

### Methane Task Force Frequently Asked Questions

October 2023

#### Overview

The Methane Task Force, a joint effort led by the Department of Conservation California Geologic Energy Management Division (CalGEM), California Air Resources Board (CARB), California Environmental Protection Agency and California Natural Resources Agency, convenes public meetings on a regular basis to share with the public updates on efforts aimed at addressing methane leaks from oil and gas infrastructure, and to elevate opportunities for deeper public and local agency engagement across these programs and efforts.

The Methane Task Force receives public comments and has prepared this Frequently Asked Question document to provide responses to commonly asked questions.

The Methane Task Force updates the Frequently Asked Questions (FAQUESTION) document every quarter. We encourage the public, community partners, California Native American tribes, and other interested parties to get involved in our public forums.

Please note:

- All Methane Task Force 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 at: <u>MethaneTaskForce@conservation.ca.gov</u>.
- 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>.
- Receive regular email updates about the Methane Task Force by requesting to be added to the listserv at <u>MethaneTaskForce@conservation.ca.gov</u>.

## Question: What are CARB's current and future approaches to minimize fugitive methane emissions?

Answer: 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>.

## Question: 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?

Answer: 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</u> <u>Standards for Crude Oil and Natural Gas Facilities Regulation</u> given that oil and gas facilities can produce both GHG emissions and criteria and toxic emissions.

#### Question: Should CARB reconsider any exemptions to methane monitoring?

Answer: 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 <u>workshop</u> 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.

## Question: How will CARB, CalGEM, and other agencies proactively mitigate leaks without solely relying on community reporting?

Answer: Under CARB's Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities Regulation, 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. CalGEM has broad authority to regulate oil and gas production operations and address methane leaks from oil and gas operations. (PRC 3106 and 3011). CalGEM has adopted regulations designed to encourage good oil and gas field practices and to prevent damage to life, health, property, and natural resources. California Code of Regulations, title 14, section 1777(a) requires that "operators shall maintain production facilities in good condition and in a manner to prevent leakage or corrosion and to safeguard life, health, property, and natural resources."

CARB and other agencies are also coordinating on enforcement as part of the California Environmental Protection Agency's (CalEPA) Environmental Justice Task Force. 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.

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

Answer: 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.

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

Answer: 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>.

## Question: What coordination among state agencies will be taking place as part of the Methane Task Force?

Answer: The state agencies participating in the Methane Task Force are coordinating with one another to identify and respond appropriately to methane leaks from oil infrastructure near communities, a recent example includes joint oil and gas well field inspections in multiple communities in Kern County,

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

Answer: 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, prioritizing wells using a riskbased approach including wells located near California communities and environmentally sensitive areas, underground gas storage wells, and wells that have been idle for a long time. Unfortunately, the state does not have sufficient resources to monitor and repair leaks from the over 5,300 likely orphan wells statewide. 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. 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.

#### Question: 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?

Answer: At this time, the Methane Task Force agencies are focused 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.

# Question: 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.

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

Orphan wells have no responsible, solvent operator to maintain, repair, or plug and abandon the wells and attendant facilities. CalGEM determines if a well is an orphan well through several steps. First, CalGEM determines if the well is a deserted well, pursuant to PRC section 3237, which requires the State Oil and Gas Supervisor to determine from credible evidence if a well is deserted; such evidence may include a failure to comply by the operator (e.g. a failure to pay idle well fees), or a rebuttable presumption of desertion (e.g. failure to maintain an access road or comply with an Order). Second, CalGEM determines whether there is a legally responsible current or prior operator with sufficient financial resources to cover the costs of plugging and abandonment. If CalGEM determines that the current operator does not have the financial resources to fully cover the costs of plugging and abandoning the well or decommissioning of deserted production facilities, CalGEM may look to previous operators to plug and abandon the well if that operator had rights to the well after January 1, 1996. The term operator may include working interests partners and other types of ownership interests. The term operator is defined in PRC to mean "a person who, by virtue of ownership, or under the authority of a lease or any other agreement, has the right to drill, operate, maintain, or control a well or production facility." For purposes of PRC 3237, however, a mineral rights holder may only be held responsible for plug and abandonment work if they retained a right to control the well that exceeds the scope of an interest customarily reserved in a lease. CalGEM's collection unit pursues various collection efforts from current or prior operators to cover the costs of plugging and abandonment. This includes issuing demand letters; levying any bond the operator has filed with CalGEM; and working with the State Controller's Office to issue a lien against any real or personal property the operator(s) may have. In addition, CalGEM is establishing processes and procedures to utilize a third-party collections agency as well.

