PUBLIC REQUEST TO ADDRESS
THE BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES, CALIFORNIA

Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Favor**	Abe Lazkani	
			Adam Glick	
			Adriana Cox	
			Aimee K Gomez	
			Al Sattler	Thank you, Supervisor Hahn, for introducing this motion. The background you have written for this motion states the issue very well. Thousands of people could have died 7 years ago when the Torrance ExxonMobil refinery had an explosion that sent a multi-ton piece of equipment hurtling through the air, landing 6 feet away from a tank holding tons of hydrogen fluoride (HF). If the tank had been breached, a deadly ground-hugging plume would have flowed downwind for miles, killing or injuring everybody in its path. As you write, typical prevailing winds would blow a deadly plume towards communities where people already bear a disproportionate pollution burden. However, "upwind" communities should not feel safe. The wind was blowing toward the ocean when the Torrance refinery accident happened. 3 refineries in other states are converting from HF to safer refining methods. The Torrance PBF and Wilmington Valero refineries should also.
			Alan Calderon	
			Alan Day	
			Alana Calderon	Keep my family safe please.
			Alexander Barnes	
			Alexander Nanji	Agree, conversion!
			Alfred Chung	
			Alicia Kern	Please make our communities safer!
			Alina Nakano	Thank you Supervisor Hahn for introducing the motion to require refineries in Torrance and Wilmington to convert to safer alternatives and phase out the use of the deadly Modified Hydrofluoric Acid. This is an unacceptable and needless risk for our communities, many of which are already facing many other environmental burdens. We are urging the Attorney General and the USEPA to take all possible action to protect our communities.

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Alina Popov	
			Alison Krumland	
			Alissa Materman	
			Allen Morita	
			Alma Reyes-Thomas	PLEASE DO THIS!
			Alqn Roseman	
			Amanda Muttulingam	
			Amy Battle	
			Amy Buntjer	
			Amy Lombardo	
			Amy Meehan	
			Andrea Valcourt	Thank you Supervisors for writing this letter and sending it forward. As a resident of a city in the Kill Zone, I am in favor of anything the Board of Supervisors can to do convince the refineries and any other involved agencies to convert from Modified Hydro Fluoric Acid to a safer product. I would think that the conversion costs would far outweigh the lawsuit costs of families suing because one or more of their loved ones died in another explosion. I feel like we are back in the “drop and cover” days, waiting for an A bomb to be dropped. In our case, we are waiting for a refinery explosion, but drop and cover will not save us.
			Andrew Matuszewski	
			Andrew Vega	
			Andrew Wooster	
			Angelina H Cooper	
			Angie Rosen	
			Ann M Drown	

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41-F.		**Favor**	Ann V Baker	I'm a former Enforcement Attorney for the US EPA (Region II), and a long-term resident of Redondo Beach, CA, having been born and raised here, and having returned as a "native daughter" in 2005 after living back east for 25 years. I wholeheartedly support the campaign for a rule to be promulgated by the US EPA to require refineries using large amounts of hydrofluoric acid to convert to a safer alternative. It's not good enough to say that safety mechanisms are in place to prevent the release of hydrofluoric acid into the surrounding, densely populated area. By the same logic, good brakes on a car should be enough to keep us safe; why wear seat belts when the odds of a serious accident are low? Seat belts are in place to keep us safe IN THE EVENT of accidents. So should safer alternatives to hydrofluoric acid be put into use to keep us safe (or at least less endangered) IN THE EVENT of an accidental release. Please vote for this measure.
			Anne Fairman	
			Anne Ortega	
			Annie C Vandergrift	
			Antoinette W Thompson	The people who live in the South Bay and those particularly who live near the refinery deserve to breathe healthy air.
			Antonella Foster	
			Anuradha Karthikeyan	
			April Wayland	Hello ~ I live in Manhattan Beach, a stone's throw from the Torrance refinery, which uses hydrogen fluoride. This dangerous chemical will likely cause massive death and illness due to an earthquake or human error. Thank you, Janice Hahn, for Item 41-F, which seeks to "Improve Safety and Advance the Conversion of Modified Hydrofluoric Acid to Safer Alternatives at Local Refineries." Please, all of you, vote in favor of this important item. The conversions need to begin ASAP
			Arthur A Oshiro	
			Asha Rawat	
			Ashley Farrell Pickett	This is far overdue and necessary for our community safety and children.
			Ashley Nava	

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41-F.		**Favor**	AUDREY L JUDSON	
			Baird A Kusaka	Thank you Supervisor Hahn for introducing the motion to require refineries in Torrance and Wilmington to convert to safer alternatives and phase out the use of the deadly Modified Hydrofluoric Acid. This is an unacceptable and needless risk for our communities, many of which are already facing many other environmental burdens. We are urging the Attorney General and the USEPA to take all possible action to protect our communities.
			Barbara Dillon	
			Barbara Fuller	
			Barbara Horowitz	
			Barbara Zipper	
			Barrett Ross	
			Bebe Ehsan	
			Beena A Raman	
			Belen Quirk	
			Bell Jamie	
			Beth Tande	
			Beth White	
			Betsy Mars	
			Biju Thekkinedath	
			Bill Reynolds	I urge the County to advance the conversion of Modified Hydrofluoric Acid to Safer Alternatives at Local Refineries. I have been working towards this end since 2016. I am a resident of Torrance, and I am on the Torrance Social Services Commission, and I am an elected delegate from Assembly District 66 to the California Democratic Party. Thank You.
			Bing W Chow	
			Bonnie L Berger	
			BRAD WALLER	
			Brandie Kaneshiro	
			Brent Yeh	
			Brett Thomsen	

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41-F.		**Favor**	Brian Stephens	
			Bruce Szeles	
			Bryan Tsunoda	
			Cam Jose	
			Candice Cooper	
			Carissa Gallardo	
			CARL MONJE	
			Carly Feingold	
			Carly Wooster	
			Carmen Beattie	
			Carmen Contreras	
			Carol Archer	
			Carol Egerer	
			Carol Preletz	
			Carol Tatsumi	
			Carol J Posner	
			Carolyn Hemker	Safer alternatives already exist and are in use at many refineries throughout the US. It seem unconscionable that this hasn't already been addressed and done.
			Carrie Perlow	
			Catherine Gallipeau	
			Catherine Salerno	
			Catherine Shinozaki	
			Catherine Atkin C Atkin	
			Cathy Rodriguez	
			Cecilia Ball	Please stop all refineries from using Modified HFA.
			Chantal Saltzman	

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Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Favor**	Charles Clendening	Thank you, Supervisor Hahn for introducing this motion to recommend that appropriate state government agencies develop policies to quickly improve safety at oil refineries and eventually lead to the phase out of very dangerous Modified Hydrofluoric Acid and its replacement with well-known much safer alternatives. Further evaluation every five years is much too slow.
			Charles Phillips	
			Charles Tsik	
			Cheryl Barnett	
			Cheryl A Townsend	
			Cheryl L Proval	I live on Bindewald Road and have a great view of the refinery every morning on my dog walks. So often I see huge fluffy clouds in the sky that start at the refinery and drift over the region. This business needs to be held accountable for its manufacturing processes and emissions, especially the use of Modified Hydorfluoric Acid!
			chloe domange	
			Chris Golfin	
			Chris P Nguyen	
			Christian Horvath	As one of the first South Bay elected officials to support the end of MHF, I applaud Supervisor Hahn for bringing forth this motion. It has been shown that converting an existing refinery to safer alternatives is possible. It may cost the refinery money but it will bring good union jobs to retrofit existing infrastructure and most importantly will ensure that thousands of residents in the immediate vicinity will be safe from any potential safety issues that may arise from the continuance of MHF. I urge the Board of Supervisors to support this motion and in doing so protect the health and well being of so many in the Second and Fourth Districts.
			Christian Sosa-Lanz	
			Christie Masters	
			Christina Lisowski	
			Christine Chiba	
			Christine Gallardo	
			Christine Stanley	

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41-F.		**Favor**	Christopher Fox	Forcing people to breathe in these toxins when there are safer less toxic means of doing things is unacceptable and they need to be held accountable and make the necessary changes to protect the general public from their harmful practices that they choose to do.
			Christopher Stasi	
			Christopher M Noble	
			Christy Wolff	
			Cindy Matsuda	
			Clara Fujimoto	
			Clark Mitchell	
			Cliff Numark	The safety of Torrance, South Bay and LA County residents and workers is critical. The City of Torrance's strategic plan called on the investigation of alternative technologies to phase out modified hydrofluoric acid at the Torrance Refinery. Of course, the City of Torrance should rigorously monitor safe operations, along with other regulatory entities. At the same time, consistent with the City's strategic plan, regulatory bodies such as the South Coast Air Quality Management District, should investigate MHF alternatives to ensure the safety of the public.
			Clifford Yamamoto	
			Clint Buckman	
			Connie Samiano	
			Connie Sullivan	
			Connie Tan	
			Constantino Garcia	
			Craig Reese	
			Cynthia Annulli	I have lived through the 2015 explosion at the Mobil Refinery and worry every day it will happen again with a deadly outcome next time. From that day in 2015, I urge California to require refineries to convert from MHF to safer alternatives, like has been done successfully at other refineries in the USA and around the World. Thank you.
			Cynthia Carrillo	
			Cynthia Lazzaro	
			Cynthia Perelson	

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41-F.		**Favor**	Cynthia A Lim	
			Cynthia S Pickens	
			Daisy Montich	
			Daisy Parga	
			Dalyan C Johnston	I have lived in the shadow of the Torrance Refinery all my life knowing that at any time, their negligence can cost me my life. The pandemic has taught us that anything is possible and we have to prepare for the worst case scenario. These refineries are dragging their feet because they don't care about anything but their bottom line. I urge the Board to pass this measure. It will save lives.
			dan materman	
			Dana Seagars	
			Dana Zupanovich	
			Dana R Grollman	
			Daniel Levin	
			Daniel Manross	
			Daniel L Fleischman	
			Danielle Thomas	
			Darren Rugh	
			Dave A Mau	
			David Leveille D Leveille	
			Dawn Huh	
			Dawn Lowe	We don’t need a weapon of mass destruction in a very dense part of the county.
			Dawn M Ostlund	
			Deb Jeter	
			Debbie Daniels	There may be a refinery in Lomita/Habor city that also uses hydrofluoric acid besides the one in Torrance.
			Deborah Hirsch	We must stop this awful chemical from polluting our local air

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41-F.		**Favor**	Deborah H Downie	
			Debra Marcus	
			Dee Blake	
			Dency Nelson	On this anniversary of the explosion at the Torrance refinery that could have jeopardized the lives of thousands of Los Angeles County residents had the container with MHF been penetrated, it is high time this dangerous chemical be replaced with the safer alternative. To ignore this opportunity would be nothing v short of a high crime.
			Derek Lazzaro	
			Dessa Meyer	
			Devin Uzan	
			Diana Howard	They must use safer alternatives!
			Diana Karanikas	
			Diana L Mielke	
			Diane Honjiyo	
			Diane Smith	
			Diane C Havenner	
			Don Garstang	Please make the South Bay safe and don't wait for a catastrophe before making changes.
			Don Kain	
			Donelle L Westbrook	
			Donna M Wright	
			Dorothy Ottolia	
			Dorothy G Moore	I'm so happy with Supervisor Hahn's initiative and I know she cares about worker and community safety. There's no need for the risks of HF/MHF with the safer alternatives. I'm convinced refineries will only change over if monetarily beneficial or they are legislatively required by EPA/OSHA etc. Thank you, Dorothy Moore, MD
			Dragan Zaric	
			Edith Ziegler	
			Elaine Guice	

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41-F.		**Favor**	Elaine Ruggeri	
			Eleanor Ives	
			Elisabeth S Youn	
			Elizabeth Brightman	
			Elizabeth Calkins	Please keep our communities safe from a potential disaster! Thanks.
			Elizabeth Marushin	
			Elizabeth Stephens	
			Elsa Bonilla	
			Elsie Yam	
			Elyse V Gura	
			Emad Georgy	
			Emily Baggs	As a Torrance resident, there is no reason for MFH to continue to be used at the Torrance refinery or Wilmington refinery when there are viable alternatives that do not pose the same safety risks for residents. These are the only two refineries in the state that continue to use MFH. This hazard to the residents of the South Bay and surrounding areas should not be allowed to continue.
			Emily Eastham	
			Emily Hertzberg	Thank you Supervisor Hahn for introducing the motion to require refineries in Torrance and Wilmington to convert to safer alternatives and phase out the use of the deadly Modified Hydrofluoric Acid. This is an unacceptable and needless risk for our communities, many of which are already facing many other environmental burdens. We are urging the Attorney General and the USEPA to take all possible action to protect our communities.
			Emily L Borrelli	
			Emma Caplan	
			Eric Weiner	This dangerous chemical has killed thousands before, it's come close to be unleashed here during one of the explosions at the refinerie. Please don't wait until it's to late..
			Eric Yawn Yawn	
			Erica Mountain	

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41-F.		**Favor**	Erich Nakano	I am a Torrance resident living within a few miles of the Torrance PBF Refinery. We are almost at the 7 year anniversary of the massive explosion at this refinery which caused a huge piece of equipment to collapse. That collapse came literally within feet of hitting a storage tank with a large amount of Modified Hydrofluoric Acid (MHF), which is in use at this refinery. Studies have confirmed that the release of MHF could cause a catastrophic injury and loss of life in neighboring communities. The two refineries – the only two in California – that use MHF are Torrance PBF and Valero in Wilmington. These refineries are surrounded by low income communities of color – communities that historically face the brunt of environmental hazards and disasters. But these neighborhoods do not have to live in fear of such a devastating catastrophe. There are safer alternatives to MHF that are in use at refineries across the country. They are proven to be an effective, and safer alternative to MHF. But the PBF and Valero refineries will not voluntarily make a change from MHF to such safer alternatives, for fear of undercutting their profits. It is the responsibility of the local and State government, to protect public safety, to require these refineries to make the change. Please make this happen!
			Erika Jerez	This initiative is long overdue. MHA use poses unnecessary risk to our residents — we have already had one major disaster at the plant. Another accident could be disastrous if MHA got released.
			Erika Kodama	
			Erin Dalbey	
			Erin Hoffman	The County must do anything within its power to promote best safe practices at local refineries and protect citizens health and well being. Please protect our environment, the air, sea and wildlife from toxic chemicals.
			Erin Murphy	Shut down refinery
			Esther Chen	
			Esther Wheeler	
			Eugene E Higginbotham	
			Eugenia Briones	
			Eugenia Chiang	
			Francis Yam	
			Frank Takaki	
			Gailene Tofiga	
			Gala Burkholder	Please keep the South Bay community safe!

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41-F.		**Favor**	Garrett Burke	Yes, a safer alternative is long overdue.
			Gary Krefta	
			Gary Meyer	Current situation too dangerous! A disaster ready to happen!
			Gary Stolz	
			Gary D Furuno	
			Gaye Simmons	
			Gayle Y Sato	
			Gemma Scharfenberger	The plant must not use such deadly substances.
			Genevieve M Clavreul	
			Geno A Schwartz	
			George Harpole	
			Gerald Orcholski	MHF is a danger to all the communities surrounding the Torrance refinery and the Wilmington refinery. MHF must be removed from the refineries and substituted with safer alternatives.
			Gianna Ingram	
			Gigi Kwok-Hinsley	
			Gina Mcduffie	
			Gloria Strickler	
			Grant Glazebrook	
			Gregory de la Pena	
			Gregory Schroff	
			Hamid Eslami	
			Hannah Choi	
			Harlan Rotblatt	MHF is a potentially catastrophic hazard -- as has already been clearly stated by the Health Officer for Los Angeles County, Dr. Muntu Davis. The existence of alternative chemicals renders it a completely unnecessary risk to LA County residents. Use of this chemical must be discontinued immediately.
			Heather Beatty	

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41-F.		**Favor**	Heather Ross	
			Helga A Post	
			Holden Hicks	
			Hope Baldridge	
			Howard Oresky	
			Irene Dyer	
			Isabel Balboa	
			Isabel Quintero	
			Ivette Lopez	This is completely against safe environmental and health standards and regulations. My child deserves clean air, chemical free.
			Jaimee Blanco	
			jairo miranda miranda	
			James D Williams	

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41-F.		**Favor**	James E Eninger	Dear L.A. County Supervisors, On February 18, 2020 - the five-year anniversary of the Torrance refinery explosion - TRAA announced a campaign urging Governor Gavin Newsom to request the Attorney General to investigate - based on newly available irrefutable evidence - the lack of basis for two legal processes that allow the Torrance Refining Company and Wilmington's Valero Refinery to use massive amounts of hydrogen fluoride that imperil the surrounding communities. An investigation is the essential precursor to a lawsuit by the State Attorney General to ban the use of HF in the refineries. Over the last three decades, in a David-and-Goliath struggle between the innovation of converting to a vastly safer alkylation catalyst and the South Bay refineries' clinging to the status quo - hoping a calamitous event beyond their control won't release their store of HF into the community - the refineries have won at every turn: 1) the 1989 Walker Initiative, 2) the 1990 Torrance lawsuit settled in a consent decree allowing the Torrance refinery to use HF,3) the original 1991 AQMD 1410 Rule overturned on a clerical error, 4) the AQMD/Ultramar MOU allowing Valero to use HF,5) two bills in the State Assembly that died in committee, and 6) the recent collapse of the second AQMD Rule 1410. Innovation at loggerheads with the status quo is a subject of the celebrated book Men, Machines, and Modern Times by Elting Morrison (1909-1995), renowned Professor of Science and Technology at MIT. The book, based on a series of famous lectures Morrison gave at Caltech, sets out a roadmap for progress illustrated by a case study of an innovation around 1900 that greatly increased the accuracy of guns on U.S. Navy warships and the Navy's opposition to it. The innovation/status-quo deadlock was broken in favor of innovation only when the issue was elevated to a higher level of authority, Theodore Roosevelt, the President of the United States at the time. In the letter two years ago in the 5th anniversary of the Torrance refinery explosion, TRAA elevated the issue to the informed leadership of Governor Gavin Newsom and Atty. Gen. Xavier Becerra. (Letter uploaded.) TRAA applauds the leadership of Janice Hahn in adding the voices of the Supervisors to this important cause. Kind regards, James Eninger, Ph.D. TRAA Science Advisory Panel traa.blog/2018/06/16/meet-the-traa-science-advisory-panel/ See: traa.website/ and traa.blog/2020/02/10/traa-urges-governor-gavin-newsom-to-investigate-torrance-and-wilmington-refineries/

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41-F.		**Favor**	James E Eninger	Please see uploaded post from TRAA.blog
			James F Matthews	Please pass this to make things safer for the community. Thank you.
			James K Berger	For cleaner air and public safety
			Jamie Ates	
			Jan Lonsdale	Please (please!)support a safer alternative at our local refinery
			Jane Affonso	I salute Janice Hahn for her long time leadership in efforts to protect communities from HF and and thank the entire Board for your consistent support on this issue. I urge you to pass 41F unanimously to protect untold future victims from this deadly chemical which still exists only because of the greed and lies of the refineries. I'm so frustrated that this risk especially impacts refinery workers and those living in environmental justice communities near the refineries. It's an excellent motion and perfect timing because of 1)there are new safer and economically viable alternatives available and in operation now, and 2)rhere are administrations in Sacramento and Washington DC and that have the capacity to finally tackle this issue. I urge Gov Newsom, Attorney General Bonta and the federal EPA to do everything in their power to follow your lead to get HF out of refineries as soon as possible. I love to think that my County, LA County can be the leader in this local, state and national effort to stand up to the refineries and finally rid our community of HF, Thank you!
			Jane Munson	Modified HFA in Torrance is a significant and unacceptable threat to the area. Most refineries do not use this. It needs to be banned.
			Jane Oden	
			Jane Roseman	
			Jane M Reitz	My husband and I recently had tests done and our bodies are suffering from the toxin: Hydrofluoric Acid. We didn't realized we could do something about it. I am sure 90% of our community suffers from this but doesn't know it.
			Jane R Readeur	This is extremely important. An accident at our local refinery could kill thousands of people in the South Bay.
			Janet Haslerud-Bergen	

