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The California Council on Science and Technology (CCST) is proud to share its latest study, Orphan Wells in California: An Initial Assessment of the State's Potential Liabilities to Plug and Decommission Orphan Oil and Gas Wells.

The study was commissioned by the Division of Oil, Gas, and Geothermal Resources, now the California Geologic Energy Management Division (CalGEM), to provide an initial economic estimate of the potential scope of orphan wells in California. The study uses well- and operator-level production rates and other factors to approximate the number of wells at risk of being orphaned. Potential financial liability for these wells is assessed using information on historical well plugging costs and existing bonds posted by operators. The study estimates a potential liability of approximately \$298 million for likely orphan wells and another \$230 million for wells at high risk of becoming orphan wells.

Since initial submission of the study in November 2018, the State has implemented a number of idle well management and testing regulations, referred to in the study, and provided updates on the Idle Well Program in a separate report<sup>1</sup>. The effect of these regulations will be important to monitor. The State also passed relevant legislation, which has not been considered in the study:

- AB 1057 (Limón, Ch. 771, 2019): This bill establishes environmental considerations for CalGEM, authorizes the supervisor of oil and gas to request additional information relating to well ownership and operation, allows CalGEM to seek additional amount of security—up to \$30 million—based on its risk evaluation of the operator, and allows 2 or more operators to enter into a liability sharing agreement.
- 2. AB 1328 (Holden, Ch. 772, 2019): This bill extends the time granted to abandon a well upon written notice from 1 year to 24 months and requires CalGEM to initiate a study in consultation with the Air Resources Board on fugitive emissions from idle, idle-deserted, and abandoned wells in the state.
- 3. SB 551 (Jackson, Ch. 774, 2019): This bill requires field inspections of certain hazardous or idle-deserted wells and facilities and attendant production facilities to inform various reporting requirements to the Legislature and, starting July 1, 2022, requires operators to submit reports showing total liability for plugging and decommissioning, including site remediation, on a schedule set by the oil and gas supervisor.

In the context of our recommendations, which suggest focal areas for further investigation and improved data tracking, these updates and progressions will be important to monitor and evaluate.

—CCST

<sup>&</sup>lt;sup>1</sup> California Department of Conservation, 2019. Idle Well Program Report: On Idle & Long-Term Idle Wells in California. Available at: <a href="https://www.conservation.ca.gov/calgem/idle\_well/Pages/idle-well-program-report.aspx">https://www.conservation.ca.gov/calgem/idle\_well/Pages/idle-well-program-report.aspx</a>