

Dr. Mark Nechodom Senior Director for Upstream Strategy

January 10, 2023 Via Email

Ms. Carolyn Lozo
Chief Oil and Gas & GHG Mitigation Branch
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Subject: Comments On Proposed Changes to the California Oil and Gas Methane Rule

Dear Ms. Lozo:

On January 20, 2023 the California Air Resources Board (CARB) hosted a second public workshop to discuss the January 13, 2022 draft potential changes potential changes to the California Oil and Gas Methane Regulation (COGR). The changes to the regulation now being considered are intended to address a variety of issues including comments made by EPA in their analysis of the regulation.

CARB has requested that stakeholders continue to provide comments on potential changes now being considered. The Western States Petroleum Association (WSPA¹) appreciates the opportunity to comment on the proposed changes. Our detailed comments are summarized in the following pages.

¹ WSPA is a non-profit trade association representing a full spectrum of companies which explore for, produce, refine, transport, and market petroleum and petroleum products in the Western United States.

As noted previously WSPA appreciates the opportunity to comment on these important issues. If you have questions regarding our comments, please contact me at mnechodom@wspa.org or Christine Luther Zimmerman at czimmerman@wspa.org.

Sincerely,

Mark Nechodom, PhD

Senior Director for Upstream Strategy

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Western States Petroleum Association

Comments On Proposed Changes to the California Oil and Gas Methane Rule

(January 13, 2023, Draft Versions)

Submitted to
California Air Resources Board
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Western States Petroleum Association (WSPA) Comments On Proposed Changes to the California Oil and Gas Methane Rule

(January 13, 2023, Draft Versions)

The Western States Petroleum Association (WSPA) is providing the following comments on the January 13, 2023, draft the proposed changes to the California Oil and Gas Methane Rule (aka COGR).

I. COGR Applicability and Exemptions

Section 95666(a) establishes the applicability of the regulation. It specifies that the COGR¹ applies to owners and operators of equipment and components in a variety of listed sectors regardless of emissions level or <u>well status</u>. Inclusion of all well statuses, including idle wells, represents a scope expansion of this regulation. A cost/benefit analysis should be conducted.

The term well status is not defined. To eliminate confusion, WSPA recommends that CARB include a definition of the term "Well Status".

II. Definitions:

(28)The definition of an idle well proposed by CARB differs from that proposed by CalGEM. WSPA recommends that the definitions be aligned with that CalGEM definition of idle found at Public Resources Code Section 3008(d): "Idle well" means 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. An idle well continues to be an idle well until it has been properly abandoned in accordance with Section 3208 or it has been shown to the division's satisfaction that, since the well became an idle well, the well has for a continuous six-month period either maintained production of oil or natural gas, maintained production of water used in production stimulation, or been used for enhanced oil recovery, reservoir pressure management, or injection. An idle well does not include an active observation well.

III. Standards [Section 95668]

A. Separator Tank Systems [Section 95668(a)]

Existing subsection 95668(a)(2)(C) provides an exemption for COGR requirements at subsection 95668(a) for separator tank systems "approved for use by a local air district" or "subject to a local air district requirement."

In the EPA Technical Support Document (TSD) accompanying the May 12, 2022 federal register publication announcing the limited approval/disapproval of the COGR, the EPA found that several subsections² were unclear as to which specific requirements the provisions point to. The EPA "recommended fix" was to specify in the rule which SIP approved local air district rules apply in place of the COGR requirements.

Per the EPA recommendation, the CARB has revised these sections to address the EPA deficiency. However, the proposed changes go beyond the "EPA recommended fix" and significantly change the scope of the exemptions provided by existing subsections of the regulation. Comments on the proposed changes follow.

1. COGR versus District Requirements for Separator Tank Systems

With respect to the separator and tank systems, the existing regulation provides an exemption from COGR requirements for a vapor collection system (VCS) where emissions are already controlled using a VCS <u>approved by a local air</u> district prior to January 1, 2018. A vapor collection system is approved by a local air district when a permit authorizing the use of the control system is issued.

The CARB is proposing to revise the exemption at 95668(a)(2)(C) such that the exemption would only apply where that air district has adopted a prohibitory rule. The proposed change fails to expressly take into account emission limitations and control obligations imposed by permitting rules.

¹ California Oil and Gas Regulation (aka COGR)

² Existing subsection 95668(a)(2)(C), 95669(b)(1), and 95670(a)(1).

Under the proposed change, separator tank systems served by VCS pursuant to a permit approved by a local air district to satisfy new source review (NSR) requirements (i.e., Best Available Control Technology); or permitted and installed voluntarily for some other purpose (i.e., safety) would no longer qualify for the COGR exemption.