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41-F.		**Favor**	Janet R Katz	
			Janette Kuvhenguhwa	
			Janice Suzuki	
			Janille Miyake	
			Janise Burrafato	
			Jasmin Chavez	
			Jason Thacker	
			Jean de Angelis	
			Jean D Nestojko	I live near the Torrance Refinery and have been concerned about the use of MHF acid for some time. My husband works in design and engineering for petrochemical companies and says it is both unusual and unnecessary for a refinery today to still us MHF acid.
			Jeffrey Shimane	
			Jeffrey K Williams	I am in favor of Agenda item 41F. Requiring Torrance Refinery to switch from Modified Hydrofluoric Acid to safer alternatives is the correct path forward for the public safety and health of the residents and workers around the refinery location. Human error and Mother Nature are 2 areas that even the best prepared companies cannot prevent. Given the highly lethal effects of MHA, the currently available alternatives would be in public interest. Passing this Initiative would demonstrate that the public health and safety of the citizens living in this are is being placed ahead of the finances of a single privately held company.
			Jen Dickson	
			Jennie Towe	
			Jennifer Armstrong	
			Jennifer Chun	
			Jennifer Chung	
			Jennifer Powell	
			Jennifer Yamamoto	
			Jenny Durand	

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41-F.		**Favor**	Jesse N Marquez	
			Jessica T Tumarkin	This is essential to ensuring the safety of people in Torrance and the surrounding communities. The use of MHF in refineries is a deadly disaster waiting to happen.
			JIANLIN HUANG	
			Jill Sanders	
			Jim Mitchell	
			Jimmy Sato	
			Joan Forman	I live in Redondo Beach with my husband. My daughter and family live in Torrance. My husband and I have asthma. We are concerned about the health of everyone, including us. We want an environmentally safe environment for all. Hazardous pollutants should not be filtering into the air we breathe.
			Joanna Stott	
			JoAnna H Van Camp	
			Joanne Hadley	Please do all you can to keep this deadly chemical out of our area. Thank you!
			Joanne Terp	
			Jodi McDaniel	
			Joe Knoernschild	
			Joe R Mendoza	
			Joel Posner	
			John Adams	
			John Rubiner	
			John Tucker	This really nasty stuff
			John A Guice	I wish our safety was more important than keeping the oil and gas industry happy.
			Joleena Powell	
			Jorge Anwandter	
			Jose manuel Gonzalez	

As of: 2/16/2022 7:43:59 AM

PUBLIC REQUEST TO ADDRESS
THE BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES, CALIFORNIA

Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Favor**	Joshua M Mendoza	
			Jovona Ludwig	
			Joyce Galletti	
			Juan Cueva	
			Judith Herman	
			Judith Schuler-Pollard	
			Judith Tighe	
			Judy Chan	
			Judy Foster	They won't do it voluntarily.
			Judy Sheldon	
			Juli Monahan	
			Julie Fairbanks	
			Julie Rosen	
			Julie A Mendoza	
			Juliet Babros	
			Jung Kim	
			Justin Massey	
			Justin mccormack	
			Kahlil Kochiyama	It is unfathomable that as a high school senior going to school less than a mile away from the explosion, that I was inches away from death due to the negligence of our local refinery. No student, child, or resident should ever be threatened by the looming possibility of an MHF disaster of catastrophic proportions. Thank you Supervisor Hahn for introducing the motion to require refineries in Torrance and Wilmington to convert to safer alternatives and phase out the use of the deadly Modified Hydrofluoric Acid. This is an unacceptable and needless risk for our communities, many of which are already facing many other environmental burdens. We are urging the Attorney General and the USEPA to take all possible action to protect our communities.
			Kaitlin Kohut	
			Kara Romero	
			Karen Klink	

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Karen Meleo	
			Karen Morris	
			Karen Oknayan	
			Karen Roseman	
			Karen L Kinne	
			kate tatsumi	
			Katerina Marutsos	
			Katherine Fukuda	I am a Torrance resident who lived a block away from the Torrance Refinery growing up. Please approve this measure that would end the use of MHF. All I want is a safer community and the potentials dangers that the refinery pose are always an imminent threat in my opinion. Please look out for our community safety.
			Katherine Schryver-Stahly	As someone who both works with children and lives with children near the Torrance Refinery, I am strongly in favor of this measure. Our children should not have to live with the possibility of another accident occurring at the refinery, especially one where their lives would be at stake. I know that the school where I work would not be able to effectively shield the children in my care from Modified HFA. Other refineries around the country do not use it in their operations and neither should ours. Thank you.
			Kathleen Mccarthy	
			Kathleen Zambrano	
			Kathryn E Campbell	
			Kathy Ruff	
			Kathy Wu	
			Kathy Yandell	
			Katie Amaya	Please take care of this conversion asap for the health and safety of all residents within the Southbay!
			Keli Moloney	
			Kelly Bates	
			Kelly Spahr	
			Kenji Hosoi	

As of: 2/16/2022 7:43:59 AM

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Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Favor**	Kenneth Johnston	As a Torrance resident for two decades and teacher in the Torrance School District, I have been appalled at the lack of action by our local officials on this matter. Hundreds of thousands of citizens are at daily risk. It is needless risk. The last two refineries in CA that still use this deadly chemical refuse to switch to safer alternatives out of sheer greed. I thank Supervisor Hahn for standing up for her constituents ! Please approve this measure for the safety of our community!
			Kenneth McKay	
			Kenny Chong	Avoiding use altogether is preferred, meaning even the modified concoction.
			Keran A Doolan	
			Keri Weiss	
			Kerianne Lawson	The Torrance Refinery is blocks from North Torrance schools, including the North Torrance High School athletic fields. Columbia Park, with it's vibrant AYSO programming is literally across the street. Please protect us all from this menace.
			Kerri Rondeau	
			Kevin Kavanagh	
			Kevin McRoberts	
			Kia Harirchian	
			Kim Neglia	
			Kim Wilson	
			Kim E Brant-Lucich	
			Kirsten van Aalst	
			Kris Barnett	
			Krista Valle	
			Kristall Mosler	
			Kristen Papac	My family and I live in the area directly surrounding the refinery and we would be horribly affected if there were to be a leak of hydrofluoric acid.
			Kristin Blumenfeld	
			Kristin Foord	As a resident living within the potential zone of destruction in case of a catastrophic accident at the Torrance Refinery, I strongly support a change to safer alternatives.

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Kristofer Jones	
			Kristy Knowlton	
			Kumiko Knear	
			Kyle Graves	
			Lan Nguyen	
			Larry J GUENTHERMAN	
			Laura Caputo	This would help to keep my family and community safer. It's needed and inexcusable not to move forward with eradicating this unnecessary toxin from the Torrance Refinery, there are plenty technologies to replace this toxin. If companies can't protect the communities they are based in, they have no business doing business.
			Laura Dotson	Please for the safety of our community
			Laura Fourness	
			Laura Geisel	
			Laura Kastner	
			Laura Lovekin	
			Laura Samaniego	
			Laura Vargas	
			Laura Wallace	
			Laura C Moore	
			LAURA P BENEDID	
			Lauren Davis	
			Lauren ONEIL	
			Lauri Kovar	
			Lavonna K Boyle	
			Lawrence Blood	
			lawrence m markey	Please pass this motion, thank you.
			Lela Getzler	

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Lenore A Landis	My name is Lenore Landis. I'm a Torrance resident, the mother of two children, and a chemistry professor at Cypress College. As a mother, I feel completely frustrated and dismayed that our children, as well as the rest of the community, cannot be protected from an MHF release and we are put in unnecessary risk every day. I support all efforts to replace MHF with a safer alternative. Dr. Kenneth Hudnut from the USGS explained at an AQMD meeting that a magnitude 7.0 earthquake on the San Andreas Fault could cause MHF pipelines to separate, and sloshing of liquid MHF could cause tank failure, resulting in a catastrophic release. After an earthquake, the Torrance Unified School District's (TUSD) emergency plan is to evacuate and remain on the field. The district doesn't have a plan for students and teachers to react to the MHF cloud that will soon follow simply because there are no viable options. All the children would be left to perish on the field. I can't even fathom how this highly toxic substance is allowed just blocks away from schools. MHF poses a real threat to the health and lives of the citizens of Torrance, Wilmington, and surrounding communities. The fact that this toxic material is knowingly allowed threaten human lives has now become a conscious decision to put politics and money before morals and ethics. Please do not turn a blind eye to the research, data, and facts that these large, wealthy corporations want to obscure. It is your moral imperative to act upon your conscience—to do what's right, to honor the trust the people have placed in you.
			Les Borean	
			Leslie Chase	A better, safer South Bay
			Lewis Jenkins	
			Lexia Correia	
			Linda Bille	
			LINDA OROURKE	
			Linda Soares	
			Linda Trinh	
			Linda R Neal	This is long overdue.
			Linda S Vore	

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Lindsay Meagher	
			Lisa DiFranco	Torrance residents deserve better.
			Lisa Johnson	
			Lisa Painter	
			Lisa Peterson	Crucial for safety and community health. Long overdue.
			Lisa Stegman	
			Lisa Wright	
			Lisa Wyatt	
			Lisa C Green	Finally, it has been way too long that this chemical has been used in such a densely populated area.
			Lisa M Rich	
			Liz Zamites	
			Liza S Tiglao-Smith	
			Loia M Jones	There's too much odor from refinery since I've lived here for over 40 years.
			Lori K Couderc	
			Lorraine Iwamasa	
			Louise Sans	
			Lynda johnson	Please help those of us who live close by and fear this danger ever day.
			lynn thompson	
			Lynne Pope	Air quality essential
			M Silva	
			Maddy Buennagel	
			Magdalena Quintas	
			Mala Fox	
			Manny Lopez	
			Marea Woolrich	
			Margaret Goddard	Thank you for being this back to the table. Please protect our health, safety, and property values!!

As of: 2/16/2022 7:43:59 AM

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COUNTY OF LOS ANGELES, CALIFORNIA

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41-F.		**Favor**	Margaret Kline	
			Margaret van Oppen	
			Margaret S Kerza-Kwiatecki	
			Margarita Lomotan	
			Maria Arminio	
			Maria McWilliams	
			Maria Sciarrino	
			Maria R Digirolamo	
			Marie Wade	
			Marilyn Bayer	
			Marilyn Smith	Lets finally get rid of this mess. I turned down a $70,000 year a job at a credit union that was down wind from this refinery. Lets get rid of this danger
			Mario Ramirez	
			Mario Salas	Hydrogen fluoride gas, even at low levels, can irritate the eyes, nose, and respiratory tract. Breathing in hydrogen fluoride at high levels or in combination with skin contact can cause death from an irregular heartbeat or from fluid buildup in the lungs.
			Marisa Rivera	
			Maritza Ohannesian	
			Marjolijn S Darcy	
			MARLENE MCEWEN	
			Marlene Young	
			Marsha Cummins	
			Marsha D Hopwood	
			Martha Roberts	
			Martha Sternberg	
			Marti Navarro	

As of: 2/16/2022 7:43:59 AM

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COUNTY OF LOS ANGELES, CALIFORNIA

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41-F.		**Favor**	Mary Kisaka	Make our community safe from MHF acid before we have a mass casualty event.
			Mary Miller	Please help keep our families and neighborhoods safe. We want to ensure we are protected from MHF should an accident happen again and any part of the refinery become compromised.
			Mary Pope	
			Mary Roberts	
			Mary Sanders	
			Mary Wiens	Please keep our area safe.
			Mary Ann Mollenkamp	
			Mary Claire Scanlon	This is much needed. The current product being used is dangerous and potentially disaster inducing. There are safer methods- let's use them!
			Mary L Miller	
			Mary Lynn Goodin	
			Mary T Mendoza	
			Masami Matsuno	
			Matthew Valentine	
			Matthew H Lim	
			matthew t stenerson	please keep our children and residents safe these refineries were built over 70 years ago when the population was much less. its 2022 we need think about all the people who live within a breeze of this potential chemical disaster
			Maureen Smith	
			Maureen J Wilson	
			Megan Hayati	
			Melissa McAlpine	
			Melody Colbert	Please get the owners to upgrade to keep the community safe!
			Melody Elder	
			Melody Kulsic	Please convert this very dangerous substance. We live in Torrance and MHA could cause a DEVISTATING Catastrophy. Please save our lives!

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Melvin Kuo	
			Mercy Nielsen	
			Michael Timmermann	
			Michael J Darcy	
			Michael J Schmitz	Thank you Supervisor Hahn for introducing the motion to require refineries in Torrance and Wilmington to convert to safer alternatives and phase out the use of the deadly Modified Hydrofluoric Acid. These refineries have continued to use this deadly gas when more effective and safer alternatives exist, despite the needless risk for the surrounding communities, including the children in neighboring schools. We support the Board of Supervisors in a call to urge the Governor and Attorney General and the State's representatives to take swift and decisive action to protect human health and well being.
			Michael L Ludwig	
			Michelle Brenes	
			Michelle Fisher	
			Michelle Kuschinsky	
			Michelle Murphy	
			Mildred M Quan	
			Mirna Davila	
			Mollie A Gehley	
			Monica Franco	
			Monica Lanier	
			Morris Age	I have lived through the 2015 explosion at the Mobil Refinery and worry every day it will happen again with a deadly outcome next time. From that day in 2015, I urge California to require refineries to convert from MHF to safer alternatives, like has been done successfully at other refineries in the USA and around the World. Thank you.
			Muriek Gonzalez	
			Nahid Mohammadifar	
			Nancilyn Burruss	This should have been done years ago!
			nancy manning	

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Nancy Sanders	
			Nanette Pastor-Hanna	
			Natalia Giacomelli	
			Natalie Tisherman	
			Nickole Williams	The refineries have Agreements with the South Coast Air Quality Management District to install additional safety equipment on their already world class Alkylation units. One refinery completed its alkylation safety enhancement projects and the second refinery will complete its safety enhancement project in a few weeks. The motion that is before the board assumes that measures haven't already been taken to enhance safety at both refineries. I find this motion to be completely unnecessary and I ask that the LA County Board of Supervisors reconsider.
			Nikki Nance	I worked next door to this refinery for decades and have seen first hand the health impact of their operations. There is no reason to allow them to continue to use Hydroflouric Acid and further endanger our communities.
			Niru Singh	
			Noah Blake	
			Noelle Tydlaska	
			Ornella Wemyss	California can and should do better. There is no reason to keep this chemical when there are alternatives.
			Paige Okada	
			Pam Johnson	
			Pamela Juge	
			Pamela Michael	
			Paola CARRILLO	
			Pat M Schardt	
			Patricia Banuilos	
			Patricia Gowda	
			Patricia Kiley	
			Patricia Maduke	
			Patricia Masai	

As of: 2/16/2022 7:43:59 AM

PUBLIC REQUEST TO ADDRESS
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COUNTY OF LOS ANGELES, CALIFORNIA

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41-F.		**Favor**	Patricia Mccarthy	
			Patricia Steven	
			Patricia Yee	
			Patricia A Harrison	
			Patricia A Thies	
			Patricia B Anwandter	This is long overdue. It is essential that we protect our communities.
			Patricia R Mortvedt	
			Patrick D Garvey	
			Patti Thompson	
			Penny Markey	
			Peta Noble	
			Peter R Miller	
			Polly Beissert	
			Rachel Ebner	
			Rachel Kimmel	
			Rachel Phillips	
			Rachel Starrett	
			Ralph Clark	
			Randall Davis	This should have changed a decades ago
			Ray Zepeda	This should happen now!
			raymond lin	
			Reena Villegas	
			Regis Camargo	
			Renata Paraventi	
			Renee Olsen Schmidt	
			Ricardo Alonso	
			Richard Dinetz	

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41-F.		**Favor**	Richard Scholtz	
			Richard Williams	
			Richard D Downie	
			Richard J Katz	
			Richard W Daley	
			Rick Hind	Thank you for this motion. If fully implemented, it will eliminate the catastrophic hazards that HF refineries pose to workers and surrounding communities in the LA area. In addition, it will hopefully encourage the USEPA to issue new RMP safety standards that eliminate similar potential disasters at dozens of other refineries that currently endanger millions of Americans. These proven safer processes now being used are appropriate for both existing and new refineries AND it will make them more economically sustainable. Ideally the USEPA will apply the same standard to all chemical facilities that pose such huge catastrophic hazards. Safer alternatives are widely available for many sectors of the industry but vastly underutilized. Thank you again, Rick Hind Former Legislative Director of Greenpeace (retired)
			Rigo Bonilla	
			Robert Sarno	
			Robert Tinti	
			Robert L Smith	
			Roberta Miller	Please, please convert to safer option.
			Roger Bondelli	
			Roger Wang	
			Rolana Avrumson	
			Rosa M Garcia	Torrance refinery need to user safer chemicals on their facilities
			Rosalie Preston	
			Rosario Diaz	
			Rose-Cherie Campbell	
			Ruby Goldman	
			Ruby Seitz	

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Rumsey Hamid	
			Russell Burruss	
			Sabrina Hsu	
			Sadia Khan	
			Sam Q Chan	
			Samaneh Fatemi	
			Samuel Curry	
			Sandi Monda	
			Sandra Viera	I am a mother, teacher, and resident that lives near the Torrance Refinery. I know all the PR the refinery does in the community with billboards, and with the Torrance Unified School District with grants and projects. The Refinery portrays itself as a good neighbor who is doing everything it needs to in order to protect the community. This is an insincere gesture as Refinery personnel countless times stood in front of AQMD and told lies about the safety of MHF; all so they wouldn't have to spend the money to switch to a safer alternative. Independent scientists as well as the AQMD scientists, have concluded that MHF is deadly and that their is virtually no way to safeguard the workers and community from an accidental spill. Knowing that there are major refinery accidents at least once a year and living with the knowledge that the "big one" (earthquake) is coming, energizes me to write to you today. I teach 5 and 6 years old who already live in fear of Covid, earthquakes, school shootings, fire and bad air. I can't tell you about all the heart breaking discussions we have before and after every drill. We practice being stealthy Ninjas and hiding quietly from gunmen, duck and covering for earthquakes, evacuating quickly for fires, and getting inside and closing the doors for bad air. I lie to them and tell them I will protect them. I can't tell them the truth, that we might not get enough warning, that bad air can get in through cracks in the window and door sealants. I would take a bullet for my kiddos but I can't take a cloud of MHF for them. Fear of "bad air" does not need to exist! You can be the heroes. Please do whatever it takes to rid our communities of MHF. Thank you.
			Sara Dozier	
			Sarah Noddings	Very important
			Sarah Webster	
			Sarveswara R Eranki	

