Methane Task Force Summary of Questions and Responses

Based on Inquiries Received as of October 6, 2022

Overview

Below is a summary of the questions received before and during the first Methane Task Force workshop on October 6, 2022. The Methane Task Force plans to quarterly update the summary of public questions and responses document.

We encourage the public, community partners, California Native American tribes, and other interested parties to get involved in our public forums.

There are many ways that we encourage participation:

- The Methane Task Force hosts public meetings and workshops: All meetings are open to the public and accessible virtually. There are updates on future meetings advertised through listserv announcements, web updates, and social media.
- We invite you to communicate with us via email: Interested individuals can reach out by email at: <u>MethaneTaskForce@conservation.ca.gov</u>.
- Website updates and listserv announcements: Information on current and future updates is provided on the Methane Task Force webpage: <u>https://www.conservation.ca.gov/calgem/Pages/Methane-Task-Force.aspx</u>. Interested individuals may also sign up to receive regular email updates about the Methane Task Force by requesting to be added to the listserv at <u>MethaneTaskForce@conservation.ca.gov</u>.

Summary of Public Questions and Responses

Q) What are CARB's current and future approaches to minimize fugitive methane emissions?

Methane accounts for about 9 percent of the State's GHG emissions, and originates from a variety of sources in California, with the largest sources being dairy and livestock operations (about 55 percent of total methane emissions), landfilled organic waste (21 percent), and oil and gas operations (15 percent).

California's Legislature recognized the immediate climate benefits that could be achieved by controlling Short-Lived Climate Pollutant emissions, like methane, through the passage of SB 1383 (Lara, Chapter 395, Statutes of 2016). SB 1383 required CARB to adopt and begin implementing a comprehensive <u>SLCP Reduction Strategy</u> to reduce statewide methane emissions to 40% percent below 2013 levels by 2030.

In response to SB 1383 and the SLCP Reduction Strategy, CARB, CPUC, CalRecycle, and CPUC have worked collaboratively to enact regulations and incentive programs to address the various sources of methane emissions. An overview of the State's current methane mitigation strategies is available on CARB's <u>website</u>. Going forward, CARB and the other State agencies are focused on implementing these existing programs as well as implementing opportunities for further methane mitigation identified as part of the <u>AB 32</u> <u>Scoping Plan Update process</u>.

Q) What authority does CARB have to regulate methane emissions? In areas where CARB does not have authority, is CARB working with other agencies and local air districts?

Local air districts have the primary responsibility for control of air pollution from all sources other than vehicular sources (H&SC §39002 and H&SC §40000). However, when it comes to regulating greenhouse gas (GHG) emissions, such as methane, CARB has the primary statewide authority (H&SC §38510). CARB and the local air districts work cooperatively to reduce methane emissions and enforce compliance under <u>CARB's Greenhouse Gas Emission Standards for</u> <u>Crude Oil and Natural Gas Facilities Regulation</u> given that oil and gas facilities can produce both GHG emissions and criteria and toxic emissions.

Q) Should CARB reconsider any exemptions to methane monitoring?

Components with heavy oil (<20 API Gravity) are currently exempt from CARB's regulation and local air district rules. CARB estimates that this exempt category, which constitutes 34% of components, makes up less than 1% of hydrocarbon emissions from leaking components. In September 2022, CARB staff held a workshop to discuss possible amendments to CARB's oil and gas methane regulation. As part of that workshop, CARB solicited feedback on potential regulation changes, including the current exemption for heavy oil components.

Q) How will CARB, CalGEM, and other agencies proactively mitigate leaks without solely relying on community reporting?

Under <u>CARB's Greenhouse Gas Emission Standards for Crude Oil and Natural</u> <u>Gas Facilities Regulation</u>, operators must conduct quarterly leak detection and repair to ensure methane leaks are identified and mitigated. CARB is also in the process of deploying methane leak detection satellites beginning in 2023 to assist in identifying leaks and CARB will collaborate and engage with community partners to identify potential satellite scans of potential leaking sources near disadvantaged communities and sensitive receptors.