Given the stringent level of control needed to satisfy best available control technology (BACT) requirements, and the fact that the permits approved by local air districts for these VCS include enforceable permit conditions, there is no need to eliminate the COGR exemption for these separator tank systems.

WSPA recommends that the COGR be revised to include an additional subsection that would continue the existing exemption provided for Separator Tank Systems served by a permitted VCS.

Add the following subsection to 95668(a)(2)(C)

If the separator and tank system is controlled with the use of a vapor collection system and is located in a region classified as non-attainment with, or "unclassifiable" for, any federal ambient air quality standard for ozone, respirable particulate matter (PM10), fine particulate matter (PM2.5), or nitrogen dioxide, the separator and tank system shall be subject to a SIP-approved local air district rule for the exemption to apply. This includes SIP-approved new source review rules and SIP-approved Title V rules for the relevant air district. SIP-approved rules include but are not limited to:

[Include a list Applicable NSR Rules for Local Air Districts, including MBARD rule 417 – organic liquid storage]

B. Well Casing Vents [Section 95668(g)]

CARB has included a provision at section 95668(g)(A) which provides that "briefly" opening of a well vent for routine maintenance or testing, does not constitute an "open well vent" for the purpose of section 95668(g). WSPA believes that inclusion of the word "brief" is unnecessary because the interval during which the well vent could be opened is inherently determined by the type of allowable activity. WSPA recommends that subsection 95668(g)(A) be revised as follows.

Revise section 95668(g)(A) as follows.

A well casing vent that is briefly opened to the atmosphere solely for conducting attended routine or periodic maintenance or attended testing would not constitute an open well casing vent.

IV. <u>Leak Detection and Repair [Section 95669]</u>

A. COGR versus District Requirements for LDAR

The leak detection and repair (LDAR) requirements of the COGR are specified at Section 95669. The existing COGR provides an exemption at subsection 95669(b)(1) from LDAR requirements for those components subject to LDAR requirements of a local air district, if the requirements were in place prior to January 1, 2018.

To eliminate EPA concern as to which specific requirements the provision points to, CARB has proposed to replace the word "<u>requirement</u>" with the word "<u>rule</u>" and include a list of citations to prohibitory rules adopted by local air districts that require LDAR.

Although this appears to be a relatively minor change, it effectively eliminates the COGR exemption for components that are already subject to LDAR requirements imposed by local air districts permits.

WSPA Recommendation

WSPA recommends that the word "requirement" be retained, and the section be revised to read as follows:

Components – including components found on tanks, separators, wells and pressure vessels - that are subject to local air district leak detection and repair <u>requirements</u>. <u>Title V permit requirements</u>, or SIP-approved <u>rules</u>, if the leak detection and repair <u>requirements</u>, <u>Title V permit requirements</u>, or SIP-approved <u>rules</u> were in place prior to January 1, 2018, or are included in the list in section 95669(c)(1)(B).

With respect to the list of local air district rules cited at section 95669(c)(1)(B), WSPA recommends that the list of citations include the following San Joaquin Valley Air Pollution Control District (SJVAPCD) and Monterey Bay Unified Air Pollution Control District (MBUAPCD) Rules.

- San Joaquin Valley Air Pollution Control District Rule 4623: Storage of Organic Liquids (Amended May 19, 2005).
- San Joaquin Valley Air Pollution Control District Rule 4624: Transfer of Organic Liquids (Amended December 20, 2007).
- Monterey Bay Unified Air Pollution Control District Rule 427: Steam Drive Crude Oil Production Wells

B. Exemptions for Selected Components

1. Components Used in Heavy Oil Operations [§ 95669(c)(2)]

Although the proposed regulation maintains exemptions for components used in heavy oil operations, the CARB's presentation at the January 20, 2023, workshop indicated that removal of this exemption may be considered in upcoming rule makings. Removal of the exemption would result in a significant increase in scope of this regulation and warrants cost/benefit analysis, emissions estimates, and SRIA. WSPA supports the continued inclusion of the LDAR exemption provided for components used exclusively for crude oil with API gravity less than 20°.

WSPA also supports the inclusion of additional language (the last sentence in the paragraph) which clarifies that the exemption applies to components used for crude oil and associated produced water components.

2. Components Used by Produced Water Lines

WSPA supports the clarifying changes to Section 95669(c)(3) that specify criteria to be used when determining LDAR exemption status of a component used in produced water lines downstream of a separator and tank system.

