

3/13/18 AGENDA, ITEM 6A - CONSIDERATION OF THE SUBMITTAL OF A RESOLUTION OR LETTER SUPPORTING A REQUIREMENT TO IMPROVE SAFETY AT THE TORRANCE REFINERY BY THE SCAQMD THROUGH THE RULE 1410 PROCESS AND OPPOSING TO THE USE OF MODIFIED HYDROFLUORIC ACID AT THE REFINERY.

SUPPLEMENTAL LETTERS SUBMITTED TO THE CITY COUNCIL BETWEEN MARCH 12, 2018 - MARCH 13, 2018 FROM THE FOLLOWING PEOPLE:

1. Paul Silverstein
2. David Hannum, Torrance
3. Melanie Cohen, South Bay
4. Raymie and Nina McCoy, Torrance

From: Paul Silverstein <pesilverstein@gmail.com>

Date: March 12, 2018 at 7:22:42 PM PDT

To: Undisclosed recipients;;

Subject: Replacement of MHF at Torrance refinery

Please vote in favor of replacing MHF at Torrance refinery as its unsafe and not worth the risk. The wind blows in our direction.

Thank you

Paul

From: David Hannum <dhannum@gmail.com>

Date: March 12, 2018 at 11:49:22 PM PDT

To: citycouncil@hermosabch.org

Subject: Report 18018-1, Item 6a on March 13 city council agenda

Hi. My name is Dr. David Hannum. I live in Torrance, less than a mile from the PBF refinery. I have a PhD in physics from the University of Wisconsin - Madison. I studied plasmas and hydrodynamics there. I have experience with the physics of fluids. I've lectured on these topics at the Princeton Plasma Physics Lab, and I've worked on a supersonic gas valve project for Berkeley National Lab. After studying the problem, I am convinced that HF and MHF present the same risk to the community. I urge you to write the AQMD in support of a ban on MHF.

I'm not the only scientist convinced of the danger to our community. I've joined together with roughly ten other local scientists and engineers in the Torrance Refinery Action Alliance to push for a ban on MHF. We have no financial interest for or against the local refineries. We only have an interest in staying alive. We share the same position as Mayor Brand of Redondo Beach, himself an ex-refinery engineer: MHF poses a fatal risk to hundreds of thousands of LA County residents, including our neighbors in Hermosa Beach.

To safeguard the lives of your constituents, I urge you to push the AQMD for a ban of HF and MHF at South Bay refineries. Alternative mitigation methods will be ineffective due to the temperature and pressure at which MHF is stored for alkylation. My colleague, Dr. George Harpole, wrote an article on this topic which was included in the staff report. I endorse his conclusions. To protect the people and economy of Hermosa Beach, you must send the AQMD a clear, direct message: Ban MHF. Thank you.

Please be aware of the following:

1. MHF is only used for alkylation at four US oil refineries (<http://www.aqmd.gov/docs/default-source/permitting/alkylation-technology-study-final-report.pdf>).
2. Three alternatives to HF/MHF alkylation are commercially available now. Sulfuric acid is proven option used by 8 CA refineries. Ionic liquids have been embraced by Chevron. Its voluntary conversion of its only HF refinery in Salt Lake City to ionic liquids just began and will complete by 2020 (<https://www.chem.info/news/2016/10/chevron-and-honeywell-switch-revolutionary-alkylation-technology>). Finally, a solid acid alkylation unit has been operating in China's Shandong Province since 2015 (<http://www.hydrocarbonprocessing.com/news/2015/12/china-s-wonfull-starts-up-world-s-first-solid-acid-catalyst-alkylation-unit>).
3. Of the alkylation methods mentioned above, only HF/MHF alkylation threatens hundreds of thousands of lives from a potential spill.

Dr. David Hannum

From: **Melanie Cohen** <melaniecohen372@gmail.com>
Date: Tue, Mar 13, 2018 at 9:23 AM
Subject: Please send a Resolution and Letter to Ban MHF
To: citycouncil@hb.org

Dear Hany, Justin, Mary, Jeff, Stacy :

Please include this in your record for this evening's meeting and Agenda Item to ban MHF. I unfortunately have a broken foot and cannot attend personally. You all know my dedication to the South Bay and hope you will pass a resolution and send a letter to the AQMD to keep all safe against MHF. Thank you for all you do!!

Melanie

From: Raymie McCoy [<mailto:swcseabee@att.net>]
Sent: Tuesday, March 13, 2018 1:26 PM
To: City Council <citycouncil@hermosabch.org>
Subject: I SUPPORT THE BAN OF MHF FOR ITS IMPACT ON PUBLIC SAFETY

Mayor and Councilmembers,

We urge you to support TRAA and citizens of Torrance in our pursuit to eliminate the use of MHF at the Torrance Refinery, formerly known as Exxon Mobile. One of two remaining refineries in California that continues to use the unstable and deadly chemical, Torrance Refinery refuses to adapt to safer alternative processes that promotes public safety and human life. TRAA and its industry experts/scientists have conducted extensive research into this matter and concludes other options are available that are less deadly than currently used MHF chemicals.

MHF is a deadly airborne chemical and is recognized by the SCAQMD as an immediate hazard to human life. Further, it is an environmental hazard that must not go unnoticed. So, we urge you and the council to do what is in the best interest of humanity and VOTE TO BAN THE UTILIZATION OF MHF AT PBF'S Torrance Refinery.

Thanks.

Raymie and Nina McCoy
1918 West 220th Street
Torrance, Ca. 90501