Under CalGEM's Idle Well Regulations, operators are properly plugging wells they do not intend using in the future, which is proactively minimizing potential sources of methane leaks. CalGEM also conducts regular inspections of oil and gas operations, and as part of those inspections, if leaks are identified, CalGEM requires operators to fix the leaks.

CARB and other agencies are also coordinating on enforcement as part of the <u>California Environmental Protection Agency's (CalEPA) Environmental Justice</u> <u>Task Force</u>. As part of CalEPA's task force, US EPA, CalEPA, CARB, local Air Districts, state and local Water Boards, Department of Toxic Substances Control (DTSC), CalGEM, and others share compliance information and coordinate on inspections of facilities across California. One of the primary goals of the program is to increase compliance in areas disproportionately impacted by health and environmental factors to prevent and reduce burdens on those communities by targeting compliance assistance and enforcement in those areas.

CARB's AB 617 Community Air Protection Program also focuses resources on the most disproportionately impacted communities in California. AB 617 is overseen by CARB and implemented by Air Districts. Selected communities work with Air Districts to develop Community Emissions Reduction Plans (CERPs) that are approved by both Air District and CARB Boards. To date, five approved CERPs for communities contain strategies to address oil and gas related activities that CARB, CalGEM and Air Districts have committed to implement.

Q) What community engagement will be done to provide community members with up-to-date information on oil and gas-related leaks?

As part of implementation of CARB's Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities Regulation, owners/operators of oil and natural gas facilities are required to conduct quarterly leak detection and repair (LDAR) surveys to monitor components for leaks and repair detected leaks within a specified time frame. Operators are also required to submit annual LDAR reports to CARB by July 1 of each calendar year and CARB provides an annual summary of these reports on CARB's <u>webpage</u>.

To support deeper community engagement, CARB recently allocated funding to develop a new Petroleum Oversight and Enforcement Section that will include several new positions to expand community engagement and oil and gas investigations, inspections, and enforcement. This new group will provide additional staff resources and emerging leak detection technologies to identify and address methane leaks from oil and gas operations and wells in communities across the state, not limited to those selected under AB 617.

Q: Will the Methane Task Force meeting recordings and supporting materials be available online following the meeting?

A: Yes. All task force meetings will be recorded and made available in an accessible format, along with supporting materials, on the Methane Task Force website here: <u>https://www.conservation.ca.gov/calgem/Pages/Methane-Task-Force.aspx</u>.

Q: What coordination among state agencies will be taking place?

A: All state departments participating in the Methane Task Force are exercising their authorities within their jurisdictions. All state departments participating in the Methane Task Force are also coordinating with one another to identify and respond appropriately to methane leaks from oil infrastructure near communities. Questions for the multiagency Task Force can be sent to: <u>MethaneTaskForce@conservation.ca.gov</u>.

Q: What is CalGEM or the Task Force doing today to monitor methane leaks from orphan wells statewide?

A: California has thousands of likely orphan wells statewide that may serve as sources of methane leaks. CalGEM performs regular inspections of operations, which includes inspecting orphan wells, and prioritizes inspections of operations using a risk-based approach, prioritizing wells located near California communities and environmentally sensitive areas, underground gas storage wells, and wells that have been idle for a long time. There are more than 99,000 active and idle wells in the state and CalGEM currently employs less than 100 field staff, in three District offices across the state, whose duties include carrying out proactive inspection schedules and responding to complaints. If leaks are detected during inspections, CalGEM will evaluate repair options using its own contractor, where there is no responsible operator.

Unfortunately, the state does not have sufficient resources to quickly identify and repair leaks from the over 5,300 likely orphan wells statewide. This is why CalGEM has developed a proposed approach to prioritizing orphan wells for state abandonment—to ensure our limited resources go to addressing those wells that pose the greatest risk and can bring about the most benefits.

Q: Will any other technologies be implemented beyond detection of leaky wells, such as potentially capturing the methane that has been emitted and putting it towards other purposes? If the stream is concentrated enough, are other technologies in the works or is CalGEM looking externally at corporations to help with that?