C. CARB is proposing to eliminate the LDAR exemption for one-half inch stainless steel tube fittings. WSPA recommends that CARB consult with air districts to provide clarity on any exemptions maintained for one-half inch components which do not meet the definition of "fitting" in 95667(a)(21). Facility Specific LDAR Plans [Section 95669(d)]

CARB is proposing that owner or operators prepare facility specific leak detection and repair plans (i.e., operator management plan or OMP) that encompass all components not otherwise identified in Section 95669(c). That is all components not otherwise subject to LDAR per a local air district requirement or exempt from LDAR per the COGR.

In prior written comments provided by WSPA in response to the discussion held on this issue during September 20, 2022, COGR workshop, WSPA recommended that CARB forego requirements for detailed LDAR plans because such requirements are burdensome and will not result in any meaningful reductions in emissions. WSPA has not changed our conclusions regarding the need for a detailed OMP. Nevertheless, we are providing comments on proposed requirements.

1. Updating Plans Due to Facility Changes

The plan must encompass all components located at a facility within a sector specified in section 95666 that are subject to COGR leak detection and repair requirements (unless exempt per section 95669(c).

As proposed by CARB, an owner or operator would be required to update the plan (within 30 days) whenever new equipment or even a component was added to or removed from a facility located within a specified sector. Updating could even be required when day-to-day, minor changes to piping systems were made even if it did not result in a meaningful change in the components counts included in a previously approved plan.

WSPA Recommendation

WSPA recommends that the LDAR Plans required pursuant to Section 95669(d) be updated on an annual basis (aligned with SJVPACD district rule 4401) and that the

List of Inaccessible/Unsafe to Monitor Components [Section 95669(g)(2)(A)

Section 95669(g)(2)(A) requires that operators maintain a list of inaccessible and unsafe to monitor components. This requirement is redundant. It is already required by section 95665(d)(1)(E). Delete this requirement.

2. Repair Timeframes for Leaks [Section 95669(h)(1)]

CARB is proposing to lower the timeframe allowed for repairing a component having a leak greater than or equal to 1,000 ppmv but less than 10,000 ppmv, from 14 days to 5 days.

The proposed change is apparently in response to an EPA comment in the "Technical Support Document" (TSD)³ accompanying the limited approval/disapproval of the COGR (see page 13 of the TSD).

In the TSD (Section 95669, Deficiency #13) EPA recommends that CARB "<u>Add in language that requires an attempt of repair be done in the first 5 calendar days of leak detection</u>".

The EPA neither recommends nor requires that CARB reduce the repair time for leaking components from 14 days to 5 days. In fact, depending on the source category, the EPA Control Technique Guideline for the Oil and Natural Gas Industry (CTG) ⁴ allows between 15 days to 30 days to compete the repair of a leaking component. A similar timeframe is allowed for inspection of repaired components.

WSPA is opposed to the change that would reduce the allowable repair time from 14 days to 5 days. WSPA recommends the Section 95669(h)(1) be revised as follows.

WSPA Recommendation

<u>For leaks with measured total hydrocarbon concentrations greater than or equal to 1,000 ppmv but not greater than 9,999 ppmv a first attempt to repair the leaking component shall be made within 5 days of the initial leak detection.</u>

Technical Support Document for EPA Rulemaking for the California State Implementation Plan;
 California Air Resources Board Regulation for Greenhouse Gas Emissions for Crude Oil and Natural Gas Facilities;
 U.S. EPA Region IX, Nichole Law et.al. April 2022 (See 87 FR 29103, May 12, 2022, also)
 Control Technique Guideline for the Oil and Natural Gas Industry, October 2016; EPA-453/B-16-001;
 U.S. EPA Office of Air and Radiation.

The component shall be successfully repaired or removed from service within <u>14 five (5)</u> calendar days of the initial leak detection using US EPA Reference Method 21.

[The allowable repair time in Table-1 should also be revised]

3. Delay of Repair for Component Leaks

Section 95670.1 does not provide repair timeline expectations if a "delay of repair" request is denied.

WSPA Recommendation

WSPA recommends that if a request for "delay or repair" is denied, the timelines for repair from Table 1 apply starting from the date of the request denial, rather than from the date of leak detection.

4. Reporting on Idle Wells [Section 95669(j)]

Section 95669(j) specifies recordkeeping requirements, including the need to report whether a component is used by an active or idle well. Since requirements for idle wells do not differ than the requirements for other wells, there is no need to report this data. The last sentence of this subsection should be deleted. Table A-4 and A-5 in Appendix-A should be revised accordingly.

