

15 January 2024

Chair Glover and Supervisors
Contra Costa County Board of Supervisors

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Agenda Item D.7, 16 January 2024 Board of Supervisors Meeting: PUBLIC HEARING in the matter of the Final Revised Environmental Impact Report (“FREIR”) for the oil refinery feed switch project that Phillips 66 has dubbed “Rodeo Renewed,” State Clearinghouse# 2020120330, County File No. CDLP20-02040

Chair Glover, Supervisors, and Mr. Lawlor

Publicly verified observations of consequences from doing the same thing in the same way Phillips 66 proposes, at similar scale and in the same jurisdiction with equivalent government safeguards, show that this project could result in significant refinery fire and flaring impacts. I coauthored timely comment that provided this new factual information, as it was not disclosed or analyzed in the Draft Revised Environmental Impact Report (“DREIR”). The Final Revised EIR (“FREIR”) refuses to accept these facts, and insists there is no reasonable potential for any such refinery process hazard or flare impacts. That is a clear and dangerous error.

This information is from 2023. The FREIR cannot argue that it was available before the County certified the 2022 EIR. Instead the FREIR attempts to excuse refusal to accept the new facts for analysis by arguing that it may disregard hazard incident information from the complete biorefinery conversion in Martinez in favor of information from the partial refinery conversion at Unit 250 in Rodeo alone. FREIR at pp. 3-23, 3-26, 3-32, 3-76, 3-77. But it may not.

First, the need to consider hazard incident information from similar processes and conditions in other refineries is well documented and the industry’s practice of doing so is widespread.

Second, refining project biomass feedstock requires more hydrogen than refining petroleum and Unit 250 represents only a small portion of post-project refinery biomass throughput and consequent hydrogen demand. By conflating the effects of complete conversion to biomass

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feedstock at Martinez with those of this partial conversion at Rodeo to date, the FREIR obscures the project's potential impact on hydrogen imbalance flaring. Indeed, disruption of the critical real-time balance between hydro-conversion units that feed hydrogen and hydrogen plants that produce hydrogen within the refinery causes significant flaring frequently. This is shown by factual observations from Marathon incidents. See point 3 of my previous comments, below and FREIR at 3-72. It can happen at the Rodeo refinery as the Phillips 66 Flare Minimization Plan shows. See esp. page 4-15 in the Plan attached to the 29 March 2022 comments of NRDC, and note that more recent Phillips 66 Flare Minimization Plan versions retain the cited material.

Rather than parsing any difference of opinion about whether bio-refinery impacts observed at Marathon are significant and could occur at Rodeo, the FREIR chooses not to accept relevant new factual information for analysis based on arguments that make no sense.

Accordingly, I reassert my previous comments herein as they remain relevant and have not been addressed.

Comment Letter 6 on the Draft Revised Environmental Impact Report (excluding exhibits)

New information confirms the reasonable potential that the Phillips 66 Rodeo refinery conversion project would result in significant impacts described in comment on the initial EIR for this project. That now-invalidated EIR ignored the warning. The RDEIR again fails to identify, analyze or mitigate these significant potential refinery flare, fire, and explosion impacts. It must be updated to include, report to the public, and analyze the new information identified below and then recirculated to provide adequate opportunity for public comment.

