

California Senate Bill 905 Implementation

Federal, state, and local agency roles and responsibilities related to the safe and effective implementation of California's deployment of carbon capture, removal, utilization, and storage and carbon dioxide removal projects

Legislative Background: Building on Existing Oversight

Enacted in September 2022, Senate Bill (SB) 905 and Assembly Bill (AB) 1279 were passed to accelerate California's climate action efforts and head off the worst impacts of climate change.

AB 1279:

- Established the state's goals to reduce greenhouse gas emissions 85% below 1990 levels and achieve carbon neutrality no later than 2045.
- Recognizes the need to advance carbon capture, removal, utilization, and storage (CCUS) and carbon dioxide removal (CDR).

SB 905:

- Directs several state agencies to take actions to strengthen the regulatory oversight of these technologies and leverage oversight roles at federal and local agencies.
- Builds on and does not replace robust, pre-existing regulatory landscape including rules established by federal, state, and local authorities that remain fully in effect based on project scope and location. This includes but is not limited to:
 - **U.S. Environmental Protection Agency** requirements for comprehensive technical and safety standards for deep subsurface carbon dioxide injection through its Underground Injection Control (UIC) Class VI well permitting program.
 - **Local land use zoning authority**, which involves issuing essential land use approvals, conditional use permits, and rights-of-way.
 - **California Environmental Quality Act (CEQA)** compliance for every project which mandates rigorous environmental review for project entitlements, under which lead local or state agencies conduct comprehensive environmental impact reports evaluating transportation, noise, biological impacts, localized air quality, and more.
 - **Local air district rules** for pre-existing stationary source air permits and potential new permits to add carbon capture equipment.

SB 905 complements these existing pillars by filling gaps including:

- Establishing stringent financial responsibility and liability rules
- Requiring additional air and community safety standards
- Developing a framework for pore-space unitization (grouping underground rights)
- Creating a centralized permit application portal
- Maintaining public project tracking

California State Agency Responsibilities

SB 905 lays out specific direction for several state agencies to ensure coordinated implementation and oversight of carbon dioxide projects and related infrastructure. The following lists outline each agency's responsibility under SB 905.

California Air Resources Board (CARB) – CCUS Program Regulatory Framework

- **CCUS Program Administration:** CARB is responsible for establishing and administering the CCUS Program to address gaps in long-term monitoring and leakage liability, financial responsibility, and seismic risk management.
- **Air and Community Safety Standards:** Building upon existing air quality and safety rules by establishing additional carbon dioxide monitoring and leakage detection requirements.
- **Long Term Financial Responsibility:** Adopting requirements for at least 100 years of financial responsibility for monitoring, stewardship, and site closure.
- **Project Tracking:** Maintaining a public system that tracks CCUS projects and key compliance milestones.
- **Unified Permitting Application Portal:** Developing and hosting a single-window, voluntary-use permit application portal to streamline coordination across participating state and local agencies.

California Natural Resources Agency (CNRA) – Pore Space & Land Title Governance

- **Pore Space Unitization Framework:** CNRA is responsible for providing a framework and recommendations on how to set agreements when two or

more pieces of land sit above the same underground reservoir where carbon dioxide could be stored.

Office of the State Fire Marshal (OSFM) / CAL FIRE – Carbon Dioxide Pipeline Safety

- **Intrastate Carbon Dioxide Pipeline Safety Standards:** OSFM is responsible for adopting minimum safety standards to regulate carbon dioxide pipelines in the state under SB 614, including requirements for design, construction, operation, testing, and emergency preparedness for carbon dioxide pipelines associated with carbon capture, removal, and sequestration (CCRS) projects.
- **Public Safety Oversight:** Overseeing emergency response planning and pipeline integrity management to reduce risks from high-pressure carbon dioxide releases.

Department of Conservation/California Geologic Survey (CGS) – Geologic & Seismic Evaluation

- **Technical Support Under SB 905:** CGS is responsible for providing geological consultation to CARB and other agencies to support safe, permanent CO₂ storage, including regulatory requirements for seismic monitoring.
- **Seismic & Subsurface Monitoring:** Evaluating seismic risks and monitoring and reporting seismic activity and potential subsurface leakage to regulators.
- **Suitability Assessment:** Evaluating the suitability of geologic reservoirs for carbon sequestration to support regulators, pore space management considerations, and provide publicly available data.

Department of Conservation/California Geologic Energy Management Division (CalGEM) - Well Safety

- **Non-injection Well Management:** CalGEM is responsible for regulating the plugging and sealing of wells that could interact with CO₂ storage formations, and for regulating monitoring wells associated with storage projects.

State Water Resources Control Board (SWRCB), and Regional Water Boards – Water Protection

- **Underground Water Protection:** SWRCB is responsible for implementing the Porter Cologne Act to safeguard surface and groundwater, including

protection of underground sources of drinking water that may be affected by CCUS activities.

- **Water Discharge Permitting:** Issuing wastewater, stormwater, and construction-related discharge permits for facilities involved in carbon capture operations and infrastructure.

Additional State Efforts and Oversight

Numerous other local and state agencies have roles in providing permitting and oversight for CCUS depending on the type of project and the geographical location of the project. For example:

- The State Lands Commission has a role in issuing leases for CCUS infrastructure that is proposed on state-owned sovereign lands or state offshore waters.
- The California Energy Commission has exclusive permitting authority for thermal power plants 50MW or larger, including retrofitting these plants with carbon capture equipment.

This work also builds upon broader public health and environmental justice protections, such as SB 1137, which establishes 3,200-foot health protection buffer zones to establish air quality protections and operational limitations on oil and gas well operations near homes, schools, and healthcare facilities.

Ultimately, SB 905 functions to establish additional state requirements that build upon the existing and numerous local, state, and federal requirements to help ensure a robust regulatory framework that can advance climate action while safeguarding Californians.