



**California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10  
Climate Change, Article 4  
Subarticle 13: Greenhouse Gas Emission Standards for Crude Oil and  
Natural Gas Facilities**

July 21, 2016

Thank you for the opportunity to comment on the California Air Resources Board (CARB) Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities. Please accept these comments on behalf of Earthworks, a national nonprofit organization dedicated to protecting communities and the environment from the impacts of mineral and energy development while seeking sustainable solutions.

**General Comments**

Overall, these proposals represent an important step forward in controlling methane emissions from oil and gas facilities. We especially appreciate CARB's leadership in proposing standards simultaneously for both new and existing sources. Other essential components include robust programs for Leak Detection and Repair (LDAR) as well as inspections and replacements.

CARB should make some improvements to this proposal to ease public participation in the regulatory process, especially with respect to the LDAR program as described below.

In addition, CARB should maintain a consistent standard for inspection frequency. Under this proposal, failing to discover leaks can form the basis for less frequent inspections. This approach is flawed for two reasons. First, the absence of a leak reveals nothing about the probability of a future leak. Second, reducing inspections for failure to discover emissions may inadvertently encourage shoddy inspection work. Operators may find it easier not to find leaks rather than repair them. This approach also sets a poor regulatory precedent.

In general, Earthworks supports the implementation of LDAR requirements (95669) to the listed 95668 facilities.

**Specific Comments**

**95668(i) Natural Gas Underground Storage Facility Monitoring Requirements**

Earthworks applauds CARB's proposal for special monitoring requirements for underground storage.

To begin, we support CARB's decision to assume LDAR implementation from the

Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR). By 2018, CARB wants the ability to remotely access readings from the continuous monitoring of ambient air from underground natural gas storage facilities. This data will greatly benefit the public.

We also suggest CARB augment this remote access monitoring system with a simple function allowing the public to upload monitoring data of our own.<sup>1</sup> As discussed below, a cooperative LDAR approach involving industry, government, and the public will most efficiently reduce emissions, save money, and ease compliance.

In addition, we support CARB's proposal (95668 (i)(c)(6)) to require operators to maintain and make available records of their monitoring system to CARB upon request. We urge CARB to similarly require operators to make those records also available to the public.

### **95669. Leak Detection and Repair.**

The Optical Gas Imaging (OGI) from the leak at the Aliso Canyon facility helped bring to the national spotlight the dangers associated with methane emissions. The infrared plumes also highlighted the contributions citizen science can bring to the enforcement of this rule. Ultimately, regulations mean nothing without proper enforcement mechanisms like an effective LDAR program.

In particular, CARB should encourage voluntary third party verification of the LDAR testing required under this section. This approach will both ease the compliance burden on operators and the oversight burden on CARB. Faster leak identification saves operators money, conserves the resource, and results in fewer fines and penalties. Regulators and the public, in turn, achieve better public health, safety, compliance and climate benefits.

As part of the LDAR program, third party verification will comply with the same requirements placed upon operators pursuant to 95669(g)(2) and (g)(2)(a). These certified OGI Thermographers will also conform to the applicable recordkeeping and reporting provisions of 95671 and 95672.

To ease both compliance and implementation, CARB should create a single publicly accessible and searchable web based portal. This platform will first assist the regulated community by allowing electronic submission of recordkeeping and inspection reports. It will also benefit the public from online streaming of the continuous monitoring data CARB will receive under 95668(i)(1)(A). Finally, this system ought to accommodate citizen complaints- especially a function allowing persons to upload OGI footage directly to CARB for 95669 purposes.

Nothing in this above approach should be construed to replace or supersede the inspection, recordkeeping, and reporting requirements detailed under this proposed regulation.

**95669(b)(1)** Earthworks encourages CARB to collaborate with local air districts on implementing an LDAR program that standardizes inspections, monitoring, recordkeeping, and reporting. Accordingly, local air districts should maintain the flexibility to impose additional LDAR requirements. In no circumstance should some districts have weaker LDAR requirements than CARB.

**95669(b)(4)** Earthworks looks forward to the upcoming rulemaking CARB is developing in conjunction with the Public Utility Commission to regulate methane emissions from oil and gas pipelines. Pipelines can be a significant source of methane emissions and operators should have similar LDAR obligations for all components of pipeline systems.

**95669(g)(1)** Earthworks supports regular inspections of all 95668 components. However, we oppose CARB's proposal to reduce the frequency of inspections simply because the operator finds no leaks or only low-level leaks. This approach provides a disincentive to find and repair leaks, by rewarding operators for not detecting them. Furthermore, past leak performance is not indicative of future performance. If anything, older components should receive greater scrutiny.

**95669(g)(2)** Earthworks supports CARB's proposal to encourage operators to employ OGI instruments. In particular, we appreciate that CARB provides that only a certified Thermographer may operate the equipment and proscribes specific timeframes for verification of the camera readings.

### **95671 Record Keeping Requirements.**

95671(a)(9 and 10) Earthworks supports CARB's proposal to require operators to maintain records of LDAR inspections for at least 5 years. We also urge CARB to require operators to make these records available to the public upon request; CARB should create a publicly accessible and searchable web based platform where operators must submit these records.

### **95672 Reporting Requirements.**

95672(a)(8-12) Earthworks supports CARB's proposals to require operators to report leaks within specified timeframes and to report the results of inspections conducted pursuant to section 95669. Similarly, Earthworks urges CARB to require operators to make these reports available to the public upon request; and create a publicly accessible and searchable web based platform where operators must submit these records.

### **Conclusion**

CARB achieves important public health, safety and climate benefits from this rule. As with all rules, enforcement is key. CARB should not take a "step-down" approach to enforcement, but instead encourage voluntary third party LDAR verification.

Sunlight also aids enforcement. CARB already proposes remote access monitoring, recordkeeping, reporting, and a robust LDAR program. Allowing a role for citizen science in this rule's implementation will achieve benefits for all stakeholders.

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<sup>1</sup> We envision here an opportunity to allow the public to submit citizen complaints with OGI video compliant with 95668(i)(B) that can trigger the 95669 inspection and repairs.