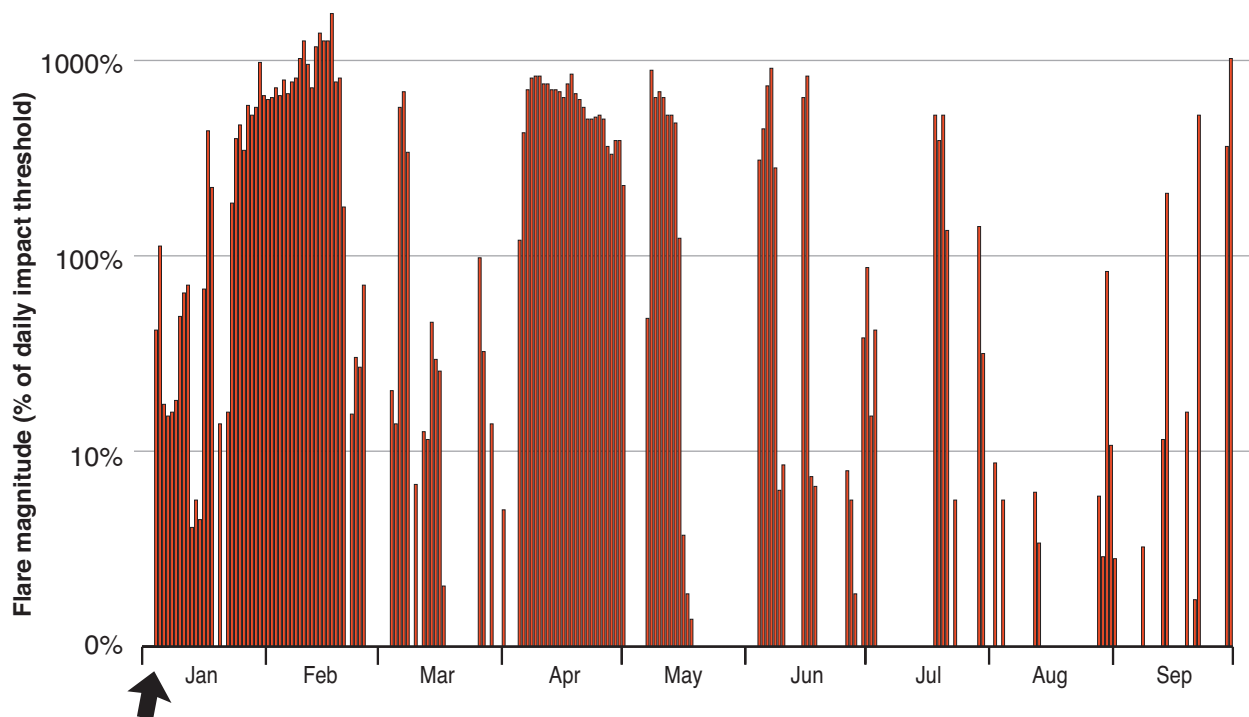
As a threshold matter, note the strength of new evidence we attach. It includes publicly verified observations of consequences from doing the same thing in the same way Phillips 66 proposes at similar scale, and in the same jurisdiction where government safeguards appear equal. Both the Marathon Martinez refinery and Phillips 66 Rodeo refinery are switching to make diesel and other refined fuels from biomass-based triglycerols instead of petroleum. Both are converting existing hydro-conversion units to the same new process technology—hydrotreated esters and fatty acids (HEFA). The scale of each project would link two existing hydrogen plants to three or four hydro-conversion units. Both are subject to requirements in the same jurisdictions, notably the Bay Area Air District flare rules and County Industrial Safety Ordinance. Thus equal public protections apply, and relatively robust reporting rules provide publicly verified data.

Indeed, the most important relevant difference may be that Marathon began refining 100 percent biomass-based triacylglycerol oils in January 2023 while Phillips 66 is yet to do so at Rodeo.

We seek the County's responses to each individual comment enumerated below with respect to project-specific impacts, cumulative impacts, and interdependencies among disclosed and undisclosed components of the project.

1. New information confirms the project potential to result in frequent significant flaring.

Daily flare activity data reported by the Marathon Martinez refinery pursuant to Bay Area Air Quality Management District Rule 12-11 for flaring from 1 January 2023 through 30 September 2023, the most recent month when these data were reported publicly, are appended hereto as Exhibit A. Marathon first commissioned its Martinez refinery conversion project and began processing 100 percent biomass-based feed at this refinery in January 2023. This is the first observed flaring from full refinery conversion to HEFA technology reported under Bay Area Air District rules. Chart 1 shows the frequency and magnitude of this post-conversion flare activity.



Frequency and magnitude of flaring at the Marathon Martinez ‘renewable diesel’ refinery, Jan–Sep 2023. Flaring frequency shown averaged 20 days per month. Magnitude shown as percentage of BAAQMD cause analysis threshold; 0.5 million cubic feet of vent gas flared (BAAQMD Rule 12-12). Flaring exceeded threshold an average of ten days per month. **Arrow:** the converted biofuel refinery first started up in Jan 2023. Data: BAAQMD Rule 12-11 reports (see Exhibit A).

Flaring at the converted HEFA refinery began immediately, recurred frequently, often exceeded the daily significance threshold established by the Air District (100% in Chart 1) and exceeded ten times that significance threshold (1000% in Chart 1) repeatedly. *See* Exhibit A. During the 273 days from January through September 2023 the refinery flared on 178 days (mean: 20 days per month; Exh. A). It flared in excess of the Air District significance threshold on 86 days (mean: 10 days per month; Exh. A). It flared in excess of ten times the significance threshold on 8 days (Exh. A).

