

Report to Mayor and City Council

Tuesday, April 03, 2018 Discussion

SUBJECT:

CONSIDERATION OF RESOLUTION 18-030 SUPPORTING THE BAN ON THE USE OF HYDROFLUORIC ACID AT THE PBF REFINERY IN THE CITY OF TORRANCE AND THE VALERO REFINERY IN WILMINGTON, AND REQUEST FOR THE EXPEDITIOUS INSTALLATION OF FENCE LINE AIR QUALITY MONITORING AT THE ANDEAVOR AND PHILLIPS 66 REFINERIES IN THE CITY OF CARSON (CITY COUNCIL))

I. SUMMARY

The City Council will consider adopting a resolution supporting the ban on Hydrofluoric Acid that urges the South Coast Air Quality Management District (SCAQMD) to ban the use of Hydrofluoric Acid at the PBF refinery in the City of Torrance and the Valero refinery in Wilmington, and also requests of the SCAQMD to expedite the installation of fence line air quality monitoring devices at the Andeavor and Phillips 66 refineries in the City of Carson, just like the SCAQMD is expediting the installation of fence line air quality monitoring devices at the PBF refinery in the City of Torrance.

II. <u>RECOMMENDATION</u>

TAKE the following actions:

1. WAIVE further reading and ADOPT Resolution No. 18-031, "A RESOLUTION OF

THE CITY COUNCIL OF THE CITY OF CARSON, CALIFORNIA, SUPPORTING A BAN ON THE USE OF HYDROFLUORIC ACID AT THE PBF REFINERY IN THE CITY OF TORRANCE AND THE VALERO REFINERY IN WILMINGTON AND ALSO REQUESTS THE EXPEDITIOUS INSTALLATION OF THE FENCE LINE AIR QUALITY MONITORING DEVICES AT THE ANDEAVOR AND PHILLIPS 66 REFINERIES IN THE CITY OF CARSON."

- 2. REAFFIRM the City of Carson's ban on the use of Hydrofluoric Acid at the Andeavor and Phillips 66 refineries in the City of Carson; and
- 3. REQUEST the support of local communities in expediting the installation of fence line air quality monitoring in the Andeavor and Phillips 66 refineries in the City of Carson.

III. <u>ALTERNATIVES</u>

- 1) TAKE no action
- 2) CONTINUE the item for additional action
- 3) TAKE other appropriate action

IV. BACKGROUND

On February 15, 2015 an explosion and fire at the Exxon Mobile refinery in Torrance severely damaged portion of the Torrance Refinery's equipment used in the production of fuel. Four contract employees were working nearby and needed first aid for injuries sustained while fleeing the explosion and fire. Debris fell on a building frequently used by operators, though the building was unoccupied at the time. Catalyst white ash dust was deposited outside the refinery property in the nearby community. The explosion rocked the neighboring communities.

A large piece of debris, over 80,000 pounds in weight, was thrown onto scaffolding around two settling tanks, each containing hydrofluoric acid (HF). Pure HF is highly toxic chemical that can seriously injure or cause death in concentrations as low as 30 ppm. The U.S. Chemical Safety Board (CSB) investigated the causes and consequences of the explosion. The CSB findings were sobering, concluding that there was the potential to release a toxic cloud and "cause serious injury or death to many community members." Wind pattern maps completed using the wind direction and wind speed the day of the explosion demonstrated that the toxic cloud would have travelled as far as the intersection of Avalon Boulevard and Carson Street, covering over one-quarter of the City of Carson and exposing tens of thousands of Carson residents to serious injury or death. If the HF tanks had ruptured over 800,000 people in the South Bay would have been in harms way.

After the explosion, Exxon Mobile sold the refinery to PBF Energy. Ironically two years to the exact day another blast and fire broke out at the PBF refinery. The call to ban HF at the Torrance refinery began soon after the February 15, 2015 explosion, but has met with no success in Congress or the State Legislature, despite the efforts of local legislators, cities, community groups and environmental activists.