5. Requirements for Pressure-Vacuum Valves [Section 95669(I)]

The CARB has added a new subsection that requires that pressure-vacuum valves be maintained in a <u>leak free condition at all times</u>, except when the operating pressure of the tank exceeds the manufacturer's recommended setting (i.e., the valve releases).

A pressure-vacuum valve (PV valve) is no different than any other component subject to the regulation, and like other components a PV valve may occasionally leak. It is not possible to ensure that a PV valve is <u>leak free at all times</u>. PV valves are already subject to quarterly leak detection and repair, and a leaking PV valve must be repaired within the designated timeframes.

Section 95669(I) exists independently of the LDAR requirements specified for components at Section 95669(h) and contravenes the allowable repair times provided by that section.

If an inspection of a PV valve shows that a leak threshold is exceeded then the valve would need to be repaired within the specified timeframes to avoid a violation of the LDAR requirements of the regulation. However, regardless of whether or not the PV valve was repaired within the required timeframe, it appears that the leak would still result in an automatic violation of section 95669(I), due to the failure to maintain the valve in a leak free condition at all times.

WSPA Recommendation

WSPA recommends that leak requirements and enforcement actions for PV valves be consistent with those for other components. WSPA recommends that Section 95669(I) be deleted since the PV Valves are already subject to LDAR requirements pursuant to Section 95669(g) and 95669(h).

V. Inspection and Repair of Remotely Detected Leaks [Section 95669.1]

CARB is proposing to amend the COGR to include new Section 95669.1 which would impose LDAR requirements on owners or operators for leaks detected via remote monitoring.

Beginning January 1, 2024, if CARB notifies an owner or operator of a methane or hydrocarbon emission identified at their facility using a satellite or other remote monitoring technology (e.g., a plane), the owner or operator must inspect the facility for leaking or venting components and equipment within 3 calendar days of the notification using optical gas imaging (OGI) instruments or US EPA Reference Method 21 as specified in section 95669(b).

WSPA recognizes the importance of adopting technological advancements towards emissions reductions. Many studies have shown that remote technologies such as satellite-based remote sensing and airplane flybys can be used to identify potential large plumes. Remote detection technologies are also being used by the oil and gas industry voluntarily for leak screening purposes already.

However, WSPA also understands that remote detection technologies are emerging in many forms (ground-level, aerial, satellite-based remote sensing), each requiring a different type of specialized training to understand the associated technical specifications. Each

technology has a different approach/method for leak detection, limitations, detection limits and thresholds, baseline inputs and outputs, quality control needs, and data management/security/privacy concerns. Furthermore, for each type of remote detection technology, we are also seeing increasing number of emerging variations from different vendors. The complexity of these technological advancements is growing rapidly making understanding of the technical specifications difficult and their use in leak detection confusing.

Few studies have been completed comparing the remote detection technologies, especially in case of proprietary technologies. No studies have established industry standards for operating these technologies or established scientific and standardized criteria for detecting leaks using these technologies. Without these transparent technical industry standards for the operation of remote detection technologies and detection of leaks, WSPA is concerned that improper use of these technologies could result in unnecessary cost burdens for response efforts from members and agencies to meet regulatory requirements. WSPA considers its premature to include remote detection in COGR prior to establishing transparent technical standards for remote technologies.

WSPA members recommend that CARB conduct a study that establishes transparent technical standards for operation of remote technologies and for their use in leak detection. WSPA also recommends that until such study is completed, CARB remove Section 95669.1 from COGR.

VI. Vapor Collection Systems and Control Device [Section 95671]

Requirements applicable to vapor collection and control systems (VCS) and vapor control devices (VCD) are specified in section 95671 of the regulation. This section applies to equipment that must be controlled with the use of a vapor collection system and control device as a result of the requirements specified in section 95668 of the regulation. Unless section 95671(c) applies, VCS must direct collected vapors to a sales gas system; fuel gas system; or gas disposal well.

Section 95671 provides that if a system specified above is unavailable, the gas may be directed to a VCD such as a flare. If the gas is directed to an existing VCD, then the device must be replaced with a new device capable of meeting specified design criteria and achieving an NOx limit no greater than 15 ppmv (at 3% excess O2).

WSPA recommends that in the event of an emergency that would prevent directing the recovered gas to a designated system (sales gas system; fuel gas system; or gas disposal well) that an operator be allowed to route the gas to an existing VCD (flare) without triggering the need to replace the flare. WSPA requests that section 95672(c)(2) be clarified due to the changes in applicability per section 95668(a).