New information therefore demonstrates a reasonable potential for the Rodeo project, if and when it is commissioned, to result in frequent significant flaring.

2. New information shows significant flaring recurs frequently despite current safeguards.

All Determination and Reporting of Cause reports provided by Marathon for significant flaring incidents during January through September 2023 pursuant to the requirements of Bay Area Air Quality Management District Rule 12-12 are appended hereto as Exhibit B. Refiners are required by Air District regulations, among other things, to report the “results of an investigation to determine the primary cause and contributing factors for the flaring event” and “measures that were considered or implemented to prevent recurrence.” §12-12-406. Per Air District rules some Reporting of Cause reports define flare incidents spanning more than one day. Despite these requirements significant flare incidents recurred frequently. Marathon provided 18 reports under §12-12-406 for flare incidents from January through September 2023. Exh. B. Six of these incidents started in January; two started in February; one started in March; one started in April; one started in May; two started in June; two started in July and three incidents started in September. *Id.*

3. New information further demonstrates interdependence of Rodeo and Nustar projects

During at least 13 significant flaring incidents over only nine months a disruption of the critical real-time balance between hydro-conversion units that feed hydrogen and hydrogen plants that produce hydrogen within the new HEFA refinery was a contributing factor. Exh. B. Incidents during which “hydrogen imbalance” was a contributing factor started on 23 January, 24 January, 27 January, 30 January, 7 February, 10 February, 6 March, 5 April, 7 May, 4 June, 15 June, 18 July and 29 July 2023. *Id.*

This new information demonstrates interdependence among HEFA refining units—including that of Unit 250 hydrotreater that depends on Nustar pipeline feed at Rodeo with the Rodeo hydrogen plants. Moreover, it shows how this interdependence can result in an upset in one part of the processing system escalating across the refinery with potentially catastrophic consequences.

4. New information confirms causal mechanisms for significant process hazard impacts

New information in Exhibit B confirms several of the underlying hazards of HEFA refinery conversion that comment on the DEIR identified as evidence that the Rodeo project could cause significant flaring, fire, and explosion impacts. Compare Marathon Determination and Reporting of Cause reports in Exhibit B to FEIR Comment 36, FEIR pp. 3-450 to 3-455; 3-561 to 3-568.

5. New information confirming HEFA refinery fire hazard: 11 November 2023 incident

A 72-hour report on a fire that was discovered on 11 November 2023 on the feed pump of the 2-HDO (hydro-conversion) Unit, a converted hydrocracking unit at the Marathon refinery is appended hereto as Exhibit C. This new information confirms that HEFA refining at Rodeo could result in refinery fires, and, represents yet another “near miss” warning that the RDEIR ignores at our peril.

6. New information confirming HEFA fire significant impact: 19 November 2023

A 72-hour report on a fire that “erupted from a furnace” in the 2-HDO Unit, triggered a Community Warning System alert a few seconds after midnight and hospitalized a refinery worker on 19 November 2023 is appended hereto as Exhibit D. The fire burned for more than an hour before it was extinguished. Exh. D. The HEFA hydro-conversion unit was depressurized to the flare after the fire (*Id.*), showing once again that reliance on safety flares alone does not prevent every incident from escalating to more serious or potentially catastrophic consequences. One of us has been informed that the Chemical Safety Board has opened an investigation. Tragically, the fact of this incident confirms that HEFA processing causes significant fire impacts.

7. New information disproves FEIR impact conclusions the RDEIR relies upon

First, FEIR did not dispute prior comment that Air District thresholds indicate significance; rather, it dismissed prior comment that the switch to HEFA refining had reasonable potential to result in continued flaring at current incident rates or increased rates. *See* FEIR at 3-46. New information proves that the switch to HEFA refining *has increased flaring rates* as shown by data reported in exhibits A and B and Chart 1 and documented in comment 1 above. Moreover, prior comment provided undisputed evidence for a pre-conversion average rate of significant flaring incidence of approximately ten incidents per year. In contrast, as shown in Exhibit B and discussed in comment 2, new evidence documents 18 such incidents over nine months at the converted HEFA refinery—an annualized incident rate of 24, more than double that pre-HEFA baseline. This shows reasonable potential for the Rodeo project to increase the frequency of significant flare incidents, and thereby result in a significant impact.