CalGEM's 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 as mentioned above aretaken to declare the well orphan before any of these wells are plugged and abandoned by the state.

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

Answer: **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:** A well that has been determined to be deserted 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.

Question: 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? Answer: 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.

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

Answer: 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.

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

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

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

Answer: 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.

## Question: To find out who has the oversight of the well, it appears to be difficult to get information from county assessor's office—can CalGEM make all of these agencies help to make that a lot more readily available?

Answer: CalGEM has no authority to require county assessors, which are locally elected officials, to change the way they make data or records publicly available. To obtain the operator data in CalGEM's possession, it is best to visit CalGEM's Online Data webpage which contains links to the state's three main databases, WellSTAR, WellSTAR Data Dashboard, and Well Finder. Another option is to email your request to the WellSTAR team

WellSTAR@conservation.ca.gov. Once the request is researched, a staff member will follow up with a response.

#### Question: Do you have a process of monitoring, from a certain distance, where the gas is going to come up to the surface and its new locations?

Answer: We have a variety of testing methods that account for distance. Some of the tools detect gases up to 300' away. If a leak is near residences, we do a thorough sweep with the equipment to confirm there is no gas. In any gas leak scenario, we primarily use Forward Looking InfraRed (FLIR) cameras to evaluate for gas leaks. We do not have any permanent monitoring systems in place. It is anticipated CARB's satellite monitoring program will start collecting data in the next few years.

#### Question: If an oil company or gas company owns one oil well, they drill for oil. And because they have an oil well, that allows them to have 18 gas wells underneath the permit for an oil well. How do we close that loophole for companies to do that?

Answer: CalGEM generally permits the drilling of wells for production of oil or gas per California Public Resources Code section 3203. Under that statute the operator of any well, before commencing the work of drilling the well, is required to file a written notice of intention to commence drilling. Drilling shall not commence until approval is given by the supervisor or the district deputy. A separate permit is needed to drill each oil or gas well. Having an oil well does not authorize a company to drill subsequent gas wells without first obtaining the necessary approvals to drill consistent with the law.

#### Question: What is CalGEM's approach to enforcement actions for oil and gas wells and parts of the natural gas distribution system that have been found to be leaking methane at high rates?

Answer: The California Public Utilities Commission (CPUC) is responsible for regulating and enforcing intrastate gas pipeline transportation and facilities. CalGEM has oversight jurisdiction of gas pipelines within oil and gas fields.

CalGEM's regulations require that operators maintain production facilities in good condition and in a manner to prevent leakage and to repair leaking equipment. If CalGEM observes or detects methane leaks from equipment or wells, CalGEM will notify the operator through Notice of Violation or other correspondence. Depending on the level of methane detected, CalGEM will direct the operator in the Notice of Violation or other correspondence to take corrective action and promptly address the leak. A Notice of Violation often will be a sufficient enforcement tool to notify the operator and for the operator to take necessary corrective action address the leaks. If the operator does not promptly repair the leak, CalGEM can pursue further enforcement action, such as an order to conduct remedial work (Public Resources Code, section 3224), or an emergency order (Public Resources Code, section 3226). Failure to comply with an order may lead to administrative civil penalties or may result in a criminal referral. CalGEM also has authority under Public Resources Code section 3226 to undertake actions deemed necessary to protect life, health, property or natural resources, which includes an emergency contract to repair the equipment. Finally, CalGEM coordinates closely with CARB, local air districts, and other agencies as appropriate, to address methane leaks.

#### Question: How does CalGEM prioritize the emissions from the wells that have been identified via satellite and is there a process of at least prioritizing which ones seem to be larger or more serious emitters?

Answer: CARB's satellite program is underway, but it is not yet collecting data. The aim is for this data to allow the state to identify and focus efforts on large sources of methane emissions across different sources. CARB and CalGEM are working together to prepare for how to use the data when it is collected to inform inspection and enforcement activities.

#### Question: Is there an "on the ground" measurement that you intend on employing in order to better quantify the severity of these methane leaks?

