



Torrance Refinery Action Alliance

February 18, 2020

Governor Gavin Newsom
1303 10th Street, Suite 1173
Sacramento, CA 95814

Posted on the
TRAA Science Advisory Panel Blog
www.TRAA.blog

Dear Governor Newsom:

The Torrance Refinery Action Alliance (TRAA) applauds your leadership in asking Atty. Gen. Xavier Becerra's office to investigate whether California's oil and gas suppliers are involved in price-fixing or other unfair practices, [as reported](#) in the *Los Angeles Times*.

There is, however, a far graver concern that needs to be investigated. On this five-year anniversary of [the Torrance refinery explosion](#), we urge you to request an investigation of how, over the last three decades, two refineries in Southern California's South Bay — the Torrance Refining Company and Valero in Wilmington — have been allowed to use massive quantities of hydrogen fluoride (HF), [one of the world's most dangerous industrial chemicals](#). Per the EPA Offsite Consequence Analysis, [tens of thousands are at risk](#) of "life-threatening health effects" up to eight miles downwind of a major HF release and "irreversible or other serious health effects" 8–16 miles downwind.

It's imperative that the investigation focus on the two legal processes allowing the refineries to use HF in the South Bay: 1) the Torrance/Mobil Consent Decree initiated in the early 1990s, and 2) the AQMD/Ultramar Memorandum of Understanding of 2003. New findings — *unavailable until now* — unequivocally expose how these were based on fraudulently false, deceptive assertions and deeply flawed analyses.* More below, but first some background.

We're sure you've followed the South Coast AQMD's years-long endeavor of promulgating Rule 1410 to protect the community. Shockingly, the process was [abruptly upended](#) by an 8–3 vote of the AQMD Directors. They [accepted](#) the two refineries' coordinated [proffers](#), first seen by the public on the Friday of the Labor Day weekend — only three business days before the September 6 AQMD meeting. For months, an AQMD-Staff-developed [Performance Standard](#) had been scheduled to be presented to the AQMD Board at its November meeting. In stark contrast, the proffers keep HF and offer only minimal measures, which won't protect the community from a major HF release.†

There was, nevertheless, a vitally important outcome of the AQMD Rule 1410 process: *It gave the AQMD Staff the first-ever outsider's view of ExxonMobil's proprietary documents and voluminous data*. After reviewing it, the Staff found itself in agreement, not with the refineries, but with the [TRAA Science Advisory Panel](#) and [the Staff's own outside experts](#). Both had

* Congressman Ted Lieu was correct when he [said](#) the community had been "hoodwinked" into believing an additive mixed into the acid actually made it any safer when there was no evidence that was the case.

† As a prime example of the measures' shortfalls, the proffers would have done nothing to prevent the [massive explosion](#) at the Philadelphia Energy Solutions Refinery on June 21 of last year. The Chemical Safety Board found the cause was the failure of an old pipe, corroded from the inside to paper-thin walls, resulting in the release of more than 5,000 pounds of HF. Luckily for Philadelphia, the hydrocarbons released with the HF ignited in a [conflagration](#) that carried the HF skyward, although the refinery itself was destroyed. Now, the Torrance and Wilmington refineries have infamously moved into the nation's top-spots as HF refineries in the most densely populated region.

already concluded that the refineries' [wildly inflated claim](#) — an additive would effectively suppress HF from forming a ground-hugging, toxic cloud — was baseless. This first-ever confirmation by a government entity[‡] of the ineffectiveness of the HF additive is crucial, because the [fallacious and deceptive claim](#) for the additive was *the primary legal foundation* of the two processes that allow the use of HF today: 1) the Torrance/Mobil Consent Decree, which settled a 1990s lawsuit by the City of Torrance against the then Mobil refinery, and 2) the 2003 AQMD/Ultramar Memorandum of Understanding (MOU), which allowed the then Ultramar refinery in Wilmington to use HF, but only if it included the additive.