Second, new information in Exhibit B disproves the FEIR rationale for dismissing prior comment regarding the potential for significant flare and hazard impacts. The FEIR concluded that Rodeo project flaring and process hazard impacts would be less than significant (Master Response 5) based in part because it would remove some fired heaters and furnaces from service and/or reduce firing rates. Despite prior comment showing that the company itself drew the opposite conclusion in its Flare Minimization Plan (see Exhibit E hereto), the RDEIR carries forward this erroneous conclusion. The Marathon FEIR made essentially the same error, claiming that reducing the number of refinery process units and firing rates in those that remain would mean “process safety and flaring risks with the Project would be similar or reduced compared to petroleum processing at the Refinery.” County File CDLP20-02046; FEIR at 3-42, 3-43.

Now, in fact, new information shows that after switching to HEFA refining, Marathon identified underlying conditions that were or could become hazardous due to *the same factor the RDEIR relies on to erroneously conclude less-than-significant impact* as contributing factors for significant flaring in at least seven incidents. Exh. B. Marathon found that using a larger number of process units would help to reduce fuel gas or hydrogen imbalance in its investigations of flaring incidents that started on 17 January, 23 January, 24 January, 5 April, 7 May, 4 June and 15 June 2023. *Id.* Again, however, the RDEIR carries forward the FEIR’s erroneous conclusion.

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8. A crucial implication of this new information

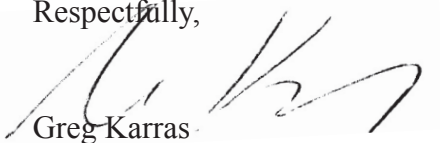
In sum, new information reported here documents reasonable potential for significant refinery flare and process safety hazards to result from the project. At the same time the Court's decision (appended to the RDEIR) provides the County a new opportunity to review and—if it so chooses—a new opportunity to condition any project approval on project design changes. As the US Chemical Safety Board advised in the aftermath of the tragically disastrous Chevron Richmond refinery crude unit fire,

“It is simpler, less expensive, and more effective to introduce inherently safer features during the design process of a facility rather than after the process is already operating. Process upgrades, rebuilds, and repairs are additional opportunities to implement inherent safety concepts.”

Interim Investigation Final Report at 40; <https://www.csb.gov/chevron-richmond-refinery-fire/>

I urge you to ensure that this critically important opportunity to protect community and worker health and safety will not be irreversibly lost. Please send the FREIR back for further analysis.

Respectfully,



Greg Karras
Community Energy reSource

Copy: Interested agencies and individuals

Attachments included in original (8 December 2023) comment document:

Exhibit A. Post-conversion flare activity (8 pages)

Exhibit B. Post-conversion flare causal analyses (65 pages)

Exhibit C. Post-conversion refinery fire on 11 November 2023 (3 pages)

Exhibit D. Post-conversion refinery fire on 19 November 2023 (3 pages)

Exhibit E. Evidence for fuel gas imbalance flaring (2 pages)

January 16, 2024

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**Agenda Item D.7, 16 January 2024 Board of Supervisors Meeting: PUBLIC HEARING
in the matter of the Final Revised Environmental Impact Report (“FREIR”) for the
oil refinery feed switch project that Phillips 66 has dubbed “Rodeo Renewed,” State
Clearinghouse# 2020120330, County File No. CDLP20-02040**

Chair Glover, Supervisors, and Mr. Lawlor,

Please accept this letter for incorporation into the minutes of the January 16, 2024 Contra Costa County Board of Supervisors meeting under item D.7 as a reflection of our public comments made live during the meeting.

Communities for a Better Environment combines community organizing, scientific and policy research, and legal advocacy to advance our resident Members’ vision for environmental justice in their communities, including Richmond in Contra Costa County. We offer our comments knowing that the harms of this refinery and this project pose a real and ongoing danger to all of Contra Costa County and present a harrowing preview of an even more local fight one day with the refinery at our fenceline.