Answer: The measurement tools used during inspections allow CARB and CalGEM to quickly identify and address leaks to address any immediate safety concerns with methane explosivity levels. These measurement devices are not able to characterize all the compounds present in the leak. CARB and CalGEM are working with air districts to explore ways to better characterize the presence of toxic compounds within leaks, including research to characterize air emissions from oil and gas wells. CARB's Oil & Gas regulation, as well as local air district regulations, require that operators inspect their equipment for leaks quarterly and repair any leaks found within a specified amount of time depending on the severity of the leak. These leak detection and repair requirement efforts must also be reported to CARB and either reported to the local air districts or kept on file by operators to be available if requested by the local air districts.

In addition, CARB is carrying out a project to better characterize air quality in communities near oil and gas operations called the Study of Neighborhood Air near Petroleum Sources (SNAPS), which includes limited-term, intensive air quality monitoring in key communities with production facilities. For more information on the program, visit: <u>https://ww2.arb.ca.gov/our-work/programs/study-neighborhood-air-near-petroleum-sources</u>.

#### Question: What is the smallest size area that the satellites can measure? Measuring many smaller areas would give more useful results.

Answer: The satellite will look for plumes in 'tiles' that will be approximately 18x50 kilometers in size. All plumes within such a tile, above the detection limit of the instrument, will be identified. The number of tiles the state can collect in California on any day depends on the number of satellites and their orbit. Where the satellites look on any given day can be adjusted based on operational needs.

#### Question: How can we better understand the severity of each of these leaks?

Answer: One indicator of the severity of a leak is the concentration of methane present and how quickly that methane concentration dissipates. Methane can present an explosion hazard at very high concentrations under specific circumstances, such as when it is released in enclosed areas and an ignition source is present. These conditions together were not detected in the recent round of joint inspections conducted by CARB, CalGEM, and San Joaquin Valley Air District. The lower explosive limit for methane is generally considered to be 5% by volume (or 50,000 parts per million)—this is the concentration at which the methane could ignite if there is an ignition source. However, the flammability or explosive properties are significantly minimized as methane dissipates. Methane dissipates quickly from most leaks found in components at oil and gas facilities, including wells. If the concentration of methane is below the lower explosive limit, there is no safety risk. If the concentration of methane dissipates within feet of the source, it means that the emissions dispersed in the air quickly and the equipment cannot detect the leak at all. In these instances, the severity of the leak is very low from a safety perspective.

In terms of health risk, exposure to methane itself, except at very high levels, is not considered a direct health risk. However, methane leaks from oil and gas production facilities can be associated with leaks of toxic compounds. A person's exposure to toxic compounds potentially present in a leak alongside methane is influenced by many factors, including:

- Concentration and presence of toxic compounds within the leak. This can be influenced by many factors, including: o components of gas – underground storage facilities and natural gas pipelines contain nearly all methane, while production facilities and associated tanks have the potential to emit toxics in addition to methane.
  - The presence and concentration of toxic compounds can vary based on the oil and gas formation;
- distance from leak (pollutants tend to disperse relatively quickly);
- wind direction and whether sensitive receptors, e.g., homes, schools, hospitals, are downwind of a leak;

• time of day – meteorologic conditions can concentrate pollutants during evening and overnight.

In addition, other emissions sources impact public exposure to toxic compounds as well, e.g., mobile sources, agriculture, other industrial sources. Exposure to any level of carcinogen is associated with cancer risk, and there are known carcinogens like diesel particulate matter from mobile sources operating on the roadway or on the oilfield itself, that may drive most of a person's risk.

## Question: Why is CalGEM allowing a lower level of emissions from equipment rather than no emissions?

Answer: CalGEM's regulations require that operators maintain production facilities in a leak-free condition. If CalGEM observes or detects methane leaks from equipment or wells, CalGEM will notify the operator through Notice of Violation or other correspondence. Depending on the level of methane detected, CalGEM will direct the operator in the Notice of Violation or other correspondence to take corrective action and promptly address the leak.

#### Question: How is it possible that companies who created these wells can walk away and leave it to California taxpayers to pay for the cleanup?

Answer: California's oil industry is more than 150 years old, with production operations peaking in 1985 and in decline since. This decline has led to more wells being taken out of production. Many wells became idle and remained idle for years. It is not uncommon for wells to become idle once they are no longer financially viable to operate due to market fluctuations, operator resources, or the lack of hydrocarbon resources.