The City Council banned the use of HF at the Andeavor refinery in the City of Carson with the adoption of the \$45 million Tesoro (now Andeavor) Community Benefits Agreement in 2017.

<u>Rule 1410</u>

In April of 2017 the South Coast Air Quality Management District (SCAQMD) initiated a working group to study the impacts of the ban of HF. Known as Rule 1410, the SCAQMD working group has met several times over the last ten months. Consultants retained by the SCAQMD have studied the costs of the HF ban to the two local refineries, estimating that \$1.6 billion in investments to refinery operations would be necessary to eliminate the HF process. They have concluded that the refineries would not make that amount of an investment and would most likely close the refineries.

Due to California's unique gasoline and diesel formulations to reduce air pollution, only a handful of refineries produce the California blend worldwide. There would only be three refiners left in Southern California that would remain in operation. The PBF Refinery and the Valero Refinery produce about 25% of the region's fuels. The closure of the two refineries would make the region more dependent upon offshore refiners. The SCAQMD consultant concluded that spot prices for fuels could rise 25 cents per gallon with a ban on HF.

<u>Rule 1180</u>

The AQMD has been studying the need for improved air quality monitoring at the local refineries. The sole air quality monitoring station in the Carson area is located in Long Beach. Known as Rule 1180 and recently adopted by the SCAQMD Board, the Rule requires the installation of air quality monitoring devices at the fence line of the all refineries. The monitoring equipment would be able to give "real time" readings on air pollution, via possibly a smart phone application or over the internet.

The SCAQMD is requiring that the PBF refinery in the City of Torrance install this air quality monitoring equipment now, but not requiring the same of the Andeavor and Phillips 66 refineries in Carson. Moreover, the SCAQMD has indicated that it may be another two-to-three years before the fence line air quality monitoring equipment will be installed at the Andeavor and Phillips 66 refineries in Carson.

This SCAQMD unfair deployment schedule was adopted despite the repeated communications and efforts by the City of Carson and the Mayor to also similarly fast track the installation of this equipment air quality monitoring equipment at the Andeavor and Phillips 66 refineries in Carson.

Analysis

Despite the potential economic impacts, the banning of HF is a major regional public safety and public health concern. The CSB report found that over 800,000 persons could be injured or killed if the HF storage units at the Torrance refinery had ruptured during the explosion. It was only by lucky circumstances that the HF tanks did not rupture. The region is ill prepared to deal with this type of emergency, as there are no unified plans for notifying and evacuating 800,000 residents and the hundreds of businesses around these refineries should there by a HF release due to a rupture or explosion.

The LA County Board of Supervisors and other cities have adopted resolutions calling for the ban on HF, including the the cities of Redondo Beach, Hermosa Beach and Manhattan Beach. The City of Torrance has adopted the position calling for improvements to the refinery, without endorsing a phase-out of hydrofluoric acid.

The PBF refinery has had repeated safety and environmental issues and has paid out millions in fines. This pattern is likely to continue. Two weeks ago, PBF was ordered by the State to remove tens of thousands of gallons of toxic waste that had been stored at the refinery for decades.

Expediting the installation of fence line air quality monitoring at the Andeavor and Phillips 66 refineries in Carson would allow for a much needed first-alert system related to toxic materials release. There does not appear to be any legitimate reason as to why the expeditious installation of fence line is appropriate for the PBF refinery but not the Andeavor and Phillips 66 refineries in Carson. In fact, because the City of Torrance already has an SCAQMD air quality monitoring station, and the City of Carson with two refineries but does not have any air quality monitoring equipment, it makes even less sense not to expedite the installation of fence line air quality monitoring devices at the Andeavor and Phillips 66 refineries in Carson.

V. FISCAL IMPACT

None.

VI. EXHIBITS

Resolution 18-030. (pgs. 5 - 7)

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