There's more: The foundation of Torrance's Consent Decree, a precursor of the Wilmington MOU, has an even more egregious legal flaw. Following Mobil's failure to show in the early 1990s that modified HF "would not form an aerosol or dense vapor cloud upon release," the [Consent Decree was modified](#) in September 1994 to allow use of HF if "Quantitative Risk Assessment" (QRA) could show "the modified HF catalyst (including mitigation) presents no greater risk than sulfuric acid."[§] In May, 2017, the TRAA Science Advisory Panel [discovered](#) the incontrovertible evidence that Mobil's QRA, a discipline [notoriously susceptible to manipulation](#), was wrongfully based on a sulfuric-acid toxicity four-times greater than we now know it to be! There's plenty of [evidence of collusion](#) between Mobil and its handpicked Safety Advisor to get the result Mobil wanted, but the fact that nothing has been done since to correct the QRA's erroneous conclusion is a smoking gun.^{**}

It's critical that the Attorney General's office undertake an investigation of what we now know were fraudulently deceptive legal processes that have allowed two South Bay refineries to use hydrogen fluoride. Thousands of lives are at risk, and there are [vastly safer, economical alternatives](#). Pretending "[It Can't Happen](#)" is only wishful thinking.

Respectfully,

Charles Clendening, Ph.D.

James Eninger, Ph.D.

Nahum Gat, Ph.D.

George Harpole, Ph.D.

*Judith Scott, M.S., former manager
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Christopher Shih, Ph.D.

[TRAA Science Advisory Panel](#)

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P.S. The assertions in this letter are fully backed up with documentation accessible via the embedded hyperlinks and footnotes. This letter is intended to be read in digital form while connected to the internet, as posted at www.TRAA.blog.

[‡] The U.S. Chemical Safety and Hazard Investigation Board (CSB) is about to be the second government entity to see ExxonMobil's long-held proprietary documents, having won a [ruling](#) by the U.S. Ninth-Circuit Court of Appeals. Atty. Gen. Xavier Becerra and the South Coast Air Quality Management District filed an *amicus curiae* brief on behalf of the CSB.

[§] Such a possibility confounds common sense — sulfuric acid's volatility (its propensity to go airborne) is so low that the Environmental Protection Agency doesn't require a [Risk Management Plan](#) for it.

^{**} There's even more new major evidence: 1) A rare, unplanned, full-scale experiment confirmed that sulfuric acid is, in fact, a vastly safer alkylation catalyst than HF. An accidental [84,000-lb release of sulfuric acid at the Tesoro Refinery in Martinez CA](#) in 2014 resulted in no vapor cloud or offsite consequence to the community. An HF release of this magnitude would have had cataclysmic consequences, not only for refinery workers, but also for the surrounding community. 2) The [only large-scale test of hydrogen fluoride with the additive](#) did not include the refineries' superheated, toxic-cloud-forming, operating conditions in its test matrix.

cc: **California State Atty. Gen. Xavier Becerra**

U.S. Senators:

Dianne Feinstein, Kamala Harris

Member of the **U.S. House of Representatives** for the most affected districts:
Ted Lieu (33rd District), Karen Bass (37th District), Linda Sánchez (38th District),
Lucille Roybal-Allard (40th District), Maxine Waters (43rd District),
Nanette Barragán (44th District), Alan Lowenthal (47th District)

Los Angeles County Board of Supervisors

Kathryn Barger, Janice Hahn, Sheila Kuehl, Mark Ridley-Thomas, Hilda Solis

County Los Angeles Public Health

Barbara Ferrer, Director

Members of the **California State Senate** for the most affected districts:

Benjamin Allen (26th District), Bob Archuleta (32nd District),
Lena Gonzalez (33rd District), Tom Umberg (34th District),
Steven Bradford (35th District)

Members of the **California State Assembly** for the most affected districts

Autumn Burke (62nd District), Anthony Rendon (63rd District),
Mike Gipson (64th District), Al Muratsuchi (66th District),
Patrick O'Donnell (70th District), Tyler Diep (72nd District)

South Coast AQMD Governing Board & Executive Officer

William Burke (Chairman), Ben Benoit, Kathryn Barger, Lisa Bartlett, Joe Buscaino,
Michael Cacciotti, Vanessa Delgado, Larry McCallon, Judith Mitchell, V. Manuel Perez,
Dwight Robinson, Janice Rutherford. Wayne Nastri (Executive Officer)

Mayors & City Council Members of most affected cities

Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Lawndale,
Long Beach, Los Angeles (Council District 15: Wilmington & San Pedro),
Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach,
Rolling Hills, Rolling Hills Estates, Torrance

Neighborhood Councils

Central San Pedro Neighborhood Council
Coastal San Pedro Neighborhood Council
Northwest San Pedro Neighborhood Council
Wilmington Neighborhood Council