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Scott Tobis	
			Scott S Shimabukuro	
			Sean Oconnell	
			Sesoria Juhn	
			Shadi Rosiles	
			Shannon Gonzalez	
			Sharon Alexander	
			Sharon Nienberg	
			Shelly L Mecoli	
			Sheri E Kapust	
			Sheri L Salazar-Lydon	
			Sherrie Mancera	This safety measure is long overdue. Torrance Refinery has had past explosions, and this is earthquake country!
			Sonia Varghese	
			Sophia Fox	The refinery should be held accountable for the toxins we are forced to inhale every moment of every day they produce it. It is absolutely absurd, as residents of Torrance safety is NOT a concern for US & our children!! My question is WHY? Why are we subjected to poisonous airborne toxins every single day? This is a choice; the refinery has a choice whether or not to harm the local residents. They choose YES. Please be better.... better human beings if possible
			Sophia Powell	
			Stacey Nozaki	
			Stacy Barrows	
			Stacy Sealock	
			Stephen Lalli	
			Steve Pickens	
			Steve Tatsumi	

As of: 2/16/2022 7:43:59 AM

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Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Favor**	Steve C Dillow	Dear Supervisors, I am writing in support of Janice Hahn's Motion Asking Governor Newsom & Attorney General Rob Bonta to Take Actions to Require HF Refineries to Convert to Safer Alternatives. In 2015 there was an explosion at the Torrance Refinery which caused much damage, including a cloud of ashes which rained down on neighborhoods for many miles downwind. My house, car and yard were covered with the ash, which they assured us was not dangerous. Only later did we learn the extent of the damage, where a 40 ton piece of equipment was blown off the top of a building and landed about 100 feet away. Had it gone a mere five feet farther it would have hit the settler tank containing thousands of pounds of pressurized MHF. The rupture of that tank or of the pipes leading into it would have led to the deaths and injuries to tens of thousands of us in the area. For years the Torrance Refinery has lied to us, especially in the earlier Consent Decree which they negotiated with the City of Torrance. They falsely claimed that HF (or their "modified" HF) was just as safe as the only alternative available at the time – sulfuric acid. But that has been proven false by scientists at TRAA. (See the TRAA Blog articles Fatal Flaw in the Consent Decree and Dramatic Large-Scale Demonstration that Sulfuric Acid Is Vastly Safer than HF for Alkylation and the Daily Breeze report Developments in the debate over hydrofluoric acid). Please help protect our community from this unnecessary hazard. Sincerely, Steve DIllow
			Steven Goldsmith	Thank you for action - will make my remarks orally
			Sue Chun	
			Susan Adams	
			Susan Bales	
			Susan Bloomfield	
			Susan Castro	
			Susan Fukuda	I live in Torrance and very concerned about the safety of community.
			Susan Oda	
			Susan M Reichert	

As of: 2/16/2022 7:43:59 AM

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COUNTY OF LOS ANGELES, CALIFORNIA

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41-F.		**Favor**	Susan W Hansen	
			Susie Perez	
			Susie Yin	
			Suzanne Barton	
			Suzanne Hodson	
			Suzanne Winkler	
			Sylvia Chavez	
			Tamaryn Byrne	Safety of the residents in surrounding communities must be made top priority
			Tanya Kelsey	
			Tara Kirkland Rainey	
			Tara Schimmel	
			Tara Schuler	
			Teresa Dube	
			Theral Golden	My Name is Theral Golden, and I am a long-time resident of West Long Beach. and a member of the West Long Association. I am writing the board of Los Angeles County Supervisors in Support of MOTION BY SUPERVISOR JANICE HAHN February 15, 2022, today agenda Item No. 41 F, County Initiative to Improve Safety and Advance the Conversion of Modified Hydrofluoric Acid to Safer Alternatives at Local Refineries.
			Theresa Hollis	
			Theresa V Calish	
			Thomas Etsten	
			thomas D amberg	
			Thomas J Miller	

As of: 2/16/2022 7:43:59 AM

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41-F.		**Favor**	Timothy C Beyer	All refineries in California must transition away from HF/MHF (MHF is HF) at as soon as possible, the safety of the public depends on it. I can personally comment on the lack of safety in my area regarding the Torrance refinery as well as the Wilmington refinery, which continue to pose a significant safety risk to a 4.3 mile hazard zone, as reported by even Valero. Especially during the COVID-19 pandemic, the refinery is even more likely than ever to be unprepared for a disaster, such as the near miss of a tank containing HF in 2015 at the Torrance Refinery. No matter how much lobbying and buying off unrelated non-profits (such groups are absolutely contemptible and should reject further money if they want to serve their local communities at all) such refineries are endangering the public's safety. One possible alkylation method that they could use as an alternative to HF is Sufluric Acid alkylation, which while imperfect, would be far less catastrophic in the event of a natural disaster.
			Tom Hazelleaf	Two refineries in Los Angeles County are needlessly putting profit ahead of the health and lives of hundreds of thousands of residents. We don't need our own Bhopal. Safer alternatives are available and in use across our state and country. The chance of disaster resulting from a modified hydrofluoric acid release due to accident, earthquake, terrorist attack or sabotage is too great. As a Los Angeles County property owner, I request that you support Supervisor Hahn's motion for a County initiative to improve Safety and Advance the Conversion of Modified Hydrofluoric Acid to Safer Alternatives at Local Refineries (item 41-F on the February 15 Board meeting). Thank you.
			Tracey Dunn	
			Tracy Becerra-Culqui	
			Tracy Nishihira	
			Tracy L Curreri	
			Tram Nguyen	
			Tricia M Blanco	
			Trudy Bush	
			Valerie Michael	

As of: 2/16/2022 7:43:59 AM

PUBLIC REQUEST TO ADDRESS
THE BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES, CALIFORNIA

Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Favor**	Vanessa Poster	it is outrageous that these refineries still use this extremely dangerous chemical so close to residents and public buildings (such as Sofi Stadium!) The disaster possible is almost beyond comprehension. How much more money do they need to make before they can "afford" to save all our lives??? Please change to safer alternatives.
			Veronica Moreira	
			Vickie Stamler	
			Viola Cain	
			Virginia Hoadley	
			Virginia Minami	
			Vivencio David	
			Vivienne Edwards	
			walter arellano	
			Wayne Ely	
			Weibing H Chiu	
			Wendy Ferrigno	
			Wendy Y Furuno	
			Will J Gagner	Status Quo is too dangerous.
			William Logan	
			Xochitl Mendez	
			Yoladna L Williams	
			Ysenia Ibarra	
			Yuet ling Law	
			Yuka Uzan	
		Oppose	Aaron Blue	
			Aaron Perez	
			Abena Williams	
			Adam Hart	

As of: 2/16/2022 7:43:59 AM

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MEMBERS OF THE BOARD

HILDA L. SOLIS
HOLLY J. MITCHELL
SHEILA KUEHL
JANICE HAHN
KATHRYN BARGER

Correspondence Received

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	Adolfo Servin	
			Akira Yoshimura	
			Alan Perucho	
			Alejandro Navarro	
			Alex M Holt	
			Alexey Shakirov	
			Alexis Oyetibo	
			Alfred Warren	
			Alfredo Martinez	
			Alissa Cude	
			alton johnson	
			Amber Fuller	
			Amber Rosson	
			Ana Ramos	
			Andrea Marquez	
			Andrew Tadlock	
			Anhthy Do	
			Anthony R Torres	
			Antonio Bendicion	
			Antonio Valenzuela	
			Arturo Carrillo	
			Atef Yacoub	
			Barbara Graham	
			Betsy Brien	
			Betsy Brien	
			Bill Parker	
			Brandon J McDermott	

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Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	Brent Barkwill	
			Brent Larkey	
			Brian Calame	
			Brissa Sotelo-Vargas	
			Brissa Sotelo-Vargas	Resubmitted my opposition to attach a letter in opposition.
			Bryan Hockman	
			Bryan M Wombles	
			Cameron Taylor	
			Carlos Amaya	I strongly oppose
			CARLOS MARQUEZ	
			Carlos I Ramirez	
			Casey O Woods	The refineries have Agreements with the South Coast Air Quality Management District to install additional safety equipment on their already world class Alkylation units. One refinery completed its alkylation safety enhancement projects and the second refinery will complete its safety enhancement project in a few weeks.
			Cesar A Tesen	
			Chris Byers	I adamantly oppose passage of this proposal. This topic went through a 3-year review with the SCAQMD, which includes a full scientific review, and multi-million dollar enhanced mitigation solutions have been put in place. The agencies who are qualified to address safety concerns related to this technology (EPA, AQMD, CalOSHA) have already spoken and ruled on this matter. The County Board of Supervisors should defer to their expertise and seek their counsel if there are outstanding questions or concerns.
			Christie E Sawires	
			craig sakamoto	
			Daisy Mah	
			Daniel Alvarez	
			Daniel Jimenez	
			Daniel Xanthis	
			Daniel A Cybul	

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			The following individuals submitted comments on agenda item:	
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41-F.		**Oppose**	Daniella Chavez	Refineries are essential to our day day lives. With safety advancements being implemented at these sites and strict environmental policies that are followed, I don't see any reason for these sites to be shut down.
			Darrell Blanco	
			Darren W Stroud	I support Torrance Refining Company LLC's comments and request that the Board of Supervisors witdraw or oppose this agenda item.
			Darrin Clark	The MHF Acid matter has been Settled with many open discutions with the puplic. Janic Hahn is playing tricks in trying to putting in this supplemental Motion
			David Cotten	
			David Ngo	
			David Skuba	
			David P Vargas	The facilities have gone above and beyond and continue to make safety improvements. During this time of insane inflation (including gas prices/taxes) this should not even be considered.
			Debbie ODay	
			Denise Haun	
			Diana Chang	
			Diaz Ralph	
			Douglas James	Existing MHF units are safer than alternatives
			Douglas R Hunt Jr	
			Eddie A Walters	
			Eduardo Carrillo JR	I live in Wilmington and with the safety advancements being implemented at these sites and strict environmental policies that are followed, I don't see any reason for these sites to be shut down.
			Eduardo Samia	This has been decided by AQMD using the proper process. Let's move on.
			Edward Ligtvoet	
			Edward Martinez	
			EDWIN D SY	
			elena johnson	
			Ellyn McIntosh	

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41-F.		**Oppose**	Emmanuel Lopez	
			Eric Greif	
			Eric Stauffer	
			Erik Flores	
			Evangelina Carrillo	
			filippo Caselli	Oppose , I don't want to pay 6$ for gasoline
			Frances Aguilar	
			Frank Canko	
			Frank Muramoto	
			FRED SERUMAGA	The refining company has spent a lot of time and money to make HF very safe.
			Geoffrey Stevens	
			George Valdez	
			Gerardo A Gonzalez	
			Gertrina Woods	

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Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	Gesuina Lafayette	County supervisors are asking the state to intervene and require Torrance Refinery and Valero Refinery to abandon MHF and force unproven technology to process their fuel, which would cost hundreds of millions of dollars without any guarantee of a safe and effective transition. The refineries have spent millions of dollars on additional safety upgrades, when they were already safe! Further, the Board of Supervisors is asking the county to work with the refineries on risk assessment and reporting requirements – which they already have! The South Coast Air Quality Management District (SCAQMD) worked with the refineries for 3 years and came to an agreement in September 2019 to enhance safety measures which requires the refineries to submit quarterly updates on installation progress. Valero Wilmington Refinery is on track to complete all SCAQMD action items by March 31st, 2022. Torrance Refinery has already completed all SCAQMD action items. The ordinance the county is considering is not only unnecessary, it undermines the SCAQMD process the refineries already have in place. We don't need more duplicative policies in the South Coast Basin. It drains resources, slows economic growth, kills good-paying jobs, and not necessary.
			Gigi Martinez	
			Giovanni Aguiar	
			Guadalupe Bazan	
			Guillermo Soto	
			Gustavo Lopez	
			Heather Wiener	
			Henry Nwafor	
			Henry m Perez	
			Hossein Pourmand	
			Jack T Grier	
			Jason Brisco	
			Jason Thacker	
			Javier Acevedo	

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Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	Jeanette Garcia	
			Jeff Ignowski	I am against the initiative to improve safety measures. The refineries that use MHF worked with the South Coast AQMD and implemented improved safety measures already to address the South Coast AQMD concerns.
			Jeff Murphy	This was debated by SCAQMD for 3 years and the outcome was agreed upon after many studies and evaluations of evidence. Both refineries will close permanently if a conversion is imposed. Fuel prices will increase significantly.
			Jeffrey Miller	
			Jeffrey Sims	Unreasonable and lacking in basis. Will hurt lower income families due to dramatically higher prices.
			Jeffrey A Johnson	
			Jen Smith	Remove Janice Hann!! She is wasting our time and money.
			Jennifer Hill	
			Jennifer M Uriarte	
			Jeremy Harris	
			Jeremy Mata	
			Jerry Forstell	
			Jesus Gallegos	
			Jesus Gamboa	
			Jiame Hernandez	Sure !! let's raise the price of gas even further !!!
			Jim Schulz	I strongly oppose this initiative. This action undermines the SCAQMD process which the refineries already have in place. Adding duplicate policies is redundant and resource intensive to support. The result will not improve the safety of the community, but instead result in the loss of good-paying jobs for the community and the loss of tax revenue for the City of Torrance.
			Joan Mackay	
			Joe Alvarez	
			Joe J Morales	
			John Bloeser	
			JOHN HEALY	

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41-F.		**Oppose**	John Marrow	Would cause loss of jobs and Valero continues to add extra safety measures to existing HF equipment to mitigate risk.
			John Sakers	
			Jonathan Velazquez	
			Jordan Wiens	Electronic monitoring and fail-safe shutdown systems and other mitigations can keep the MHF refineries safely operating.
			Jorge L Anderson	
			Jose Barajas	
			Jose Montenegro	
			Jose Perez	This motion is bad for the 32,000,000 people in California that own and drive a gas or diesel powered vehicle or use gas or diesel powered tools.
			Joseph Etter	
			Josh Hicks	
			Joshua Robinson	
			Juan Choza	
			Juan Martinez	
			Julie Bofinger	
			Justin Ruhoff	
			justin williams	
			Karin Johnson	
			Karina Carias	
			Karly Moore	
			Katherine Graff	
			Kathleen D Tafur	
			Katie Jensen	
			Katrina Rickels	
			Kei Rietz	
			kevin lee	

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Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	Kevin Martin	The safety track record of the local refineries use of MHF is stellar. This should not even be on the table. Thank you.
			Kevin Wold	This has all the current Safety Equipment to make this safe.
			Kevin B Plummer	
			Kirankant Patel	
			Kirstie l Roberts	
			Lana Terry	
			Larry E Langford	
			Laura Falgoust	
			Lauren A Beasley	
			Leila Bozorgnia	
			Leonard Galiza	
			Lisa Binns	
			Lloyd J Whitfield	
			Lola Gutierrez	
			Lori K Windisch	
			Luis Sanchez	
			Luis G Paredes	
			Lynn Harvey	Torrance Refinery uses a substance called Modified Hydrofluoric Acid in their operations, a highly lethal substance. We must require the refinery to change to a safer alternative and phase out the use of Modified HFA to keep our community cleaner and safer for children and other living things!
			LYNN M ARGIANAS	
			Magdy Ahmed	
			Manish Misra	
			Manuel J Caro	
			Maria Aoki	
			Maria L Vargas	
			Marisol Alvarez	OPPOSE

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41-F.		**Oppose**	Marko Popovic	
			Martin Rocha	
			Mat Hersman	
			Matt Smith	This is unnecessary and has been voted on by AQMD.
			Matthew Franzoy	Use common sense, not politics!
			Mauricio Vargas	
			Meredith Weiss	
			Michael Kosidlak	
			Michael E Stem	This action will cause the 2 refineries that use HF acid to close. If they do close there will be a shortage of gasoline for California and push gasoline prices higher than the already historically high prices that we pay now. In addition thousands of jobs will be lost and or impacted by these refinery closures.
			Michelle Doran	
			Michelle D Leal	
			Mike Cude	
			Mike Gheno	
			Min Pu	
			Miranda Smith	
			Muhammad Waseem Durrani	
			MYISHA HATFIELD	MHF SAFETY SYSTEMS ARE IN PLACE THAT ARE WAY BEYOND THE OSHA REQUIREMENTS. THIS WILL PUT THOUSANDS OF PEOPLE OUT OF WORK AND CAUSE A BIGGER INCREASE IN THE COST OF GAS.
			Nancy Benitez	
			Nathanael Dunham	
			Neal Chang	
			Nicholas Marko	
			Nick R Vuoso	
			nicole lewis	

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41-F.		**Oppose**	Nishal Patel	
			OCTAVIO LANDEROS	
			orlando carbajal	
			Pablo Mena	
			Pacifico Gines	
			Paul Moson	This would increase truck traffic ten fold, as I understand carrying the alternative to Modified Hydrofluoric Acid. to the refinery. Also the cost to be recovered by this change.
			Penny Wirsing	
			peter casey	
			Philip Ockelmann	This is an attempt to increase the property values of a mostly privileged population who bought their houses at a lower price due to being near a refinery. Before passing this, please ask them if they are willing to chip in some of that value increase to pay for it. Or if they are willing to give up their cars to offset the gasoline that will no longer be produced in their community if the refinery is closed as a result of this. I would suggest their answers will be "no" and "no." Some day in the not-too-distant future we will stop using gasoline and the refinery will not be needed then, anyway.
			Rachel Rochelle	
			Rashad Lindsey	
			Raul Ocegueda Jr	
			Rederick Chatman	
			Rene Ditton	
			Richard C Lujan	
			Richard L Kennedy Sr	
			Richards Mike	
			Robert Chang	
			Robert Nack	
			Roberto Alvarez	

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			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	Roberto Barquero Salas	
			Rodney Johnson	
			ROLAND RIETZ	
			Roland F Blackiston III	
			Romaine Thomlison	
			Ronald Ronald E Ramos	
			ronald s lacy	
			Roxana Noriega	
			Roya Bozorgnia	
			Rudolf O Cuss	
			rudolph williams	
			Ryan Baker	
			Ryan Barbee	
			Salvador Rojas	
			samantha smith	
			Samuel A Thomson	Gas is expensive enough this will just make it more expensive
			Sandeep Pangala	
			Sandy Barbee	
			Sean Graham	
			Seth Collinsworth	
			Stephanie Weide	
			stephen r CORNEY	
			Steve Steach	
			Steven E Elston	
			Taylor Obico	

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			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	Thomas Cheng	
			Thomas Luong	
			Thomas Trull	MHF has been used in refineries worldwide with years of safe operation. Alkylation units undergo enormous scrutiny--inspections, maintenance, etc. It is in refineries' interest to operate these units safely and it is ludicrous to think otherwise...they come to work at these refineries every day! Refineries have already gone above and beyond the original safety systems built into these units. Sure, everything can be more safe. Everything can be more effective. Improvement is ongoing for every aspect of daily life. But, where do we draw the line? The "safer" alternatives are still in many ways harmful to people's health...still creates greenhouse gases, emissions, etc. Please allow the refineries to continue safe operation until widely available infrastructure is in place to allow electrified vehicles to take over. Allow the transition from gas to electric vehicles to happen, as it will eventually. Forcing changes, making the transition more sudden, harder for people to handle financially, with every fill up at the pump, is not in our community's best interest.
			Thomas S Fearon	
			Tori E Plummer	
			Travis Kelley	
			tyler harrison	
			Tyler Montes	
			Ui An	
			Uyen Lam	
			Valerie Tse	MHF is the safer alternative. With the additional safety enhancements done as part of the proffer with SCAQMD, I can't believe this is on the table again.
			van johnson	
			Vanessa Franco	
			Veronica Celis	
			Wally Portacio	
			Wayne McPartland	
			Wesley T Leomiti	
			William Chamberlain	

As of: 2/16/2022 7:43:59 AM

			The following individuals submitted comments on agenda item:	
Agenda #	**Relate To**	**Position**	**Name**	**Comments**
41-F.		**Oppose**	William Wallace	
			Yvonne Freeman	
			Zachary Chang	
		Item Total	**903**	
Grand Total			**903**	

As of: 2/16/2022 7:43:59 AM

From:	Arreola, Carlos
To:	PublicComments
Subject:	FW: Comment Letter - Torrance Refining Company LLC RE: Supplemental Agenda Item, No. 41-F
Date:	Tuesday, February 15, 2022 9:21:56 AM
Attachments:	image001.png image002.png image003.png image004.png 02-15-2022 Ltr to LA County Supervisors.pdf

Hi,

Please include the attached letter in today's public comment record.

