



**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**

Thank you for the opportunity to provide comments on the California Air Resources Board's (CARB) Final Regulation Order on Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities. Please accept these comments on behalf of Earthworks, a nonprofit organization dedicated to protecting communities and the environment from the impacts of energy development while seeking sustainable solutions. In addition to these written comments, please accept footage Earthworks has taken by our on-staff certified thermographers operating a state-of-the-art Forward Looking Infrared Camera (FLIR).<sup>1</sup>

**General Comments**

We wish to also incorporate by reference, Earthworks comments on this proposed regulation from July 21, 2016.<sup>2</sup> Overall, Earthworks supports this rule because it helps raise the standard for oil and gas emissions regulation around the country. We also commend CARB for eliminating the proposed "step-down" provision, which can reduce inspection frequency as facilities age.<sup>3</sup>

These comments will focus primarily upon CARB's Leak Detection and Repair (LDAR) provisions.<sup>4</sup> In particular, we wish to use this opportunity to describe the programmatic value third party verifiers can add to California's LDAR program. If conducted well, a robust third party verification system can ease the regulatory burden on CARB and local Air Resources Boards (ARB), save the industry time and money by preserving the resource they wish to sell to market, and protect communities and the climate.

**Citizen LDAR Enforcement**

Rules are only as good as their enforcement. This rule contains a potentially very effective and efficient enforcement mechanism that will provide benefits to Californians, their government, and the regulated community. Section 95674(a)(2) allows CARB's Executive Officer to form agreements with local ARBs on approaches for LDAR implementation. One key implementation approach that CARB executes should involve LDAR programs in partnership with third-party nongovernmental organizations.

Citizen enforcement should play a role complimenting this rule's required inspections conducted by regulators and industry. These partnerships can follow quality assurance and quality control (QAQC) requirements as determined by CARB. Further, we expect the technicians performing the Optical Gas Imaging (OGI) will have the same certifications as their industry and government counterparts and remain in compliance with all other applicable standards set by CARB.<sup>5</sup> That is to say, the practical implementation and legal effect of these partnerships need

not differ in any substantive way from those LDAR programs conducted by operators or regulators under this final regulation order. The OGI technology, reporting requirements, emissions thresholds, penalties, and repair timelines remain identical regardless of the camera holder.<sup>6</sup>

This approach works. On September 29, 2016, Earthworks certified FLIR thermographers, in partnership with Kern County community members, filed a complaint with the San Joaquin Valley Air Pollution Control District (SJVAPCD).<sup>7</sup> Our FLIR footage indicated tank venting from a heavy oil facility.<sup>8</sup> The complaint immediately triggered an investigation leading to a notice of violation (NOV).<sup>9</sup>

Given our field experience employing OGI technology and filing complaints, Earthworks believes these partnerships between local ARBs and third party citizen enforcers can work even more efficiently. For example, CARB or local ARBs can adopt an enforcement approach that creates a rebuttable presumption in favor of issuing an NOV immediately upon receipt of a “qualifying complaint”.

CARB or the local ARB could adopt an implementation agreement with a third party similar to those contemplated by 95674(a)(2). Qualifying complaints would contain OGI footage from a certified thermographer of a regulated facility.<sup>10</sup> Third parties then electronically submit these complaints to the local ARB for investigation. After determining its authenticity, regulators then use the footage as evidence in their investigation. That evidence shall create the rebuttable presumption of a violation. A similar arrangement has worked with federal EPA enforcement efforts in the Eagle Ford shale region of Texas.

## **Conclusion**

This final regulation order represents some of the nation’s best protections from greenhouse gas emissions by oil and gas facilities among those states that permit oil and gas activity. Our comment’s focus on LDAR reflects the thousands of field hours our staff and certified thermographers have spent taking infrared images of virtually every kind of onshore oil or gas facility in sixteen states.

Accordingly, we appreciate the opportunity to suggest that allowing citizens to participate in the enforcement of this rule will provide benefits to all Californians, including the regulated community. Furthermore, a robust citizen enforcement component can easily fit within the basic structure of this rule and actually eases the regulator’s enforcement burden.

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<sup>1</sup> FLIR cameras qualify under this final regulation order’s definition of “Optical gas imaging” under § 95667(a)(40)

<sup>2</sup> See [https://www.earthworksaction.org/files/publications/CARB-methane-comments\\_20160721.pdf](https://www.earthworksaction.org/files/publications/CARB-methane-comments_20160721.pdf)

<sup>3</sup> See § 95669(g)

<sup>4</sup> Pursuant to §95669

<sup>5</sup> See § 95669(g)(1)

<sup>6</sup> Assuming that the camera holder has a Level II Thermography or equivalent training. See, for example, Tables 1-4 of this final regulation order describing the allowable number of leaks, emission thresholds, and repair time periods (pages 28-29).

<sup>7</sup> The complaint investigation is attached. Complaint number: S-1609-115

<sup>8</sup> See § 95667(a)(60)

<sup>9</sup> NOV #5016761 (October 31, 2016)

<sup>10</sup> In compliance with § 95669(g)(1)