End this Toxic Relationship

Biofuels are the latest attempt by fossil fuel companies to extend the lifecycle of their toxic assets. This is not an act of environmental stewardship or moral conscious, but a panicked and rushed decision within the context of a precipitously declining oil industry in California. While our state moves steadily ahead towards decarbonization and electrification, this Project is a last ditch effort by Phillips to continue to squeeze whatever value they can out of this site and out of this County, all at the expense of community health. The time is now to think ahead, reject this toxic industry, and plan for the healthy and safe future that Contra Costa residents deserve.

For these reasons, we are asking that the Board of Supervisors **reject this Project and reject this Environmental Impact Report.**

Protect Rodeo from this False Solution

Biofuels are a direct threat to this environmentally just future we are building. While the extractive oil industry greenwashes biofuels as a sustainable alternative, biofuels are harmful to our communities and reinscribe extractive economies globally. Like petroleum, biofuels feedstock must come from somewhere. In the case of this refinery, feedstocks are currently coming from Argentinian soybean oil. More soybean oil production will accelerate the ongoing deforestation in Argentina, meaning this project is directly complicit in the destruction of these precious, finite natural resources. This project is threatening the future of youth at home and within the Global South who are also on the frontlines of environmental degradation and the climate crisis.

Once this soybean oil is transported across the hemisphere, the Rodeo Refinery will continue to spew out toxins and greenhouse gases into our local community. As the FREIR acknowledges, “the differences in criteria pollutant emissions” between the petroleum refining and biofuel refining “is small” and in some cases increases local air pollution.

If the County moves forward with the Project over our objections, then we ask that the Board better protect Rodeo and strengthen odor management protocols. First, **shorten the onsite staff inspection interval from every 12 hours to every 6 hours**, so that two inspections take place within every 6 hours. Second, **shorten the odor event threshold that mandates facility shutdowns from 24 hours to 6 hours**. If multi-hour odor issues are indeed supposed to be rare, give the Refinery this 6-hour incentive to make sure.

Rein in Out of Control Refineries

We applaud the County’s recent investigations into the Marathon Martinez Refinery. New information generated by that investigation and the chemical releases that triggered it need to be considered by the County in this process. Chevron’s November 2023 apocalyptic flaring event, and at least four more flarings since, underscore a pattern. Consequently, residents do not trust these refineries.

If the County moves forward with the Project, the Board of Supervisors must ensure that the project proposed by Phillips 66 is indeed the project that happens. We sued, and the court agreed with us, over the obvious connections of this Project and the NuStar rail terminal that currently feeds Unit 250 onsite. The NuStar terminal has quadruple the capacity that can be used by Unit 250. Phillips insists that NuStar won’t soon feed the rest of the Rodeo Refinery. This claim, without any County guarantee, is reflected in the latest EIR, and is insufficient.

The County should condition its approval of the project on that promise, and prevent that excess capacity at NuStar from feeding the Refinery beyond the existing Unit 250 operations.
The word of Phillips is not enough.

Phillips 66 has no Flare Minimization Plan for the Project

Bay Area Air Quality Management District (BAAQMD) "Regulation 12, Rule 12, Section 404.2 states that prior to installing or modifying any equipment required to be described in the FMP [Flare Minimization Plan] in accordance with Section 401.1.1 (i.e., a flare capable of receiving vent gases or equipment that vents to a flare), the owner or operator shall obtain an approved updated FMP addressing the new or modified equipment." (BAAQMD Compliance Advisory, August 1, 2006, https://www.baaqmd.gov/~media/files/compliance-and-enforcement/advisories/flares/adv_080106_12-12_fmp.pdf, emphasis removed).

To our knowledge, Phillips 66 has not submitted a Flare Minimization Plan (FMP) that reflects their plans to convert the facility into a biofuels refinery. Given the significant health impacts that flaring has, and the horrific recent incidents at the Marathon Martinez Refinery since its biofuels conversion, the FMP is a crucial and missing piece of understanding this project. We urge the County **to reject this Project until an FMP that protects community health has been submitted to and approved by BAAQMD.**

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As the County celebrates Dr. Martin Luther King Jr. today, we echo his words:

We are now faced with the fact, my friends, that tomorrow is today. We are confronted with the fierce urgency of now[...]. Over the bleached bones and jumbled residues of numerous civilizations are written the pathetic words, "Too Late."

Sincerely,



Kerry Guerin
Attorney & Just Transition Fellow

Katt Ramos
Program Director

Keala Uchôa
Youth Organizer

Alfredo Angulo
Just Transition Campaign Manager