Thanks,

Carlos Arreola Lopez
Operations Deputy
LA County Supervisor Janice Hahn
(213) 974-4444

From: Pinedo, Gerardo <GPinedo@bos.lacounty.gov>
Sent: Tuesday, February 15, 2022 9:01 AM
To: Brien, Betsy <Betsy.Brien@pbfenergy.com>
Cc: Gonzalez, Daritza <DGonzalez@bos.lacounty.gov>; Butler, Katie <KButler@bos.lacounty.gov>; Arreola, Carlos <CArreola@bos.lacounty.gov>; Johnson, Matthew <MJohnson@bos.lacounty.gov>; Chico, Herlinda <HChico@bos.lacounty.gov>
Subject: Re: Comment Letter - Torrance Refining Company LLC RE: Supplemental Agenda Item, No. 41-F

Thank you, Ms. Brien. Adding our two policy deputies working on this issue, Ms. Katie Butler and Ms. Daritza Gonzalez; as well as our Board Ops Deputy, Mr. Carlos Arreola, to ensure your letter is filed accordingly. Herlinda and Matt, FYI.

Gerardo Pinedo, Chief of Staff
Office of Supervisor Janice Hahn
(213) 974-4444 (main)
(213) 974-1045 (direct)

From: Brien, Betsy <Betsy.Brien@pbfenergy.com>
Sent: Tuesday, February 15, 2022 8:53 AM
To: Pinedo, Gerardo <GPinedo@bos.lacounty.gov>

Subject: Comment Letter - Torrance Refining Company LLC RE: Supplemental Agenda Item, No. 41-F

Chief of Staff Pinedo:

I am submitting this letter on behalf of Torrance Refining Company LLC ("TORC") regarding Supplemental Agenda Item, No. 41-F ("Agenda Item"). We are happy to inform the Los Angeles County Board of Supervisors that TORC has fully completed and implemented the voluntary safety system enhancements as agreed in our August 30, 2019 proffer letter to the District.

Attached are some photographs that show the voluntary safety enhancements of the Modified Hydrofluoric Acid ("MHF") Alkylation Unit at TORC's Torrance Refinery ("Refinery") and the testing that was done to show the efficacy of the enhancement's ability to capture and prevent any offsite release of MHF.

You are welcome to contact me with any questions via the number below.

Sincerely,

Betsy A. Brien
Director, Western Region External Relations
PBF Energy Western Region LLC
Office: (562) 349-1651
Betsy.Brien@pbfenergy.com

Opinion

This Chemical Kills. Why Aren't Regulators Banning It?

A fiery refinery blast in Philadelphia could be just the beginning.

By Daniel Horowitz
Daniel Horowitz is an organic chemist and former managing director of the U.S. Chemical Safety Board.

- July 8, 2019

Explosions last month at the Philadelphia Energy Solutions oil refinery complex could have imperiled hundreds of thousands of people living within a few miles of the plant.Credit...Matt Rourke/Associated Press

Last month's spectacular explosions at a large Philadelphia oil refinery complex injured five workers, terrorized city residents and drove up gasoline prices. But the impact could have been vastly worse had the explosions triggered a release from the refinery's huge inventory of toxic hydrogen fluoride — up to 420,000 pounds' worth, according to information the company filed with the Environmental Protection Agency in 2017. That disaster, had it occurred amid the chaos on the morning of June 21, would have imperiled hundreds of thousands of people living within a few miles of the plant.

The explosions occurred in the 149-year-old refinery's alkylation unit, where hydrogen fluoride is used to convert butane and other chemicals into heavier hydrocarbons that

raise the octane rating of gasoline. Of the nation's approximately 135 oil refineries, only about 48 use hydrogen fluoride. Among refinery workers and safety experts, hydrogen fluoride-based alkylation commands the highest level of fear of any process used to make gasoline, and with good reason.

Hydrogen fluoride, also known as hydrofluoric acid, is a highly corrosive agent that requires specialized equipment and constant vigilance to prevent a release. Human exposure to just 170 parts per million in the air for 10 minutes can result in death or serious injury. Hydrogen fluoride binds to the calcium in human cells, causing severe, disfiguring chemical burns and compromising the heart, lungs and bones. Inhalation is rapidly fatal because of massive internal hemorrhaging and cardiac arrest.

In 2012, the release of a reported eight tons of hydrogen fluoride from a South Korean industrial plant sickened thousands of people in an agricultural area and left a disaster zone in its wake. Crops were destroyed and residents had to be relocated. Five plant workers died, and 18 others were severely injured. According to its 2017 filing with the E.P.A., the Philadelphia refinery stores about 24 times the amount of hydrogen fluoride that was released in South Korea.

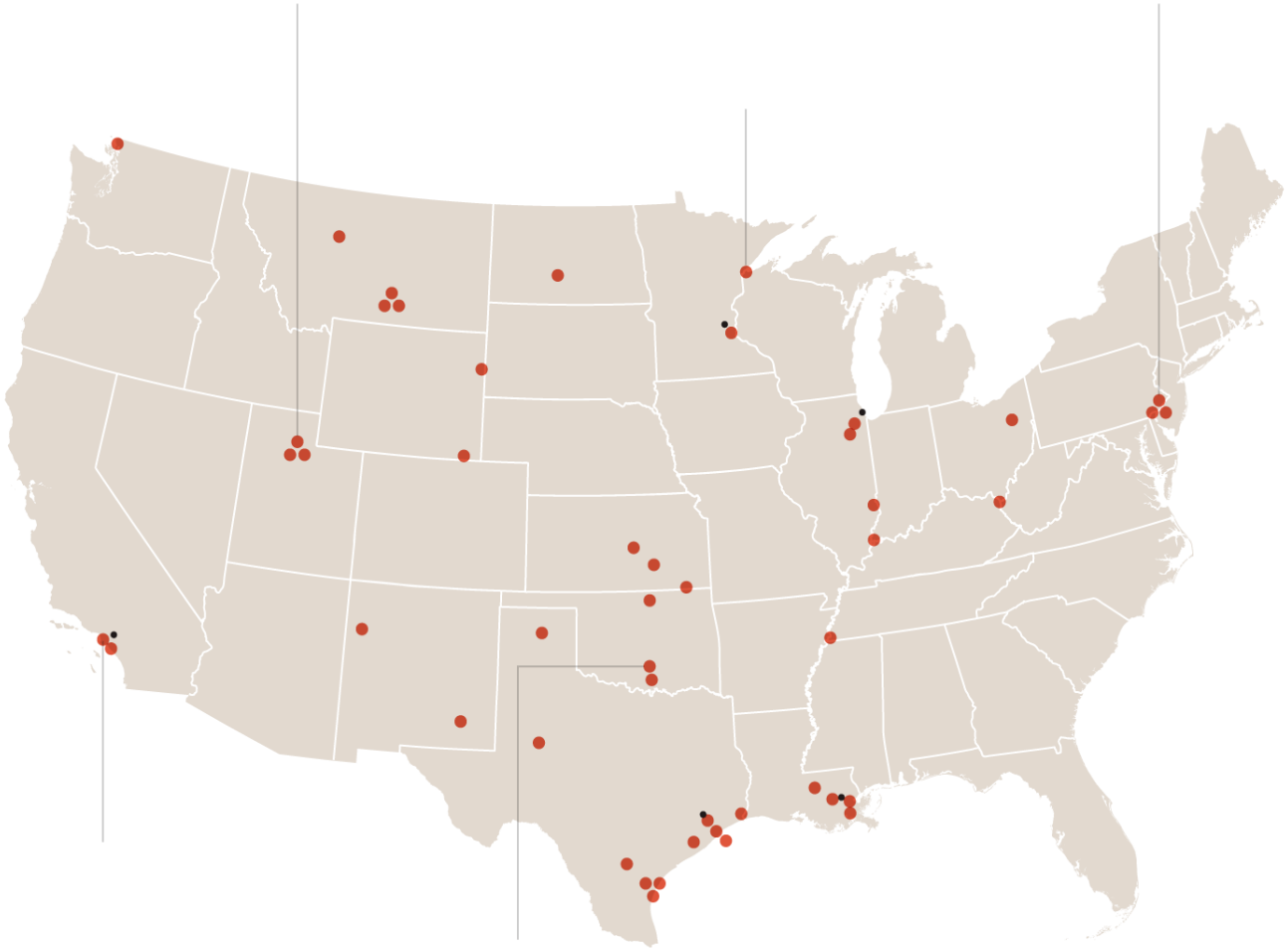
In the 1980s, the oil giant Amoco commissioned tests in the Nevada desert to determine what would happen if hydrogen fluoride were suddenly released from a refinery. The results were nightmarish: All the spilled hydrogen fluoride immediately became airborne and formed a dense, ground-hugging aerosol cloud. Within minutes, dangerous concentrations of hydrogen fluoride — twice the lethal threshold — were detected two miles downwind.

Responding to the findings, oil companies invested in more safety systems — water sprays, chemical additives and emergency inventory dump systems — to try to contain a hydrogen fluoride release. None of these methods have been shown to be completely reliable. At the same time, oil companies lobbied to oppose further restrictions, and thus the fundamental danger has remained. Each company files a worst-case accident scenario with E.P.A., including the population at risk, but Congress has restricted this information to a handful of E.P.A. reading rooms.

On Feb. 18, 2015, the Los Angeles area came close to witnessing hydrogen fluoride's effects firsthand when a powerful explosion ripped through a pollution control device at the Exxon-Mobil refinery in Torrance. Investigators from the U.S. Chemical Safety Board found that the explosion had hurled a 40-ton piece of equipment within five feet of striking two large tanks containing hydrogen fluoride. Three schools and hundreds of homes lie within a mile of the tanks. A crisis was averted, but barely. The refinery shutdown that followed the Torrance explosion raised gasoline prices, costing California motorists an estimated $2.4 billion at the pump

Where a Deadly Chemical Is in Use

According to the E.P.A., 48 refineries use hydrogen fluoride. Many are in or near urban areas; there have been three H.F.-related explosions since 2015.



By The New York Times | Source: Environmental Protection Agency

Three years later, on April 26, 2018, an explosion devastated the Husky Energy Refinery in Superior, Wis., threatening the integrity of the plant's hydrogen fluoride alkylation unit. The refinery is still rebuilding and won't resume partial operations until at least 2020, at an estimated cost of $400 million. Investigators found that debris from the explosion pierced an asphalt tank that was located farther from the blast site than the refinery's hydrogen fluoride tank, which could easily have been hit.

Accounts published by Reuters and The Philadelphia Inquirer indicate that the blasts last month in Philadelphia essentially destroyed the refinery's alkylation unit. Under such conditions, it is miraculous that no hydrogen fluoride was released. Given the oil refining industry's inadequate attention to process safety, however, it is only a matter of time before refinery workers and the public are exposed to hydrogen fluoride's dangers.

The Philadelphia plant is closing, but that leaves 47 refineries in the United States still handling hydrogen fluoride. In four years, three major accidents have occurred that could have led to large hydrogen fluoride releases. This exposes a shocking level of disregard for public safety. Oil companies are passing along large accident-related costs

to consumers while pleading poverty when asked to replace hydrogen fluoride with processes that use safer chemicals.

The oil refining industry can produce gasoline more safely, without using hydrogen fluoride. But industry associations have objected, saying the conversion is too costly. Refineries in Utah and Louisiana are quietly installing alkylation units that use safer catalysts like advanced sulfuric acid and ionic liquids that will never vaporize in an accident to threaten workers and the public.

Toxic Tonnage

Of the 48 refineries using hydrogen fluoride, 25 report having a maximum inventory on site of 100 tons or more. (Three Philadelphia-area refineries, listed in boldface, hold a total of 465 tons; the smallest amount at a U.S. refinery is 23 tons.) Experiments in the 1980s showed that a release of four tons of hydrogen fluoride into the air can be lethal to anyone in an area at least two miles downwind.

Nonetheless, the industry is working diligently to defeat any regulatory efforts to phase out hydrogen fluoride. The American Chemistry Council, a trade association that represents major hydrogen fluoride producers like Honeywell, sponsors dubious, previously unknown grass-roots organizations like "Californians for a Sustainable Economy" that advocate for continued use of hydrogen fluoride to produce gasoline and argue that any restriction will cause refinery closures, job losses and higher gas prices. Voting on party lines in Southern California last month, a Republican-controlled committee of air pollution regulators narrowly defeated a community-supported effort to phase out hydrogen fluoride from two of the state's refineries in populated areas near Los Angeles.

At the federal level, industry lobbyists from groups like the American Chemistry Council and the American Petroleum Institute were among those pushing President Trump's Environmental Protection Agency to begin the process of scrapping Obama-era environmental rules that finally would have required oil refineries to evaluate using safer technologies. If enacted, the E.P.A.'s May 2018 Reconsideration Rule will turn the clock back years on the agency's process safety regulations, squarely putting short-term corporate profits ahead of public safety. Even modest regulatory improvements — like requiring facilities to have third-party safety audits and to investigate the root causes of their own chemical accidents and near misses — stand to be repealed.

The E.P.A. should be moving in the opposite direction. Recently enacted toxic chemical legislation, as well as the 1990 Clean Air Act Amendments, give the agency ample authority to restrict or prohibit unduly hazardous chemicals in industry. That is particularly important with chemicals like hydrogen fluoride that are widely and unnecessarily used in urban areas and can be replaced with safer substitutes. Millions of Americans will be safer if the E.P.A. takes positive action. If it fails to do so, Congress must intervene.

Philadelphia Oil Refinery Explosion Shakes City With Huge Fireball
June 21, 2019

Dr. Daniel Horowitz, an organic chemist, served as managing director of the U.S. Chemical Safety Board, a federal agency that investigates chemical disasters, from 2010-2018.

Torrance Refining Company

Torrance Refining Company LLC
3700 W. 190th Street
Torrance, CA 90504
www.pbfenergy.com

VIA EMAIL

February 15, 2022

The Honorable Holly Mitchell
Chair of Board of Supervisors
500 West Temple Street
Los Angeles, CA 90012
https://publiccomment.bos.lacounty.gov/

Subject: Supplemental Agenda Item, No. 41-F - County Initiative to Improve Safety and Advance the Conversion of Modified Hydrofluoric Acid to Safer Alternatives at Local Refineries (February 15, 2022, Los Angeles County Board of Supervisors' Meeting)

Dear Honorable Chair,

On behalf of Torrance Refining Company LLC ("TORC"), I am writing regarding Supplemental Agenda Item, No. 41-F ("Agenda Item"), as referenced above. We are happy to inform the Los Angeles County Board of Supervisors, as we have already communicated to the South Coast Air Quality Management District ("District"), TORC has fully completed and implemented the voluntary safety system enhancements as agreed in our August 30, 2019 proffer letter to the District. Attached are some photographs that show the voluntary safety enhancements of the Modified Hydrofluoric Acid ("MHF") Alkylation Unit at TORC's Torrance Refinery ("Refinery") and the testing that was done to show the efficacy of the enhancement's ability to capture and prevent any offsite release of MHF.

With the completion and implementation of these voluntary safety enhancements, TORC has fulfilled its commitment to further protect Refinery personnel and the community by having state of the art safety systems. It is still true that a safer, commercially viable alternative technology for HF, MHF, and sulfuric acid currently does not exist. As we noted in our August 30, 2019 proffer to the District, and as required by existing law[1], TORC will continue to explore the feasibility of inherent safety measures, including alternative alkylation catalyst technology, every five years.

Based on the foregoing, we believe TORC has already accomplished what the draft Motion attached to the Agenda Item attempts to do, which is to further protect and enhance the safety of Refinery personnel and the community. It should be further noted that although TORC regularly works with numerous local, state, and federal agencies regarding risk management, emergency response, notification plans, and drills, we would welcome further discussion with the Board of Supervisors regarding the voluntary safety enhancements in the context of these plans and drills. TORC also extends an invite to the members of the Board of Supervisors to come and take a tour of the voluntary safety enhancements at the Refinery.

[1] *See* Title 8 Cal. Code of Regs. § 5189.1(l); Title 19 Cal. Code of Regs. §2762.13.

Please contact Betsy Brien at (562) 349-1651 or betsy.brien@pbfenergy if you have any questions concerning TORC's comments, need additional information, or would like to take a tour of the voluntary safety enhancements at the Refinery.

Sincerely,

Steven Steach
Senior Vice President, Head of Refining

Enclosure (1)

cc: Trecia Canty, Senior Vice President & General Counsel
Paul Davis. President Western Region
Jerry Forstell, Refinery Manager
Betsy Brien, Director External Relations, Western Region
Supervisor Hilda Solis
Supervisor Sheila Kuehl
Supervisor Janice Hahn
Supervisor Kathryn Barger
Chris Hannan, Executive Secretary, LA/OC Building and Construction Trades Council

Torrance Refining Company LLC
3700 W 190th Street
Torrance, CA 90504
www.torrancerefinery.com

February 11, 2022

VIA E-MAIL AND OVERNIGHT MAIL

Wayne Nastri
Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: ***Torrance Refining Company LLC Proffer Letter Commitments Quarterly and Final Update***

Dear Mr. Nastri,

On behalf of Torrance Refining Company LLC ("TORC"), consistent with our November 25, 2019 letter, and as requested by you in your November 15, 2019 letter, below is the fourth quarter 2021, and final, update regarding the voluntary modified hydrogen fluoride ("MHF") alkylation unit safety enhancement commitments and control measures as proffered TORC's August 30, 2019 Proffer Letter accepted and approved on September 6, 2019 by the South Coast Air Quality Management District ("South Coast AQMD") Governing Board pursuant to Board Resolution No. 19-19 (the "Proffer Letter"). Capitalized terms used in this letter and not otherwise defined shall have the meanings ascribed in the Proffer Letter.

Attached as Annex A is a summary of the final status of the design, purchase, installation, testing, and implementation of the proffered safety enhancements as of the fourth quarter 2021. We provide additional detail regarding the final status of the enhancements below. Also, attached is Annex B, which are photographs of the progress of the enhancements since the July 2021 Torrance Refinery turnaround.

Settler Area Protective Steel Structure, Northern Water Mitigation Monitors, and Fluidized Catalytic Cracking Unit ("FCCU") Electrostatic Precipitator ("ESP") Over Pressure Mitigation

For the new protective steel structure:

- All foundations are set;
- All structural columns, beams, and bracing are erected;
- All side steel panels are installed; and
- The steel girts and platform modifications are completed.

