

Feb. 22, 2024

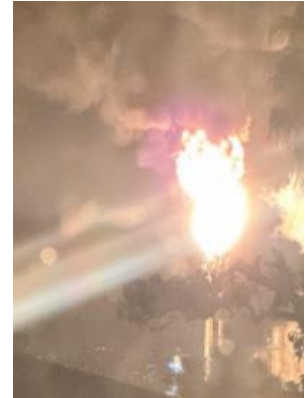
South Coast Air Quality Management District (AQMD)

**Re: Rule 1118 - Earlier progress cutting harmful oil refinery flaring emissions has stagnated and even reversed; the proposed regulation is still missing key tools**

Dear AQMD Governing Board and Staff,

**After many decades of regulatory work since earlier years of unbridled flaring, refinery flares still regularly emit large and even increasing volumes of harmful gases.**

The flare regulation has been updated multiple times, so we are not starting from scratch, and can do much better. After considerable staff work and years of promises, we need adoption of *all readily available controls* (listed next page). The photo at right just this month illustrates the massive flames and smoke adding large burdens to already-compromised air quality in refinery neighborhoods. Black, brown, indigenous, and people of color communities are hit hardest by refinery flaring.



2/9/2024, Phillips 66, Wilm. CA,  
Ashley Hernandez, CBE

**Other recent-year examples include one flaring event emitting 65,000 lbs. of Sulfur Oxides (SOX) and another at 43,000 lbs. of Volatile Organic Compounds (VOCs) in Wilmington.<sup>1</sup>** Every year, many flaring events *each* emit thousands of pounds of pollutants near all the refineries.

*What causes flaring?* Gases are sent to flares to prevent dumping the most hazardous directly to the air, during unplanned shutdowns when refinery equipment breaks down, or during planned shutdowns for maintenance. (Routine flaring may also occur if refineries don't have sufficient compressors and gas recycling inside the refinery, and this can be illegal.<sup>2</sup>) Even if 98% or higher of VOCs are combusted as assumed (becoming carbon dioxide and water), the remaining 2% or less emitted to the air equals thousands of pounds of VOCs, because gas volumes are so large. Combusted sulfur compounds like Hydrogen Sulfide are only transformed into other harmful sulfur compounds—Sulfur Oxides. (The sulfur element isn't destroyed). If flares are overwhelmed, black smoke particulate matter is also emitted. Many other pollutants are emitted.

**District staff found refineries steadily *increased* the number of unplanned breakdown flaring from 2020-2023.<sup>3</sup>** Many regulatory agencies found refinery accidents occur due to poor maintenance. During emergencies it is too late to avoid flaring – these must be prevented ahead of time.

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<sup>1</sup> Through Public Records Act requests, CBE received 2020-2022 flare data measured pursuant to Rule 1118, reported to SCAQMD. On 6/1 to 6/2/2020 Valero flares emitted >65,000 lbs SOx and 1/22 to 3/4/2022 emitted > 43,000 lbs. VOCs.

<sup>2</sup> U.S. EPA Enforcement Alert: *Frequent, Routine Flaring May Cause Excessive, Uncontrolled Sulfur Dioxide Releases Practice Not Considered 'Good Pollution Control Practice'; May Violate Clean Air Act, 2000*, <https://www.epa.gov/sites/default/files/documents/flaring.pdf>

<sup>3</sup> [SCAQMD draft staff report](#), Jan. 2024, p. 2-12, **unplanned flaring events increased steadily from 129 in 2020 to 232 in 2023.**

We urge the following improvements to the draft regulation (and moving adoption to at least May):

- 1) **The proposed 2028 Annual SOx emission target is so loose, most refineries already met far tighter standards years ago.** It acts like a backstop, not an achievable improvement.
  - *Tighten to <0.10 tons SOx per million barrels crude oil processed, which has already been met by multiple refineries (instead of 0.25, a step backward<sup>4</sup>).*
- 2) **An Annual VOC target is entirely missing** – there is *no* such standard to address high-VOC, low-SOx events missed by the annual SOx target.
  - *Set a similar achievably low VOC target, based on long-term flare data, since such targets for SOX were found effective by the staff.*
- 3) **Flare Minimization Plans are not required every year**
  - *Require annually, ensure they plan to prevent causes of large flaring of previous years.*
- 4) **The oil industry killed staff-proposed Online Video Monitoring which could document harmful smoking flare violations** that would otherwise be missed by AQMD enforcement. Vague Homeland Security arguments were used by the industry, reminiscent of South African censorship during Apartheid (when refinery emissions were defined as official state secrets). This is absurd—neighbors can see and film flaring, but District staff must travel long distances, frequently arriving too late to see and enforce against smoking flare violations, unless staff has access to realtime flare video.
  - *Reinstate staff-proposed realtime online flare video monitoring.*
- 5) **The District promised in 2017 to carry out specialized Remote Optical Sensing of flares** to improve emissions underestimations, but now says communities must wait until EPA develops its test protocol (though the District has many of its own protocols).
  - *Commit to Remote Sensing by a date certain (within 3 years).*
- 6) **Other key amendments are needed** including correcting low-ball VOC calculations (inconsistent with EPA), more comprehensive prevention of constant flaring at hydrogen and so-called “Clean Service” flares, definition loopholes, etc. Additional technical details are included in comments submitted by Communities for a Better Environment (CBE).



July 11, 2023 - Phillips 66, photo provided to Alicia Rivera, CBE, by CBE member

We applaud the excellent work done in the Staff Report and the analysis by staff. However, compromises have been won by the oil industry which keep the flare regulation from minimizing

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<sup>4</sup> According to the [SCAQMD Reg. 1118 staff report](#), *Proposed Amended Rule 1118 – Control of Emissions from Refinery Flares January 2024*, Table 3-3, p.3-3. **Marathon Carson achieved 0.10 tons SOx /million barrels crude every year since 2012** (and average less than 0.03 tons/million barrels, never higher than 0.08.) Since 2017 Chevron El Segundo achieved 0.10 tons SOx 3 out of 5 years (and close to that in 2012 and 2016). From 2013-2016 Marathon Wilmington achieved it (as well as 2018 and 2020). TORC achieved it in 2021 and was close to achieving it in 2020. Only Phillips 66 failed to achieve 0.10 since 2012. **It is a step backward to set the standard now at 0.25 tons SOx/million barrels crude processed.**

flaring to readily-achievable levels. Minimizing flaring also requires accident prevention, which saves refineries money. Unlike other regulations, most methods for minimizing flaring don't require adding control equipment, just better refinery operation to prevent malfunctions, which is more cost-effective than frequent breakdowns.

Communities also deserve well-maintained and run refineries using good pollution control practices. Repeated and unnecessary flaring is paid for in community health risks due to hundreds of thousands of pounds each year of pollutants from flaring.

Thanks for your consideration.

Sincerely;

Ashley Hernandez, Wilmington Youth Organizer and  
Julia May, Senior Scientist, Communities for a Better Environment (CBE)

Oscar Espino-Padron, Senior Attorney, Earthjustice

Jane Williams, Executive Director, California Communities Against Toxics

Jesse N Marquez, Executive Director, Coalition For A Safe Environment

Taylor Thomas, Eastyard Communities for Environmental Justice