The state has several tools to hold companies accountable to pay for cleaning up their operations; however, they are limited. CalGEM has authority to pursue collections from the operator, however, current law does not allow CalGEM to assign liability to surface property owners that did not operate the well and do not own the mineral rights. In addition, there is a limit in how far back in ownership history CalGEM can go to hold past operators liable. CalGEM can look to previous operators until an operator is found that CalGEM determines has the financial resources to cover the cost of plugging and abandoning the well or decommissioning deserted production facilities. However, the supervisor may not hold an operator responsible that made a valid transfer of ownership of the well before January 1, 1996 (Public Resources Code section 3237 (c)(2)).

So, if an operator has no assets, and the wells and production facilities were obtained by that operator before 1996, CalGEM has very limited ability to hold an operator accountable.

#### Question: Who is responsible for achieving compliance on one of these wells the landowner, the equipment owner, or CalGEM?

Answer: Depending on the specific law, the operator is required to comply with requirements in Public Resources Code (PRC) and Regulations found in California Code of Regulations, title 14. PRC defines the term "operator" to include any "person who, by virtue of ownership, or under the authority of a lease or any other agreement, has the right to drill, operate, maintain, or control a well or production facility." (PRC, § 3009) If CalGEM determines that the current operator does not have the financial resources to fully cover the cost of plugging and abandoning the well or the decommissioning of deserted production facilities, the immediately preceding operator is responsible for the cost of plugging and abandoning the well or the decommissioning of deserted production facilities. However, the supervisor may not hold an operator responsible that made a valid transfer of ownership of the well prior to January 1, 1996. The term operator may include working interests partners and other types of ownership interests. For purposes of PRC 3237, however, a mineral rights holder may only be held responsible for plug and abandonment work if they retained a right to control the well that exceeds the scope of an interest customarily reserved in a lease. CalGEM's collection unit pursues various collection efforts from current or prior operator to cover the costs of plugging and abandonment. This includes issuing demand letters; levying any bond the operator has filed with CalGEM; and working with the State Controller's Office to issue a lien against any real or personal property the operator(s) may have. In addition, CalGEM is establishing processes and procedures to utilize a third-party collections agency as well.

#### Question: What would the lag time be from when a methane leak is detected and when the inspection occurs? Might it be long enough time for the methane to dissipate and become undetectable?

Answer: CalGEM responds and inspects any reported incident of a gas leak as soon as possible. If a leak is detected during inspections, CalGEM requests the operator fix it as soon as possible and follows up with re-inspections to ensure the leak is fixed.

## Question: Are there any plans to tighten the regulations on idle wells so that they have to be permanently shut down and stopped from leaking methane instead of being allowed to pump oil from them every few years?

Answer: The definition of an idle well (PRC 3008, subdivision (d)), and provisions regarding management of idle wells (PRC 3206) are established by statute, and as such, would require the Legislature to pass a law to update the framework for idle well management.

#### Question: Shouldn't the MTF be expanded in scope to pick up the small number landfills leaking literally MORE than the entire oil and gas sector?

Answer: At this time, the Methane Task Force is focused on identifying and addressing methane leaks from oil infrastructure near communities, recognizing the threats these leaks can pose to community health and safety. For information on CARB's work outside the task force to reduce methane emissions from landfills, please visit: <u>https://ww2.arb.ca.gov/our-work/programs/landfill-methane-regulation</u>.

## Question: How is California trying to understand or quantify methane emissions from orphan wells – and is this a priority or a distant nice-to-have?

Answer: Methane emissions are a priority for the Methane Task Force, which is why CARB is developing a satellite-based program to search for these emissions. Also, CalGEM is now requiring methane emissions testing before and after a well is permanently plugged and sealed. In addition, the CARB has an active contract with California State Polytechnic University (Cal Poly) to measure emissions from idle and abandoned wells. It is expected that Cal Poly will complete its analysis and release a report in the late Spring of 2024.

## Question: How can I find out if an abandoned pump and drill site have been properly capped?

Answer: The status of a well can be found in WellSTAR. When a well is properly plugged and abandoned WellStar will show that status. In addition, a well file request may be submitted through CalGEM's website with the API number or name of the well.

Some physical indicators that help determine whether a well is plugged and abandoned may include the following:

A properly plugged and abandoned site requires digging up around the well, cutting off the wellhead 5 to 10 feet below the ground, putting a top plug of cement, welding on a cap to the top of the casing, and then burying the well. If the well can be seen, this clearly has not been done. If the drill site is still visible, then it has not been decommissioned. All the above ground equipment must be removed.