See Annex B.

Regarding the water monitors, the new northern firewater monitor and the other two new area perimeter firewater monitors are installed, tested, and commissioned. See Annex B.

With respect to the FCCU ESP Over Pressure Mitigation enhancement, this safety enhancement is completed. See Annex B.

TORC completed these safety enhancements in 2021 as planned.

Settler Area Water Mitigation Dome and Curtain

The new water mitigation dome monitors and spray curtains are installed, tested, and commissioned. See Annex B.

TORC completed these safety enhancements in 2021 as planned.

Settler Area Enhanced HF/MHF Detection System

The new HF/MHF detection systems are installed, tested, and commissioned. See Annex B.

TORC completed these safety enhancements in 2021 as planned.

* * *

In conclusion, TORC has successfully completed all the voluntary MHF alkylation unit safety enhancements in year 2021. As a result, TORC has met all its commitments and obligations under the Proffer Letter.

If you have any questions or require any additional information regarding this final quarterly update of the safety enhancements, please do not hesitate to contact me at (310) 212-4500.

Sincerely,

Jerry Forstell
Refinery Manager

cc: Paul Davis, President, Western Region
Trecia Canty, Senior Vice President & General Counsel
Steve Steach, Senior Vice President, Head of Refining
Darren Stroud, West Coast Refinery Attorney
Jill Whynot, South Coast AQMD
Sarah Rees, South Coast AQMD
Susan Nakamura, South Coast AQMD
Barbara Baird, South Coast AQMD
Daphne Hsu, South Coast AQMD
Michael Krause, South Coast AQMD

ANNEX A

Safety Enhancements	Fourth Quarter 2021 and Final Status
Settler Area Protective Steel Structure Northern Water Mitigation Monitors Fluidized Catalytic Cracking Unit (FCCU) Electrostatic Precipitator (ESP) Over Pressure Mitigation	<u>Settler Area Protective Steel Structure and Northern Water Mitigation Monitors</u> • Funding approved for Detailed Engineering and Procurement • Funding approved for Construction of Settler Area Protective Steel Structure and Northern Water Mitigation Monitors • Detailed Engineering completed • All long lead materials received • Building plans approved by City of Torrance permitting department • Construction completed for Settler Area Protective Steel Structure • Northern Water Mitigation Monitors installed, tested, and commissioned • Enhancements implemented in 2021 <u>Fluidized Catalytic Cracking Unit (FCCU) Electrostatic Precipitator (ESP) Over Pressure Mitigation</u> • Funding approved for Detailed Engineering and Procurement and Construction • Detailed Engineering completed • All long lead materials ordered and received • Construction completed for FCCU ESP Overpressure Mitigation • Enhancement implemented in 2021
Settler Area Water Mitigation Dome and Curtain	• Funding approved for Detailed Engineering and Procurement, and Construction • Detailed Engineering completed • All long lead materials received • Construction of water mitigation dome monitors and spray curtains installed, tested, and commissioned • Enhancements implemented in 2021

ANNEX A

Safety Enhancements	Fourth Quarter 2021 Status
Settler Area Enhanced HF/MHF Detection System	• Funding approved for Detailed Engineering and Procurement, and Construction • Detailed Engineering completed • Construction work packages finalized • All long lead materials received • Construction of settler area enhanced HF/MHF detection system installed, tested, and commissioned • Enhancements implemented in 2021

ANNEX B

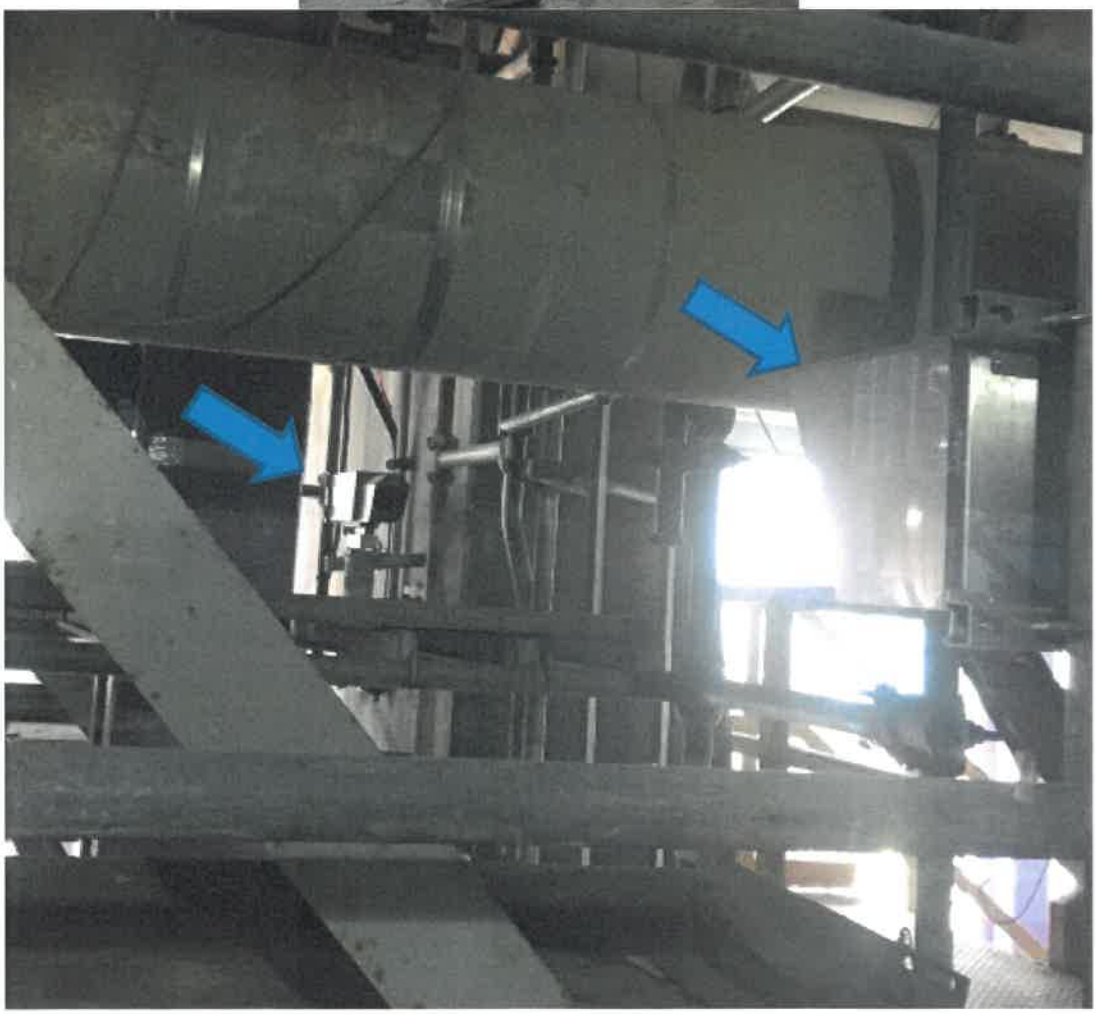
Overall Protective Structure and Area Firewater Monitors Completed

ANNEX B

New Northern Firewater Monitor Flow Test

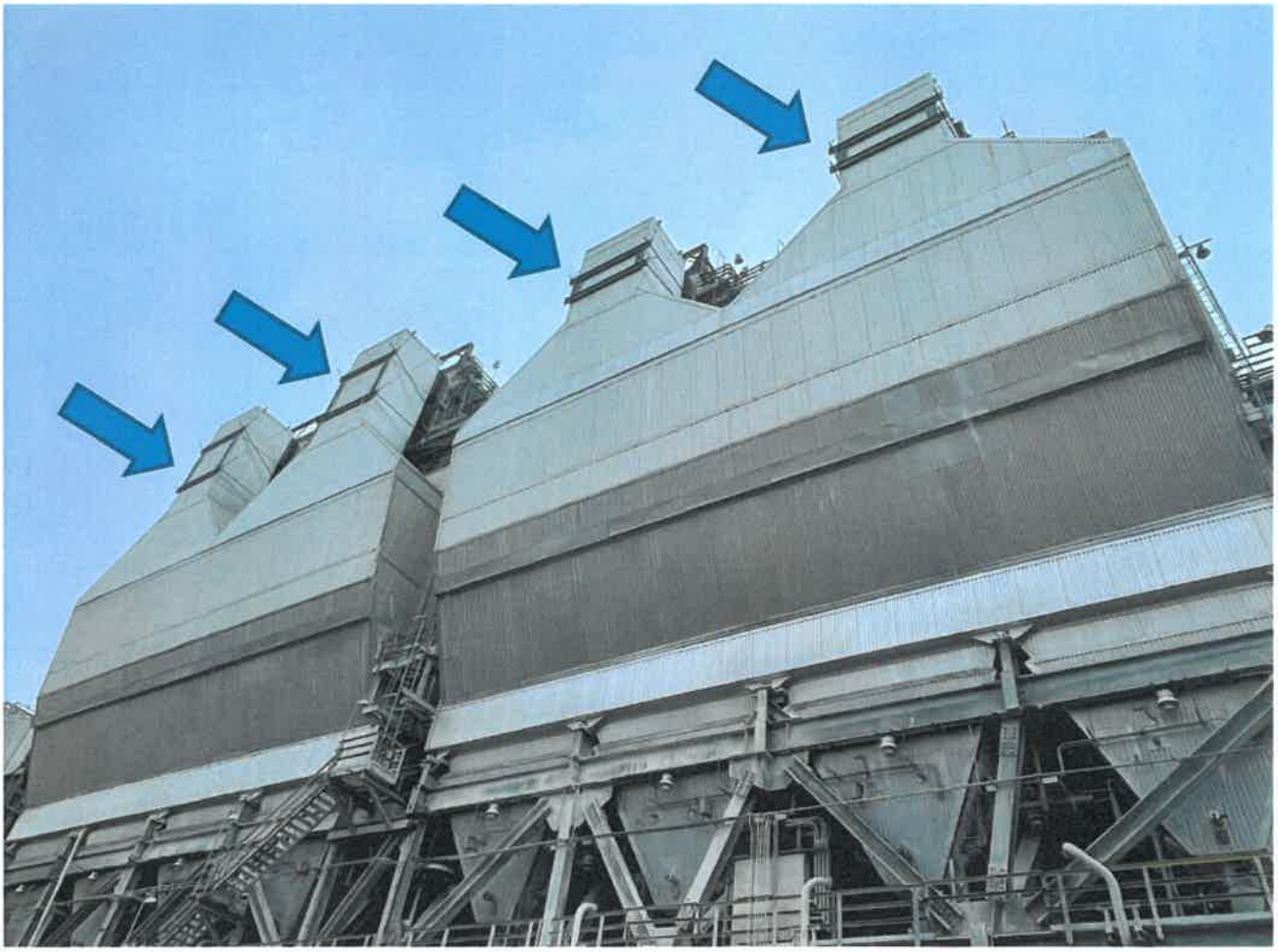
ANNEX B

Examples of New Enhanced HF Detection



ANNEX B

FCCU ESP Over Pressure Mitigation Enhancement Completed



ANNEX B

Dome Monitor and Spray Curtain – Flow Test (Before Side Panels Installed)

NOTE: HIGHLIGHTING AND BOLDING ARE NOT IN THE ORIGINAL – BUT PROVIDED BY A TRAA mer

XAVIER BECERRA
Attorney General

State of California
DEPARTMENT OF JUSTICE

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April 26, 2018

Dr. William A. Burke, Chairman
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
(via US mail and email to mwpatrick@aqmd.gov)

RE: Proposed Rule 1410 Regarding Hydrogen Fluoride Use by Refineries

Dear Chairman Burke,

The California Attorney General's Office has been monitoring the South Coast Air Quality Management District's (SCAQMD) rule development process for Proposed Rule 1410, which will regulate the use of hydrogen fluoride (HF) at refineries.[1] HF is a highly toxic chemical that when suddenly released can form a ground-hugging aerosol cloud. A sudden release of HF from a refinery could have catastrophic impacts on both refinery workers and tens of thousands of residents in nearby communities.

Only two refineries in California use HF in their alkylation processes and both are located in the South Coast basin: the Torrance Refinery in Torrance, owned by the Torrance Refining Company and the Valero Refinery in Wilmington. Both refineries are adjacent to disadvantaged communities that bear a disproportionate pollution burden and that have residents who are especially vulnerable to pollution. It is these communities that would suffer the most severe impacts from an HF release.

We agree that the use of HF by refineries presents an extraordinary hazard that requires robust and meaningful regulation. It is within SCAQMD's authority to adopt a rule to prevent releases of HF from refineries.[2] Accordingly, the Attorney General urges SCAQMD to craft

[1] This letter uses "HF" to denote both anhydrous hydrogen fluoride and modified hydrogen fluoride, except when discussing modified hydrogen fluoride specifically.

[2] *Ultramar, Inc. v. South Coast Air Quality Management Dist*., (1993) 17 Cal.App.4th 689, 706-12.

Proposed Rule 1410 in a manner that provides the neighboring environmental justice communities the maximum protection possible.[3]

Environmental Justice Considerations

Refineries emit numerous chemicals that add substantially to the pollution burden on the communities adjacent to them, commonly low-income communities and communities of color.[4] Both the Torrance and Valero Refineries are adjacent to disadvantaged communities that already bear a disproportionate pollution burden and have residents who are especially vulnerable to pollution. The Torrance Refinery is adjacent to the Harbor Gateway South neighborhood, which is among the most pollution-burdened communities in the state. CalEnviroScreen ranks the Harbor Gateway South neighborhood in the 95th percentile for combined pollution and vulnerability and the 99th percentile when considering the pollution burdens alone.[5] The community faces extraordinarily high housing costs and unemployment. Furthermore, the community is overwhelmingly made up of people of color, with more than 83% being Hispanic, African American, or Asian American. Just to the east of Harbor Gateway South and downwind of the Torrance Refinery is the City of Carson, which has similar CalEnviroScreen rankings. Carson's population is 76% minority according to the 2010 U.S. Census, but several Carson census tracts closest to the Torrance Refinery range between 89-92% people of color.

The Valero Refinery is in a Wilmington neighborhood and is adjacent to the City of Long Beach. The neighborhoods surrounding the Valero refinery are also among the most burdened in the state; they rank in the 90th percentile or higher for overall pollution burden. These communities' proximity to the port and major freeways expose them to among the very highest diesel particulate matter levels in the state. Wilmington is nearly 90% Hispanic and upward of 90% of the population are considered impoverished. Wilmington residents have heart attack rates that are higher than 79% of the rest of the state, which indicates a high cardiovascular disease rate in that community. According to OEHHA, people with cardiopulmonary disease

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[3] The Attorney General provides these comments pursuant to his independent power and duty to protect the natural resources of the State from pollution, impairment, or destruction in furtherance of the public interest. Cal. Const., art. V, § 13; Cal. Govt. Code, §§ 12600-12; *D'Amico v. Board of Medical Examiners*, (1974) 11 Cal.3d 1, 14-15. These comments are made on behalf of the Attorney General and not on behalf of any other California agency or office.

[4] A pending report by the Office of Environmental Health Hazard Analysis (OEHHA) finds that refineries typically discharge into the air almost two hundred chemicals with potential adverse health impacts. OEHHA, Analysis of Refinery Chemical Emissions and Health Effect, (Draft, September 2017) pp. iii-iv (hereafter OEHHA Refinery Report), https://oehha.ca.gov/media/downloads/faqs/refinerychemicalsreport092717.pdf.

[5] CalEnviroScreen is a screening tool created by OEHHA to rank communities in the state by their pollution burden and their overall vulnerability to the effects of pollution.

may be more susceptible to negative health consequences of HF exposure.[6] Further, in Long Beach, the neighborhoods closest to the refinery have high concentrations of people of color.

There is an Inherent Risk of Future Refinery Accidents.

The possibility of chemical releases from petroleum refineries can never be completely eliminated. Most obviously, earthquakes are an omnipresent risk in Southern California. Moreover, because petroleum refineries are large complex chemical processing plants, the risk of accidents, including those that cause fires and explosions, can be reduced but not eradicated. It is well-understood that federal, state, and local accident prevention programs, such as risk management plans and the modelling of worst case scenarios, can at best minimize the risk of accidental releases.[7] For this reason, chemical safety experts recognize a hierarchy of controls to prevent chemical accidents, with inherent safety measures such **as the use of less hazardous materials being the first choice.**[8]

The history of HF releases and near-releases illustrates the unpredictability and difficulty of preventing future chemical accidents. The 1987 Texas City release of 40,000 pounds of HF occurred when refinery operators hoisted an unrelated piece of equipment above the HF storage tank, against refinery policy, and then accidentally dropped it.[9] Also in 1987, an explosion and small release of HF from the Torrance Refinery occurred in 1987 because "a series of controllers and alarms [were] inoperable" and failed to detect an excess flow of HF.[10] Most recently, a confluence of eight distinct operational errors caused the February 2015 explosion in the electrostatic precipitator unit at the Torrance Refinery.[11] That explosion, according to the U.S. Chemical Safety Board (U.S. CSB), came close to damaging the HF alkylation unit.

> As a result of this incident, *a near miss event occurred in the modified hydrofluoric acid (MHF) alkylation unit* when explosion debris nearly hit tanks in close proximity to the [electrostatic precipitator], each containing hydrofluoric acid (HF), water, hydrocarbons, and a chemical additive intended to reduce the amount of HF vaporized during a loss of containment event.[12]

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[6] OEHHA Refinery Report, at p. A-15.

[7] 40 C.F.R. §§ 68.25, 68.69.

[8] U.S. EPA, Chemical Safety Alert: Safer Technology and Alternatives (2015) pp. 2-3 (hereafter Safer Technology); California Interagency Working Group on Refinery Safety, Improving Public and Worker Safety at Oil Refineries, 28-29 (2014); Cal. Code Regs., tit. 19, §§ 2735.3, 2762.13.

[9] United States Environmental Protection Agency, Hydrogen Fluoride Study, (1993) p. 113 (hereafter Hydrogen Fluoride Study).

[10] *Id.*, at p. 114.

[11] U.S. CSB, Investigation Report, ExxonMobil Torrance Refinery, (May 2017) pp. 25-48 (hereafter CSB Investigation Report).

[12] *Id.* at p. 6 (footnotes and citations omitted) (emphasis added).

HF is Highly Toxic and Prone to Drift in a Cloud.

Even at low levels, HF gas can irritate the eyes, nose, and respiratory tract. It is easily absorbed through the skin and into body tissues, where it causes cell damage and malfunction.[13] At high levels of exposure, HF can cause death from an irregular heartbeat or from fluid buildup in the lungs.[14] In 1987, a release of approximately 40,000 pounds of HF from the Marathon Refinery in Texas City, Texas led to the evacuation of 85 square blocks and over 1,000 hospital visits.[15] Over two years later, some victims continued to have symptoms, particularly breathing and eye problems.[16]

The toxicity of HF is exacerbated by its propensity to concentrate in dense clouds of toxic vapor. A sudden release of HF may "form a cloud containing both HF vapor and HF aerosol [a suspension of fine droplets]. . . . [A]nd thus adds to the hazards posed to workers and to the public."[17]

> HF can travel significant distances downwind as a dense vapor and aerosol under certain accidental release conditions. Because HF can exist as an aerosol, the cloud can contain a substantially greater quantity of the chemical than otherwise would be the case. Thus, the potentially high concentration of HF in these dense vapor and aerosol clouds could pose a significant threat to the public, especially in those instances where HF is handled at facilities located in densely populated areas. [18]

Studies have found that HF clouds can migrate at least five miles at ground level, with lethal levels of HF extending as far as two miles away.[19]

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[13] *See* Centers for Disease Control and Prevention, *Hydrogen Fluoride*, https://emergency.cdc.gov/agent/hydrofluoricacid/basics/facts.asp.