A: At this time, CalGEM's focus, in coordination with partner agencies like the California Air Resources Board and local Air Districts, is on detecting and repairing methane leaks. When CalGEM detects a methane leak during an inspection, the priority is to have the operator repair the well to stop the leak. In the event there is no operator, CalGEM will hire a contractor to stop the leak.

Q: Where does the screening criteria fit for 1) verifying that there is no operator responsible for a likely orphaned well to confirm its status and 2) making that the final determination before the state takes on the burden of costs? Why wasn't orphan status confirmed sooner.

A: CalGEM's screening of likely orphan wells is being performed concurrent with efforts to verify and declare these wells are orphaned.

CalGEM's proposed well screening and prioritization methodology focuses on ranking and prioritizing likely orphan wells for state plugging and abandonment that may pose the greatest risk to public health, safety, and the environment. While the inventory of wells being screened are those for which CalGEM already has some evidence to suggest the well could be orphaned, additional steps will be taken to declare the well orphan before any of these wells are plugged and abandoned by the state. Before state funds are committed for a state abandonment, CalGEM undertakes a review to make sure there's no operator with financial resources to plug and abandon wells and decommission facilities. At the end of this review, a well can be declared orphan or presumed orphan, should no responsible, financially solvent operator be identified.

Q: What is the difference between between idle, long-term idle, likely orphaned and orphaned wells?

A: **Idle Well:** Any well that for a period of 24 consecutive months has not either produced oil or natural gas, produced water to be used in production stimulation, or been used for enhanced oil recovery, reservoir pressure management, or injection. For the purpose of determining whether a well is an idle well, production or injection is subject to verification by the division. (Pub. Resources Code, § 3008, subd. (d).)

Long-Term Idle Well: Any well that has been an idle well for eight or more years. (Pub. Resources Code, § 3008, subd. (e).)

Orphaned Well: Well that has been determined to be <u>deserted</u> as demonstrated through a final plugging and abandonment order, consistent with Public Resources Code section 3237. The well has also been determined by CalGEM to have no legally responsible current or prior operator with sufficient financial resources to fully cover the costs of plugging and abandonment, as described in Public Resources Code section 3237, subdivision (c).

Likely Orphaned or Deserted wells are those wells that have been determined to be deserted as demonstrated through a final plugging and abandonment order, consistent with Public Resources Code section 3237, but have not yet been determined to be Orphan because a determination of financial resources held by legally responsible current or prior operators has not yet been completed.

Q: What types of contaminants are being considered as part of the screening methodology? Other contaminants could be present, as mentioned with volatile organics, chlorides, sulfides, possibly even radon. Are those also being screened/considered in the screening and prioritization methodology?

A: CalGEM does not have contaminants as criteria on the initial screening process, as CalGEM does not have enough data of contaminants from all wells. CalGEM does consider well casing damage as part of the criteria, because it is a potential indicator that the well may not have the integrity needed to prevent leaks, which could lead to contaminants escaping into the surrounding environment.

Q: What community engagement(s) or types of information sharing are planned to ensure residents are informed about leaking wells in their communities?

A: If a significant methane leak is discovered, local first responders are notified immediately. Depending on the nature of the leak, they may notify local community members if there is an immediate danger to the community. In addition, web updates continue to be provided regarding leaking wells discovered in Bakersfield over the summer, to keep the public informed of well conditions. Information on well inspections and leaking well repair updates are made available at: https://www.conservation.ca.gov/well-inspections-repairupdates

Q: Will information/materials be made available in languages other than English?

A: Yes, Methane Task Force public meeting materials are available in other languages. Please contact the CalGEM Public Transparency Office for materials. Email: CalGEMPublicTransparencyOffice@conservation.ca.gov.

Q: How will natural seepage be considered in the well abandonment and mitigation process?

A: Natural seepage is when hydrocarbons naturally leak out of the ground through fractures and sediments, in the same way freshwater springs bring water to the surface. As CalGEM undergoes state abandonment efforts (permanently sealing and decommissioning wells and facilities), each oil and gas well is plugged and all appropriate zones in the wellbore are tested to prevent any leakage from the wellbore itself to the surface.