[14] There are at least two known worker deaths from HF exposure. Hydrogen Fluoride Study, at p. 123.

[15] Hydrogen Fluoride Study, at p. 113.

[16] Daval, et al, *A Community-Based Epidemiologic Study of Health Sequelae of Exposure to Hydrofluoric Acid*, (1992) Ann. Epidemiol. 2: 214, 228-29.

[17] Hydrogen Fluoride Study, at p. 13.

[18] *Id.*, at p. *xiii*.

[19] George Stein, *Safeguards for Hydrofluoric Acid Tested*, L.A. Times, Sept. 22, 1988; Jim Morris & Chris Hamby, Use of Toxic Acid Puts Millions at Risk, (2011) (hereafter Public Integrity Report), https://www.publicintegrity.org/2011/02/24/2118/use-toxic-acid-puts-millions-risk.

There is Substantial Uncertainty About the Safety of Modified Hydrogen Fluoride.

Both the Valero and Torrance refineries have converted their processes to use modified hydrogen fluoride (MHF).[20] MHF includes an additive intended to reduce the volatility of the HF. There remains great uncertainty, however, whether a sudden release of MHF could cause aerosol formation and the migration of a toxic cloud. Significantly, SCAQMD staff concluded that "the testing/modeling information provided by [the Torrance Refining Company] did not sufficiently demonstrate MHF would not flash atomize and form [a] dense HF cloud."[21] Likewise, in litigation related to the 2015 explosion at the Torrance Refinery, the U.S. CSB reported that "modified hydrofluoric acid is not widely used in the industry and few scientific studies show whether modified hydrofluoric acid is actually safer."[22]

Compounding the scientific uncertainty about the release behavior of MHF is the continued failure of the Torrance Refinery operators to disclose full information about the consequences of a release of MHF. Specifically, after the 2015 explosion (when the refinery was owned by ExxonMobil), the U.S. CSB began an investigation into the cause of the explosion as well as the safety risks posed by the refinery's use of MHF. The U.S. CSB issued a set of subpoenas, including some seeking information about the safety of MHF. ExxonMobil, however, vigorously fought compliance with those subpoenas—even claiming that the U.S. CSB concocted "hyperbolic and frightening 'what if' scenarios"—rather than properly addressing the U.S. CSB's legitimate concerns about the possibility of catastrophic release had the debris damaged the tanks holding the MHF.[23] As the U.S. CSB stated in its investigation report, ExxonMobil "resisted CSB requests for safety information pertaining to the potential release of HF in the event the tanks were struck by explosion debris [and] continues to refuse to provide the CSB with information detailing safeguards to prevent or mitigate a release of HF.[24] And regarding MHF in particular, "CSB was not provided with documentation quantifying the resulting effect of the chemical additive on a potential HF release, and as such the CSB cannot comment on the effectiveness of this additive."[25]

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[20] Mobil Oil Company, which at the time owned the Torrance Refinery, agreed to the conversion in a judicial settlement with the City of Torrance. Ultramar, which still owned the Valero Refinery, agreed to the conversion in an agreement with SCAQMD.

[21] SCAQMD Presentation, PR 1410 Working Group Meeting # 4, Aug 2, 2017.

[22] Memorandum of Points and Authorities in Support of United States' Petition to Enforce Administrative Subpoenas Issued by U.S. Chemical Safety and Hazard Investigation Board at 5, *United States v. Exxon Mobil,* No. 17-mc-66 (C.D.Cal 2017) , ECF No. 11 (*Exxon Mobil),* citing Declaration of Mark Wingard, *Exxon Mobil,* ECF No. 10, ¶ 23.

[23] Exxon Mobile Opposition to the United States' Petition to Enforce Administrative Subpoenas Issued by U.S. Chemical Safety and Hazard Investigation Board, 11-12, *Exxon Mobil,* ECF No. 19. The District Court granted ExxonMobil's petition to quash the HF-related subpoenas. The United States has appealed that decision. *Exxon Mobil,* ECF Nos. 33-34.

[24] CSB Investigation Report, at p. 6-7.

[25] *Id.*, at p. 6, n. 2.

An Inspection by U.S. EPA Found that the Torrance Refinery Lacks an Adequate Worst-Case Scenario Analysis

In November 2016, the U.S. Environmental Protection Agency (U.S. EPA) inspected the Torrance Refinery (under its current ownership) for compliance with section 112(r) of the Clean Air Act, which requires refineries and other users of large amounts of "extremely hazardous substances" to enact "risk management programs" to minimize the risk of accidental releases of hazardous compounds. 42 U.S.C. § 7412(r). U.S. EPA's resulting inspection report indicates that the Torrance facility was out of compliance with a number of process safety and offsite consequence analysis requirements.[26] Notably, the refinery operators did not properly identify and analyze the potential "worst-case scenario" for an accidental release of HF.[27] Although worst case scenarios are based on a "highly unlikely chain[] of events," U.S. EPA acknowledges that "such events may and indeed can happen."[28] U.S. EPA's inspection found the refinery had underestimated the volume of HF in the acid settling tanks and improperly classified the pumping of MHF into the alkylation process as a "passive mitigation measure."[29]

Most disturbingly, U.S. EPA's inspection also concluded that Torrance Refining Company had no "clear basis" for its selection of 3.2 miles as maximum distance from the release where HF concentrations could exceed levels set based on the health effects the chemical could cause. Without an adequate worst-case analysis, SCAQMD and the neighboring disadvantaged communities cannot know the full extent of the potential harm that could be caused by a catastrophic event.[30]

In the face of these uncertainties, SCAQMD should adopt the most protective regulation possible to safeguard the public from the sudden release of this extremely hazardous chemical compound.

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[26] U.S. EPA, Inspection Report, at p. 11-16.

[27] *Id.*, at p. 12-14.

[28] U.S. EPA, Chemical Safety in Your Community: EPA's New Risk Management Program, (1999) p. 6.

[29] U.S. EPA, Inspection Report, at 12-13. As mentioned above, chemical safety experts recognize a hierarchy of controls to prevent chemical accidents. Passive measures, those that provide a risk reduction benefit with no action required by personnel, are preferred to active measures because in an emergency, unpredictable circumstances may prevent refinery operators from taking action. Safer Technology, at pp. 2-3; California Interagency Working Group on Refinery Safety, Improving Public and Worker Safety at Oil Refineries, (2014) 28-29 (2014); Cal. Code Regs., tit. 19, §§ 2735.3, 2762.13. Inherent safety measures—using less hazardous chemicals—is the first choice. *Ibid.*

[30] *See also* Accidental Release Prevention Requirements: Risk Management Programs Under Clean Air Act Section 112(r)(7), 61 Fed. Reg. 31668, 31670 (Jun. 20, 1996) ("For example, today's rule requires covered sources to provide information about possible worst-case scenarios. EPA intends that officials and the public use this information to understand the chemical hazards in the community and then engage in a dialogue with industry to reduce risk.")

SCAQMD Should Take Strong Action to Protect the Neighboring EJ Communities from Releases of HF.

HF use by refineries presents an extraordinary hazard that demands special consideration. A large sudden release of HF could cause a ground-hugging toxic cloud to drift over neighboring disadvantaged communities, potentially injuring thousands, if not tens of thousands of residents. While the devastation that could follow a sudden release of HF is not something any community should experience, it is particularly unfair to put that risk on communities that already bear disproportionate pollution burdens compared to the rest of the state. The residents of these communities are entitled to SCAQMD's continued effort to do everything possible to protect them from the devastation that could follow a sudden release of HF.

The lack of full information about the hazards of MHF and the potential impacts of a sudden release of MHF compounds the need for strong, protective regulation. As described above, the U.S. EPA stated in a March 2017 inspection report that the Torrance Refining Company had not prepared a proper worst case scenario analysis as required by section 112 of the Clean Air Act. Further, following the 2015 explosion at the Torrance Refinery, ExxonMobil (the former owner) did not comply with certain subpoenas issued by the U.S. CSB regarding the potential hazards of MHF. The lack of a clear understanding of the actual risks posed by the use ofMHF by refineries warrants strong regulation by SCAQMD to ensure the communities' safety.

We commend SCAQMD for its continued attention to the hazard posed by refinery usage of HF and urge SCAQMD to craft Rule 1410 to provide the workers and neighbors of the Torrance and Valero refineries with the maximum protection possible. We look forward to seeing a proposed rule that takes these considerations into account.

JAMES R. POTTER
Deputy Attorney General
CHRISTIE VOSBURG
Special Assistant, Environmental Justice Bureau

For XAVIERBECERRA
Attorney General

cc: Members of the SCAQMD Refinery Committee (via email to Cristina Lopez)·
Wayne Nastri, SCAQMD Executive Officer (via email)
Heather Farr, SCAQMD Program Supervisor (via email)

LA2018300898

Gov. Whitman, Retired Generals Call on EPA to Protect Against Chemical Plant Disasters

POSTED AT 12:20 PM BY DAVID HALPERIN

Today, former EPA administrator and New Jersey governor Christine Todd Whitman, retired generals Russel Honoré and Randy Manner, former EPA official Robert Bostock, and I, submitted a comment to the Environmental Protection Agency urging it to strengthen rules to make U.S. chemical plants less vulnerable to potentially catastrophic explosions and toxic releases. Here's what we wrote:

June 16, 2021

Hon. Michael S. Regan, Administrator, United States Environmental Protection Agency

James Frederick, Acting Assistant Secretary of Labor for Occupational Safety and Health

Re: Docket ID: EPA-HQ-OLEM-2021-0312

Dear Administrator Regan and Acting Assistant Secretary Frederick:

We submit this comment in response to EPA's Notice of Virtual Public Listening Sessions regarding the EPA Risk Management Program (RMP) regulations and related goals.

In offering our views, we draw on our prior experience in government and national security roles:

- Christine Todd Whitman, former Administrator, United States Environmental Protection Agency;
- Lieutenant General Russel L. Honoré, US Army (Ret), former Commander, Joint Task Force Katrina and founder, the GreenARMY;
- Major General Randy Manner, US Army (Ret), former Acting Director and Deputy Director, Defense Threat Reduction Agency;
- Robert M. Bostock, former Assistant to the Administrator for Homeland Security, United States Environmental Protection Agency;
- David Halperin, lawyer and former staff member, National Security Council and Senate Intelligence Committee.

In summary, we believe the requirements of U.S. national security make it urgent that EPA move to issue new, strong RMP rules that adequately protect the American people against chemical plant explosions. Millions of Americans, particularly low-income people and people of color, live near hazardous chemical facilities. Accidents, storms that have been intensified by climate change, and deliberate attacks, including terrorism and cyber attacks, all pose risks of chemical explosions that could cause widespread destruction and death.

EPA should restore and build on its 2017 rule, including by requiring all RMP facilities to assess safer alternatives to existing chemical processes; requiring all these facilities to share their safer technology analyses with communities and emergency responders; and, starting with the highest risk facilities, requiring chemical facilities to substitute safer alternatives to their processes, wherever feasible, that will eliminate or significantly reduce the consequences of a catastrophic release.

In prior comments to EPA, three of us (Honoré, Manner, Halperin) collectively urged the Obama administration to implement strong RMP rules, and while that administration made important reforms, we were disappointed that the rules issued did not adequately protect the public from chemical disasters. We strongly opposed the rules issued under the Trump administration. Those rules eliminated many of the important provisions of the prior RMP rule.

The current Trump-era rules have increased dangers to U.S. national security by raising the risks of chemical explosions and releases on U.S. soil, whether from accident, natural disaster, or deliberate attack, either a physical attack or a cyber attack.

The American people need much greater protection from chemical disasters, so we urge you to strengthen safety measures, as we describe below.

For decades, our country has failed to squarely address the dangers of hazardous chemical facilities — from oil refineries to water treatment plants. An accident, natural disaster, or deliberate attack could trigger an explosion or chemical release that could kill thousands of people. Millions of our citizens live and work near these dangerous facilities.

After three years of intensive discussions with chemical companies, plant workers, affected communities, first responders and others, the EPA in January 2017 issued a rule to help protect the American people from these

dangers. While not strong enough, the rule improved the federal RMP, which addresses some 12,500 facilities that use or store large quantities of highly toxic or highly flammable chemicals.

The principles of that rule need to be restored and strengthened.

Let's be clear about what's at stake.

The world was outraged in 2017 by a chemical attack in Syria that led to terrible suffering and death.[1]

Yet across our own country, hazardous chemical facilities are, in effect, as Senator Barack Obama said in 2006, "stationary weapons of mass destruction" — capable, if triggered, of causing the same kinds of harm as chemical weapons.[2]

This is a national security issue. National security concerns compel a stronger RMP rule now.

Our country knows the risk because there have been major incidents, like the 2013 West, Texas, ammonium nitrate explosion at an RMP facility. That tragedy killed 15 Americans and injured 160 more. There have been thousands of other serious and deadly chemical incidents at facilities regulated by the RMP program — including fatal explosions and fires at refineries in Washington and Texas, the 2012 massive Chevron Richmond refinery fire, and the fatal 2013 Geismar, Louisiana, Olefins plant explosion.

The thousands of incidents over recent years have underscored the failure by many in the chemical industry to minimize and safely secure toxic materials, and our government's failure to create comprehensive and fair rules to protect against such incidents.

The weight of these dangerous and sometimes fatal incidents, and the continuing threat to U.S. security, compelled President Obama to issue, on August 1, 2013, the Executive Order on Improving Chemical Facility Safety

and Security (EO 13650), which directed federal agencies to act. That executive order led the EPA, after consulting with the Department of Homeland Security, the Occupational Health and Safety Administration, and other federal agencies, to issue the 2017 rule.

The EPA under the Trump administration repeatedly highlighted the 2016 finding of the Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATF) that the West, Texas, explosion was set deliberately. We don't think the outcome of a debate over the cause of one chemical incident, however deadly, should be determinative of what makes sense for chemical security rules to protect our people. In fact, stronger chemical safety measures are needed whatever the explanation for West.[3]

The need for stronger provisions, and safer materials, is indeed no less critical and urgent if West was caused by sabotage. If West was a deliberate explosion, that should only heighten our concern: We know there have been numerous chemical accidents and natural disaster incidents in the past, but now there is at least evidence of a deliberate attempt to cause harm by attacking one of these facilities — and of the vulnerability of one of our plants to such an effort.

Whatever happened at West, it is a serious concern that terrorists could trigger a chemical plant attack in our country, with devastating consequences.

We do know the April 19, 1995, Oklahoma City federal building bombing that killed 168 people was intentional. We also know that following the January 6th attack on the U.S. Capitol, the FBI has warned that domestic terrorism is now the U.S.'s greatest terrorist threat.[4]

There have been other danger signs. 9-11 hijacker Mohammed Atta, before he flew a jet into the World Trade Center, reportedly had been scouting U.S. chemical plant sites.[5]

In response to the terrorist attacks of September 11, 2001, the Environmental Protection Agency was designated the lead agency, under President George W.

Bush's July 2002 National Strategy for Homeland Security, for reducing the vulnerability to deliberate attacks on the nation's Chemical Industry and Hazardous Material sectors.

Prior to the official designation as lead agency, EPA developed a "Strategy for Improving Security and Preventing Releases caused by Criminal Attack at Hazardous Chemical Facilities." The proposal, based on the General Duty clause of the Clean Air Act, would have incorporated security requirements into EPA's Risk Management Program.

Regrettably, the Office of Management and Budget declined to support this proposal, and the Bush Administration did not allow this proposal to go forward. The administrator of the EPA, Governor Whitman, subsequently requested that the EPA be removed as the lead for this sector, since it was given the responsibility but not the authority to pursue measures to improve security in this vulnerable portion of the nation's critical infrastructure.

In 2003, the government's National Infrastructure Protection Center warned that U.S. chemical plants could be terrorist targets.[6] Security experts have warned of the relative ease with which determined attackers could thwart plant security.

The EPA has identified 466 chemical facilities that each put 100,000 or more people at risk of a poison gas disaster.[7] In 2004, the Homeland Security Council projected that a major attack would kill 17,500 people and injure tens of thousands.[8]

The people most at risk are low-income people and people of color, especially poor children of color. People of color are nearly twice as likely as white people to live in the fenceline zones near hazardous chemical facilities. Children of color make up nearly two-thirds of the 5.7 million children living within a mile of a high-risk chemical facility. Poor black and Latino children are more than twice as likely to live in fenceline zones than white children living above the poverty line.[9]

The potential for cyber attacks makes the challenge even more serious.[10] The recent spate of cyber attacks on US industry, including energy and critical infrastructure facilities, highlights the heightened risk of strikes on chemical plants by attackers armed only with computers. Many U.S. chemical facilities may be dangerously unprepared for sophisticated cyber attacks,[11] let alone the massive "cyber Pearl Harbor" about which former Secretary of Defense Leon Panetta has repeatedly warned. Indeed, Panetta, as secretary and former secretary, has specifically mentioned chemical plants as vulnerable to, and targeted by, cyber attackers.[12]

Even without the threat of sabotage, we are not only at risk, but actual harm is occurring regularly under EPA's existing framework.

From 2004 to 2013 there were some 1,500 U.S. chemical releases or explosions with reportable harm[13], causing 17,000 injuries and 58 deaths. There have been hundreds more incidents since then, with more casualties.

We know the dangers, also, from the 1984 pesticide plant disaster at Bhopal, India, which caused 20,000 deaths. The Bhopal plant was owned by a U.S. company, Union Carbide. If that plant had been located in the U.S. and 20,000 people had died here, we would have fixed this problem long ago.

Our country received another serious warning in the wake of Hurricane Harvey in 2017, when a flooded organic peroxides manufacturing plant, operated by the French company Arkema, in Crosby, Texas, 20 miles from Houston, burned, as a result of the plant losing power and refrigerated materials decomposing.[14] Brock Long, then the Federal Emergency Management Agency head, said that the "the plume is incredibly dangerous."[15] Residents around the area were evacuated. At least 15 first responders were treated at the hospital. Some of the emergency workers sued the plant[16], as did Harris County, Texas[17], and in 2018, a grand jury criminally indicted Arkema North America and two of its executives, charging that they recklessly released chemicals and put residents and first responders

at risk of serious injury.[18] After a Texas judge acquitted all defendants in October 2020, a spokesman for the Harris County district attorney said, "Today's ruling by a judge doesn't change the fact that dangerous chemicals on Arkema property ignited and were belched in a cloud of toxic smoke over the surrounding communities, and a first responder there protecting people is now on a lung-transplant list."[19]

Hurricane Harvey was the largest recorded storm in U.S. history in terms of peak rainfall. Global climate change is helping to produce more intense storms across our country, increasing the risk of chemical incidents triggered by violent weather. Harvey helped reveal the vulnerabilities of our communities to these storms, including the chemical plants near U.S. coastlines.[20]

The 2017 EPA rule would have required plants like Arkema's to engage in more coordination with local first responders to plan for incidents by sharing information that first responders need to protect communities, and make it easier for community members to learn about plant dangers. The rule also would have required such plants to evaluate whether they need greater safety improvements and emergency preparedness, such as storing fewer chemicals, improving storage safety, and strengthening backup power so electricity would be maintained in a storm, and devising other ways to operate more safely and reduce hazards before foreseeable hurricane winds, flooding, or earthquakes hit. And the rule would have required the 12% of RMP facilities with the most serious accident records — refineries and coal products manufacturers, paper mills, and chemical manufacturers — to analyze whether it was feasible to move to safer technologies and materials.

Chemical industry lobbying kept important protections out of the 2017 RMP rule. In particular, community, labor, and environmental groups had strongly urged — and we urge today — that plants be required to move to safer technologies where feasible[21], as some responsible companies, such as Clorox and hundreds of publicly owned water treatment facilities already have done voluntarily.[22]

But, as noted, the 2017 RMP rule did provide for some critical, common-sense reforms: enhancing emergency preparedness; improving investigations of near-miss incidents and actual releases; instituting third-party audit requirements; increasing public access to chemical hazard information; and requiring safer technology analyses (STAAs) including, for example, improving plant design to protect against chemical terrorism. EPA found in issuing the 2017 rule that it would reduce deaths, injuries, and other harm from RMP facility incidents involving both RMP-covered and non-RMP covered chemicals, as well as lead to "prevention of rare but extremely high consequence events," such as a major Bhopal-level catastrophe.

Instead of heeding these concerns, the EPA during the Trump administration cancelled all of the essential prevention measures — including inherently safer technology assessments, incident investigation improvements, and training — and most of the information measures, while weakening and postponing the other common sense emergency response measures, such as annual coordination with first responders, disaster drills and exercises, and even public meetings after a chemical disaster. This is an enormous abdication of the government's responsibility to protect our nation and our people.

If the Trump-era rule is not replaced, it will likely cost our country a great deal of money over time in recovery expenses from a greater frequency of chemical explosions — far more than the cost of implementing the 2017 rule.[23] And it could lead to extensive, and even catastrophic, loss of lives.

The provisions in the Trump-era regulations to reduce public access to information about chemical hazards at U.S. facilities are of particular concern to us.

EPA under the Trump administration used national security as an attempted justification to weaken the informational access for first responders, but EPA offered no evidence or gave no justification for why such public servants are not or cannot be adequately trained to keep such information safe. Nor did

EPA provide any evidence that allowing a community member to request certain information from a facility would increase the likelihood that a terrorist would attack a facility.

In fact, evidence supports the need for the people most affected by a chemical incident to have information before it happens, so they can adequately prepare to protect themselves.[24]

Determined attackers will be able to discover, through diligent research, where hazardous materials are stored, regardless of what EPA mandates; thus, there's no good reason to leave first responders or community members in the dark, when informing them could improve public protection.

Instead of keeping the Trump-era rule, EPA should restore and build on the 2017 rule, including by:

— Requiring all RMP facilities to assess safer alternatives to existing chemical processes, alternatives that will eliminate or dramatically reduce the consequences of a catastrophic release of an acutely toxic substance. The 2017 rule exempted 78% of the 12,500 Risk Management Plan chemical facilities from requirements to conduct STAAs. The exempted facilities include, for example, water treatment plants, some of which put major cities at risk of a catastrophic release of chlorine gas.

— Requiring all these RMP facilities to send their STAAs to the EPA and readily share the information with nearby communities and other interested parties, such as emergency responders, vendors of safer technologies, facility employees and contractors, and safety researchers.

— Establishing a publicly accessible clearinghouse of safer available alternatives that could encourage and support the adoption of safer alternatives by more facilities as soon as practicable.

— Starting with the highest risk facilities, requiring chemical facilities to substitute safer alternatives to their processes, wherever feasible, that will eliminate or significantly reduce the consequences of a catastrophic release. The coalition of community, worker, and environmental groups that has engaged the EPA on these issues[25] has recommended that EPA at the very least begin a pilot program to require IST implementation in a subset of RMP facility categories, such as waste water and drinking water treatment plants, bleach plants and hydrogen fluoride refineries, and for those facilities among the 2,000 high-risk facilities cited in the EPA's National Enforcement Initiative (NEI) 2017-19 proposal.

— Factoring into RMP regulations and permits the vulnerability of chemical facilities to natural disasters and common-sense prevention and safety measures to protect communities and workers from the double threat of chemical disasters hurricanes, floods, and other "natech" incidents where there is a domino effect of natural and technological disasters, including: safer shutdown/startup; back-up power; real time monitoring; worker involvement & community notification.

— Expand the universe of substances regulated by the RMP program to include ammonium nitrate, reactives and other hazardous chemicals and expand the categories of facilities covered.

These provisions to improve chemical security are urgently needed to protect the American people. EPA should cancel the current Trump proposed rule, implement the 2017 rule, and build on it with the new provisions listed above to further strengthen chemical plant security.

That is the only responsible course if we are to protect the American people.

We would be pleased to discuss these matters further with you.

Sincerely,

Christine Todd Whitman

Lieutenant General Russel L Honoré, US Army (Ret)

Major General Randy Manner, US Army (Ret)

Robert M. Bostock

David Halperin

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DEADLY HF COULD KILL MORE OF US THAN COVID-19

Only 2 refineries in CA use massive amounts of deadly **Hydrogen Flouride acid (HF). Accidents, earthquakes, or intentional acts could cause a large release, spreading vapor clouds thru the community, burning skin and lungs, and causing death to thousands within minutes.** Near misses of large releases into the community occured: Torrance 2015; Philly 2019; Wisconsin 2018. Wilmington/LA & Torrance Refineries have refused to change to vastly safer available alternatives. They risk the lives and jobs of more than 1.5 million people! **WHY?**

Both refineries are located in communities facing extreme enviromental justice burdens

ILWU Dispatch Hall
3754 ft.

Wilmington Elementary
4987 ft

LB Convention and Queen Mary
less than 3 miles

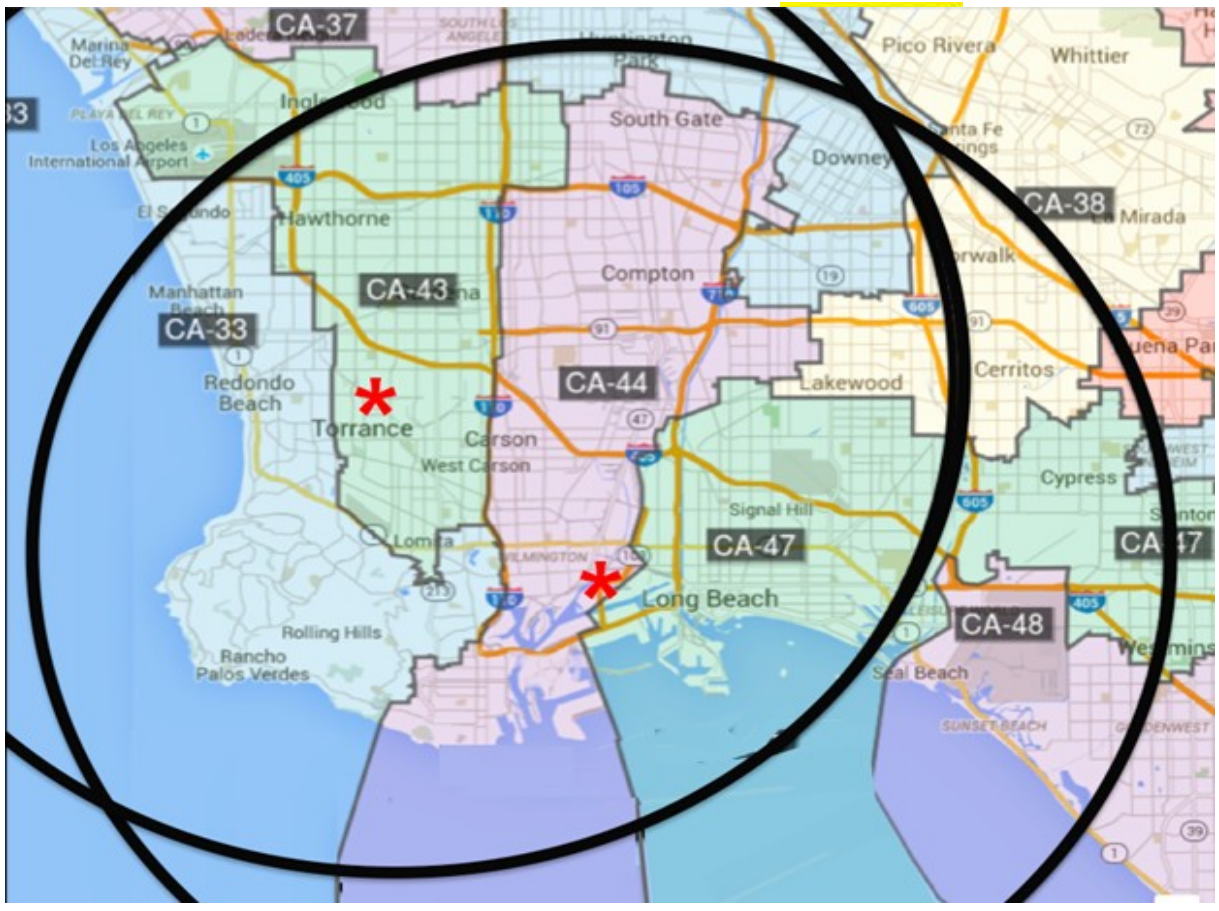
LA RAMS/ So Fi Stadium
7.47 miles

8 National Security Facilities
within 6 miles

1,513,340
women, children, men, cats, dogs, birds, coyotes & butterflies

*Numbers are approximate

Circles indicate estimated "endpoint" for risk of death or serious injury



Want the latest news?

WHERE IS YOUR HOME, JOB, SCHOOL, FAVORITE RESTAURANT?

Visit TRAA.website and join our newsletter mailing list info@traa.website

-The facts against using deadly HF are over whelming and supported by staff reports from local and federal agencies. Even the United Steelworkers report calls it "A RiskToo Great." See TRAA.blog

- U.S. Environmental Protection Agency says the circle of death/severe injury (see map) includes more than 100 schools, national security facilities, hospitals/first response centers, union headquarters and YOUR HOME!

- Safer alternative chemicals are replacing HF in numerous refineries. Why not at the only two in California using HF?

TORRANCE REFINERY ACTION ALLIANCE

PUT COMMUNITY AND WORKER SAFETY FIRST

What you can do?

- ✓ **Email Attorney General Nominee Rob Bonta** and demand action to end HF in California refineries: **AttorneyGeneral@doj.ca.gov** (please copy TRAA)
- ✓ **Volunteer with TRAA,** we have lots of activities that will match what you like to do. Join us: info@traas.Website
- ✓ **Contribute money to our "Fight HF Fund,,** - http://bit.ly/Don ateToTRAA Even a small donation of $27, and a couple of major donors (smiley face), could help eliminate the HF threat to your family, job and your life!

Paidfor by donations to TRAA, Inc.

Commercially Available Alkylation Alternatives to Hydrofluoric Acid (HF)

Executive Summary

There are at least five major companies actively marketing alternatives to hydrofluoric acid alkylation:

1. Dupont - Sulfuric acid brand name **"STRATCO®"**
2. UOP Honeywell - Chevron Ionic Liquid "**ISOALKY™**"
3. Well Resource - Ionic Liquid "**Ionikylation"**
4. KBR Solid Acid **K-STAA™**
5. C&BI Sulfuric acid **CD*Alky*®**

Alkylation is a process used in conjunction with making high octane gasoline. This requires a chemical of which there are several choices. One choice, Hydrofluoric acid (HF) poses a vastly greater risk of death or severe injure for miles from the large storage tanks at two refineries in Southern California and 39 more in other states. The other choices are commercially available and described below. There are likely other products that we are not aware of. People working to remove HF have no position on the choice of conversion.

HF is a very old technology - developed over 70 years ago, **no HF** alkylation unit has been built in the US in the last 20 years. We understand an HF alkylation unit was built in China about 10 years ago but as a result of increased government safety standards that project was scrapped.

In addition to public safety concerns, these alternatives to HF also offer significant economic benefits to the refiners.

The following is a brief summary of each process in layman's terms. Information is drawn largely from **public presentations and documents of each company.** Each company is quite willing to further expand on these summaries and address questions and concerns directly.

The summary **conclusion** from this information is that **there are robust commercially available vastly Safer Alternative Technologies. Conversion to one of these alternatives could be accomplished in** less than **3 years and for a budget under $400 million dollars.**

Note: Each of these companies are primarily "licensors" in collaboration other companies specializing in planning, design and construction. These are called Engineering, Procurement, Construction (EPC) companies. Buildouts typically involve hundreds of construction jobs. In many places these are union jobs.

All vendors reported that **conversion would increase alkylation capacity, reduce operating costs, provide cost savings by eliminating the need for safety mitigation against HF, and reduce liability in the event of a catastrophic release (currently, liability is not revealed to investors).**

COMPANY - HEADQUARTERS - CHEMICAL:

1. Dupont - Kansas - Sulfuric acid H_2SO_4 Alkylation Technology.

Marketed under the brand name "STRATCO®"

Overview: Used by the vast majority of alkylation units in the US, is the most tested technology and used in some of the newest commissioned units. Units are designed and licensed by Dupont, the largest chemical company in the US.

REFINERIES USING THIS PROCESS:

Dupont has licensing agreements for over 100 alkylation units worldwide + 39 commissioned alkylation units in the United States with **8 units in California**. They range in size from 2,000 to 38,000 barrels per day (BPD) of alkylate design capacity. While there have not been direct conversions from HF to sulfuric acid, there have been several refineries that had used HF, then added a sulfuric acid unit to increase their capacity and subsequently retired the HF facility.

COSTS:

For a facility the size of the Torrance PDF refinery (25,000 BPD of Alkylation), costs are in the range of $200 million. Norton Engineering Report commissioned by SCAQMD estimated $122 million. The other parts of the process ("outside" refrigeration, water tower etc) would be $100 million, depending on labor costs, etc. For example, Valero recently added a 12,000 BPD grassroots Dupont alkylation unit in Houston. Estimated cost of approximately $200 million.

A conversion from HF to DuPont STRATCO® Alkylation Technology was is a revamp where as much as 80% of the existing equipment is typically reusable. Resulting in possibly savings of 40-60% of the grassroots price.

SCAQMD Report on Safer Alternatives Feb. 2021 states - cost for a conversion to DuPont's STRATCO® producing 25,000 BPD alkylate excluding a new fractionation section would be **approximately $120 million.**

CONSTRUCTION TIMELINE: In US, about three to four years from agreement to commissioning with 6 weeks shut down for final conversion, Plot size similar to HF

OTHER BENEFITS OR CONCERNS:

Sulfuric Acid alkylation is a more efficient process, thus **it provides significant expansion of capacity** Additional savings results from not having to install, monitor and maintain HF safety equipment. (per vendor statements)

Cited as a downside is increased truck traffic with the claim of an extra 40-50 trips a day to transport H2SO4 into the refinery, and waste H2SO4 out. The product vendor reports that generally H2SO4 is moved by train or only **12 trucks a day**. Also, volunteers counted actual truck traffic at a key intersection at Torrance refinery and showed that there would be **less than a 3% increase even using the refinery's made up number. The trips** would be much shorter trips (5-10 miles) than the existing cross-country truck trips (1800 miles) to move HF.

Sulfuric acid transport does not endanger communities that it travels through to the degree that HF truck transport does. These communities are usually unaware and unprepared for potential releases such as occurred recently in a Southern China road accident.

COMPANY - HEADQUARTERS - CHEMICAL

2. UOP HoneyWell/Chevron- Illinois Ionic Liquid - "ISOALKY"

OVERVIEW:

"Uses ionic liquids (marketed as "Isoalky") instead of HF or sulfuric acid as a liquid alkylation catalyst for production of high-octane fuels. In addition to lower health risks, ISOALKY enables catalyst regeneration to occur within the unit itself, lowering catalyst consumption by 400 times versus sulfuric acid, according to the technology licensor." -SCAQMD (2/5/21)

Suitable for existing unit retrofits, the proven technology also affords refiners process safety, performance, and economic advantages... to produce alkylate **without the volatility of conventional acids [HF].**.. simpler handling procedures requiring only standard personal protective equipment, UOP said. [Vastly safer]

REFINERIES USING THIS PROCESS: One completed at Salt Lake City Chevron is a revamp of an HF unit. TWO **-Also a series of ISOALKY technology unit revamps are already under way in North America [one is an HF Conversion]. Additional units are scheduled for startup in China (Sinochem Hongrun Petrochemical), Chevron and UOP said in Oil & G Journal.**

COSTS: "Similar to other revamps"

TIMELINE: In US, about three to four years from agreement to commissioning with 6 weeks shut down for final conversion, Plot size similar to HF

OTHER BENEFITS OR CONCERNS: "The payoff—includes a boost in unit capacity, feedstock flexibility, and savings resulting from less complex handling procedures—more than justifies the capital expenditure." - Helin Cox, Business Director for alkylation and treating at Honeywell UOP. **Oil and Gas Journal 2021**

- Regenerated inexpensively on-site, uses minimal product, minimal danger to transport.
- Concerns raised regarding "viability" are unfounded since **UOP Honeywell is one of the world's leading developers of oil industry technology and Chevron is ranked fifteenth in the Fortune 500 and 61st worldwide and have been developing ISOALKY for 15 years.**

COMPANY - HEADQUARTERS - CHEMICAL

3. Well Resources – Canada - Ionic Liquid Alkylation Marketed as "Ionikylation"

OVERVIEW:

Ionikylation, ...alkylation technology developed by China University of Petroleum–Beijing and licensed by Well Resources Inc, is an inherently safe, commercial process using … ionic liquid catalyst, a non-volatile, non-aqueous liquid salt, to facilitate the alkylation reaction. The technology has been under development for 20 years. Significant process improvements have been made in recent years, concurrent with widespread commercial adoption in Asia-Pacific. In 2005, the first retrofit project was successful … retrofitting an existing, 65,000-metric-ton per year sulfuric acid alkylation unit with the proprietary catalyst. - **SCAQMD Feb 5, 2021**

"Ionikylation has been available on the market for a number of years. To date, we have directed much of our attention to the Asia-Pacific region with public, government, and industry stakeholders ...***in some regions, industrial safety violations can be prosecuted under criminal codes, which is a strong motivator for phasing out unsafe practices (HF) with expediency***" - Beverly Chung Communications Director, Well Resources Inc. ***(Emphasis added)***

REFINERIES USING THIS PROCESS:

There are 5 refineries using this liquid Ionic Alkylation plus one under construction and one awaiting commissioning. The 1st was commissioned in 2013. **Most recently and notably, the 1st revamp from HF was completed a year and a half ago** in Southern China and **is operating without incident**. It is currently used in refineries ranging from 50,000 to 300,000 BPD and operated by China's largest petrochemical companies Sinopec & PetroChina.

COSTS: US cost estimate range from $200 - $400 million

CONSTRUCTION TIMELINE: Est. time to build in North America: 1.5 to 2.5 years.

OTHER BENEFITS OR CONCERNS:

- The alkylation catalyst is non-hazardous and non-corrosive, allowing all process equipment to be manufactured using low-cost carbon steel.
- The alkylation catalyst is regenerated onsite under moderate operating conditions, providing the added benefits of emissions reduction compared to alternative technologies [vastly safer than HF alkylation.]
- Eliminates the need for costly and complex safety and monitoring systems (water sprays, secondary containment, etc) needed for HF since the process is "inherently safe"
- Over the lifetime of the project, reduces maintenance costs because the catalyst is non-corrosive and does not damage equipment over time

COMPANY - HEADQUARTERS - CHEMICAL

4. KBR - Texas - KBR- Solid Acid Alkylation Technology (K-SAAT™)

KBR is a U.S. based company with a 100 year history that delivers science, technology and engineering solutions.[2] KBR works in various markets including aerospace, defense, industrial and intelligence. Annual revenue is nearly $6 billion. The process they are aggressively marketing uses a solid catalyst, using low carbon intensity and simple technology using much of existing equipment and promises a 30% return on investment - Edward Griffith Refinery Technology Manager.

REFINERIES USING THIS PROCESS:

There are 2 refineries commissioned or in process.

- Confidential 2020 (conversion from Sulfuric) in US
- CVR Winnwood, OK (**conversion from HF**) in process
- More to be announced soon

COSTS: not available at this time

OTHER BENEFITS OR CONCERNS:

In addition to the benefits of Solid Acid mentioned about, this massive company with close ties to US military gives a specified return on investment, has a US revamp in process and also offers a 30 day tie-in (less than a typical refinery turn-around)

COMPANY - HEADQUARTERS - CHEMICAL

5. CB&I/McDermott - Texas - Sulfuric Acid - CD*Alky*®

"CB&I is a leading provider of technology and infrastructure for the energy industry. With more than 125 years of experience, CB&I provides reliable solutions... maintaining a relentless focus on safety & an uncompromising standard of quality.

CB&I's CD*Alky* technology is an advanced low-temperature sulfuric acid alkylation process that produces a high-octane, premium gasoline blending component with less environmental impact, while also reducing overall maintenance and chemicals costs for refineries.

Based on commercially proven sulfuric acid alkylation chemistry, The CDAlky process's simple innovative design enables operation at significantly lower temperatures than conventional alkylation processes [like HF] and produces finished alkylate product at higher yield while reducing acid consumption by up to 50 percent compared to conventional technology [other sulfuric acid and HF alkylation] ... reduces both the equipment piece count and the operational complexity" **CB&I Statement**

REFINERIES USING THIS PROCESS:
Currently used in 14 refineries in 4 countries - most notable Is **Valero in Norco, Louisiana. Valero is one of the two companies still using HF in California.**

"CD*Alky*® technology has been selected by Valero Refining – for its St. Charles Alkylation Project ... CB&I's overall scope… on the project includes CD*Alky* technology license, basic engineering and proprietary equipment. ...the CD*Alky* unit produces 25,000 BPD alkylate" - **CB&I press release**

TIMELINE: "Completed 2020 on time" [**2.5 years**] **Valero 4th quarter report** Jan, 2021

COSTS: [less than $416 million] "Under budget" - **Valero 4th quarter report Jan, 2021**

OTHER BENEFITS OR CONCERNS:

- Plot space is significantly lower than that required by conventional technology. Able to operate at very low temperatures.
- Reduces maintenance and chemical costs as well as the environmental impact of the alkylation process
- Findings confirm corrosion rates and fouling propensity are greatly reduced with CDAlky technology relative to conventional technology. (Sulfuric & HF are considered conventional)

Regarding: L.A. BoS Agenda Item 41-F, February 15, 2022 – Banning HF

Comments by: George Harpole, Ph.D.

In 1986 tests, in the Nevada desert, liquid hydrogen fluoride was released under conditions simulating a refinery leak. All the HF flash evaporated into a ground hugging fog. Two miles downwind, the HF concentrations were measured as 4 to 8 times greater than the EPRG-3 level to avoid life-threatening health effects. Moreover, HF quantities in single vessels at the Torrance Refinery are 6 times greater than flowed in the tests.

MHF is HF with organic solvent added to reduce the boiling point. However, this reduction is small – both boiling points are still near room temperature.

Refinery engineers have done their best to mitigate the HF hazards with chemical additives, water sprays, and other equipment. However, HF is so inherently dangerous that none of this can be enough. Especially in large earthquakes, accidental or deliberate explosions, or fire – all the safety systems can fail simultaneously with a catastrophic rupture. The consequent HF release into densely populated communities surrounding refineries would be disastrous.

Several much safer alternatives to HF have been demonstrated to commercial size and are available – 1) ionic liquid, 2) solid acid, and 3) sulfuric acid. Chevron's ISOALKY ionic liquid process is being used to convert from HF by refineries in Salt Lake City, and has significant performance benefits, as well as being very safe both for refinery workers and the community.

The SCAQMD commissioned the 2016 Norton report outlining HF alternatives, including some cost estimates. An update is needed, hopefully, this time, in cooperation with the refineries and alkylation system suppliers.

Attempts to ban HF have met resistance (for three decades) largely because of the assumed conversion cost. The state and/or federal government should assist the refining companies with this conversion expense – if the refining companies will cooperate and waive any resistance to banning HF. Then, action is more likely, with everyone safer, and business intact.

Thank you Supervisor Hahn for introducing the motion to require refineries in Torrance and Wilmington to convert to safer alternatives and phase out the use of the deadly Modified Hydrofluoric Acid. This is an unacceptable and needless risk for our communities, many of which are already facing many other environmental burdens. We are urging the Attorney General and the USEPA to take all possible action to protect our communities

Sincerely,
Erika Kodama

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 TRW Chemical Technology Dept. *Christopher Shih*, Ph.D.

TRAA Science Advisory Panel
4733 Torrance Blvd. #200
Torrance CA 90503

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

Millions living in the vicinity of refineries in Torrance and Wilmington are at risk from massive amounts of highly toxic hydrogen fluoride. Tens of thousands could die from an accidental release. Meanwhile, refineries around the state, country and world use safer alkylation methods. Chevron realized the value of converting its Salt Lake City facility to use an ionic liquid catalyst instead of HF.

There have been three major near-misses in the last six years that could have caused mass casualties near refineries, including a terrifying close call in Torrance. On February 18, 2015, the Torrance Refinery exploded, and four people were injured. An 80,000-pound piece of equipment came within five feet of the HF settler tank containing 50,000 pounds of HF.

Alternatives to HF/MHF for producing high-octane gasoline have been proven to be much safer, as Dr. Philip Fine testified in his presentation to the SCAQMD Governing Board, Feb. 1, 2019.

The time to switch to a safer alternative to deadly hydrogen fluoride is now.

Sincerely,

Judith B. Herman

I support this motion.

I want to thank Supervisor Hahn and the entire Board of Supervisors for being such staunch supporters of community and worker safety with respect to the use of modified hydrofluoric acid at the two refineries in the South Bay. On this seventh anniversary week of the Torrance Refinery explosion it is particularly gratifying to see elected officials who care so much about our concerns.

The Torrance Refinery exploded on February 18, 2015. Shortly afterwards the community discovered that MHF is essentially no different than HF in spite of the assurances we'd been given for 25 years that it was much safer and was not capable of releasing a deadly poisonous cloud that could travel up to six miles from the originating site, killing or permanently disabling every living being in its wake.

Now is the time to finally phase out this deadly chemical since there are new safer alternatives in place. Just last year a refinery in Salt Lake City completed a successful conversion to a safer alkylation catalyst and there are two more refinery conversions in progress in other parts of the US.

Since the 2015 explosion the Torrance Refinery Action Alliance has been dedicated to phasing out the use of MHF at the Torrance and Valero refineries. We've encountered many roadblocks and powerful opponents along the way, but the Los Angeles County Board of Supervisors has been with us throughout. Thank you for your support.

In support of 41F
Los Angeles County Board of Supervisors meeting of February 15, 2022

I fully support Supervisor Hahn's motion to ask Governor Newsom and Attorney General Rob Bonta to take all possible actions to require refineries in California to switch from the dangerous HF used in the gasoline refining process to a safer alternative. I live about six miles to the east of the Torrance Refinery and so am in the zone for serious injury or death if there were to be an HF explosion. On the seventh anniversary of the massive explosion at the Torrance Refinery (then the Exxon Mobil Refinery), which narrowly missed involving the HF tank, it is long past time to see the conversion take place. Thousands of us living around the Torrance and Valero refineries thank you for taking this action to increase our safety.

Rosalie Preston
15913 Menlo Avenue
Gardena, CA 90247

Valero

February 14, 2022

The Honorable Holly Mitchell, Chair
County of Los Angeles Board of Supervisors
Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Re: Motion re County Initiative to Improve Safety and Advance the Conversion of Modified Hydrofluoric Acid to Safer Alternative at Local Refineries (the "Motion")

Dear Chair Mitchell:

Ultramar Inc. ("Ultramar") is writing to express its concern regarding the above-referenced Motion. Ultramar spent more than three years addressing this issue through the South Coast Air Quality Management District ("SCAQMD") process. We continue to believe our HF alkylation unit already had/has state of the art mitigation measures in place. We nonetheless, worked with SCAQMD to reach agreement on additional mitigation measures after multiple technical meetings, numerous community meetings, including several official meetings of the District's Refinery Committee. After this extensive collaborative effort, the SCAQMD Governing Board voted 8-3 to accept Ultramar's commitments (attached) at its September 6, 2019 Governing Board meeting. At that meeting, then-Chairman Dr. William Burke expressed his support of the implementation of Ultramar's mitigation measures. Ultramar has spent the last three years implementing these additional mitigation measures, investing substantial engineering and financial resources and is within one month of completing this work, as discussed in our most recent quarterly update.

These additional mitigation measures were fully researched, analyzed and acted upon by the appropriate jurisdictional agency and have been implemented in good faith by Ultramar. To now assert that these mitigation measures are insufficient undermines the collaborative process in which the parties engaged. We do not believe the path forward presented in the motion is appropriate and should not be brought to a vote without further discussion by all interested parties.

Sincerely,

Kyle Sharon
Vice President and General Manager

CC (e-mail): Hon. Hilda Solis, LA County Board of Supervisors, District 1
Hon. Sheila Kuehl, LA County Board of Supervisors, District 3
Hon. Janice Hahn, LA County Board of Supervisors, District 4
Hon. Kathryn Barger, LA County Board of Supervisors, District 5

Wilmington Refinery • Ultramar Inc., a Valero Company
2402 E. Anaheim • Wilmington, CA 90744 • Telephone (562) 491-6877

Valero

January 31, 2022

Mr. Wayne Nastri
Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mr. Nastri,

In response to your November 15, 2019 request for quarterly updates regarding implementation of the enhanced mitigation measures described in our August 30, 2019 letter to the Hon. Larry McCallon, Chair of the South Coast Air Quality Management District Refinery Committee, Ultramar Inc. (hereafter "Valero") provides the following update for the fourth quarter of 2021.

Valero continues to actively progress all aspects of the commitments detailed in our August 30, 2019 Proffer letter and is on track to complete all projects based on the milestones outlined in our letter, notwithstanding the COVID-19 pandemic that continues to impact society. While it is possible that the continuing fallout of the pandemic could lead to material, labor and / or agency approval delays, we are not aware of any specific potential delays at this time. Full funding for all portions of our commitments, which have not already been completed were approved on May 7, 2021. All installations will be completed by end of the next scheduled Alky ReVAP unit turnaround in 1Q2022. The projects outlined in our letter include:

- *Item 1 - Installation of Open Path Perimeter HF Sensors.* Valero committed to install open path detection monitors around the perimeter of the alkylation unit within one year of adoption of the Board's resolution in this matter, i.e., by September 6, 2020. This project has been completed and was fully commissioned by August 28, 2020, as noted in our September 2, 2020 letter.
- *Item 2 - Installation of Flange Guards.* Valero committed to install flange guards on each flange in the alkylation unit in main acid service greater than 2 inches in diameter by the completion of the next scheduled turnaround. To date, we have installed 114 flange guards. Delivery of flange guards has been delayed due to material supply and labor shortages. The remaining flange guards are expected to be delivered by January 24, 2022, and installed during the unit turnaround. We remain on schedule to have all committed flange guards in place by completion of the next scheduled Alky ReVAP turnaround in 1Q2022.
- Item 3 - *Automation of Water Curtain System.* Valero committed to automation of the water curtain system upon completion of the next scheduled Alky ReVAP turnaround. Engineering funding was approved in September 2019 for this project. Preliminary engineering design was completed in May, 2020. The refinement engineering phase was completed in March, 2021, including finalization of the Cause and Effect logic. Associated sensor electronics and PLC were received in mid-April. Installation of the water valve modifications and PLC modifications started in August, 2021, and are now 80% complete. We are on schedule to have this project implemented by completion of the next scheduled Alky ReVAP turnaround in 1Q2022.

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- *Item 4 - Installation of Additional Point Source Detectors.* In conjunction with the water curtain automation project described above, Valero committed to install additional point source detectors by completion of the next scheduled Alky ReVAP turnaround. As noted above, engineering funding was approved in September 2019, preliminary engineering was completed in May, 2020, with refinement engineering completed in March, 2021. As outlined in our January update there will be 13 additional point source detectors installed, as well as an additional 21 open path detectors as part of the water automation scope. An additional 3 open path detectors will be installed around the acid boots. Installation of the new point source detectors started August, 2021, and is 85% complete. Installation of new open path detectors started August, 2021, and is 80% complete. We are on schedule to have this project implemented by completion of the next scheduled Alky ReVAP turnaround in 1Q2022.
- Item 5 - *Acid Settler Debris Grid.* Valero committed to develop a preliminary engineering design for a debris grid as described in Valero's August 30, 2019 letter within 180 days of the District's acceptance of Valero's proffer; based on the Board's adoption of Resolution No. 19-19 on September 6, 2019, the debris grid preliminary design is to be completed by March 4, 2020. Preliminary design engineering has been completed, with the results sent to you on March 3, 2020. The refinement phase of engineering was completed in March, 2021. On July 6, 2021, we received approval from the City of Los Angeles for the associated structural steel. Construction started in August, 2021, and was completed December 17, 2021.
- Item 6 – *Acid Settler Riser/Leg Rain Out Barrier/Shroud.* Valero committed to develop a preliminary engineering design for barrier/shroud systems for the acid settler risers and legs and the depropanizer acid boot, as described in Valero's August 30, 2019 letter, within 180 days of the District's acceptance of Valero's proffer. Based on the Board's adoption of Resolution No. 19-19 on September 6, 2019, the barrier/shroud preliminary engineering designs are to be completed by March 4, 2020. Preliminary design engineering has been completed, with the results sent to you on March 3, 2020. The refinement phase of engineering was completed in March, 2021. On July 6, 2021, we received approval from the City of Los Angeles. Construction started in August, 2021, and was completed December 17, 2021.

Some additional key milestones include:

- We have received City of Los Angeles Structural Inspection final sign off.
- We have received final Electrical sign off from the City of LA electrical inspector.

We hope this information is helpful to you. We will provide another update on or before April 29, 2022.

Very truly yours,

Kyle Sharon
Vice President and General Manager

CC (e-mail): Hon. Ben Benoit, SCAQMD Governing Board Chair
Hon. Mayor Larry McCallon, SCAQMD Governing Board Member/Refinery Committee Chair

RESOLUTION NO. 19–19

A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) Accepting the Proffered Voluntary Implementation of Additional Safety Enhancements for the Use of Modified Hydrofluoric Acid at the Torrance and Wilmington Refineries

WHEREAS, Modified Hydrofluoric Acid (MHF) Alkylation is used at the Torrance and Wilmington refineries within the South Coast Air Basin for the purpose of producing alkylate, a critical blending component of California Air Resources Board reformulated gasoline; and

WHEREAS, the Torrance Refinery is currently owned and operated by the Torrance Refining Company LLC (TORC); and

WHEREAS, the Wilmington Refinery is currently owned and operated by Ultramar Inc. (Ultramar); and

WHEREAS, pursuant to the City of Torrance Consent Decree, Case No. C 719 9530 (Torrance Consent Decree), issued by the Los Angeles Superior Court in 1990, and several subsequent court orders, the Torrance Refinery agreed to use MHF, a modified form of alkylate catalyst reformulated to significantly reduce safety risks associated with HF; and

WHEREAS, pursuant to a Memorandum of Understanding between the South Coast AQMD and Ultramar, dated February 12, 2003 (2003 MOU), the Wilmington Refinery agreed to use MHF; and

WHEREAS, during the more than two-year extensive public participation rule making process for PR 1410, additional information has been provided to the South Coast AQMD regarding the safety systems and risk mitigation measures currently in use at each of the Torrance and Wilmington Refinery alkylation units to reduce the risk and protect refinery personnel and the community; and

WHEREAS, the South Coast AQMD Governing Board has determined it is desirable, and each of the Torrance and Wilmington refineries is willing, to further reduce the overall risk of the use of MHF in the MHF alkylation units by implementing additional, voluntary safety enhancements and control measures; and

WHEREAS, TORC has submitted a proffer letter, dated August 30, 2019, (TORC Proffer Letter) pursuant to which it is committing to install significant voluntary safety enhancements in the Torrance Refinery's alkylation unit; and

WHEREAS, Ultramar has submitted a proffer letter, dated August 30, 2019, (Ultramar Proffer Letter) pursuant to which it is committing to install significant, voluntary new control measures in the Wilmington Refinery's alkylation unit; and

WHEREAS, the South Coast AQMD Governing Board has determined that the expeditious implementation of the safety enhancements set forth in the TORC Proffer Letter and the Ultramar Proffer Letter is in the best interest of all the stakeholders;

THEREFORE, BE IT RESOLVED that the South Coast AQMD Governing Board, in regular session assembled on September 6, 2019, does hereby accept the safety enhancements and control measures as proffered in the TORC and Ultramar Proffer Letters; and

BE IT FURTHER RESOLVED that the South Coast AQMD Executive Officer is directed to not continue with any PR 1410 rulemaking activities or other efforts seeking additional commitments from TORC or Ultramar regarding the use of HF or MHF; and

BE IT FURTHER RESOLVED that until the new safety enhancements and control measures are fully implemented by TORC and Ultramar as set forth in their respective Proffer Letters, the South Coast AQMD Executive Officer shall report back to the Refinery Committee annually on the progress of the implementation of the new safety enhancements and control measures at the Torrance and Wilmington Refineries; and

BE IT FURTHER RESOLVED that nothing in this resolution or in the South Coast AQMD Governing Board's acceptance of Ultramar's or TORC's respective Proffer Letters shall modify or alter the 2003 MOU or the Torrance Consent Decree.

AYES: Bartlett, Benoit, Burke, Buscaino, Delgado, McCallon, Robinson and Rutherford

NOES: Cacciotti, Hahn and Mitchell

ABSENT: Perez*

DATE: September 6, 2019

Denise Garzaro, Clerk of the Boards

*The member appointed by the Governor is currently Vacant.

August 30, 2019

The Honorable Larry McCallon
South Coast Air Quality Management District
Chairman, Refinery Committee
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mayor McCallon,

On behalf of Ultramar Inc., owner and operator of the Wilmington Refinery (Ultramar), I am pleased to proffer Ultramar's commitment to enhance our state-of-the-art hydrofluoric alkylation mitigation systems with unprecedented additional layers of protection.

As we have maintained throughout the District's consideration of Proposed Rule 1410, Ultramar has served as an industry leader in developing and implementing state-of-the-art approaches to minimize the likelihood that a release of hydrogen fluoride (HF) could occur and to provide for rapid detection and response in the unlikely event that a release were to occur. In addition to the systems currently in place, Ultramar, working with the District and other stakeholders, has identified additional measures that we believe will support and complement our existing systems and will provide additional measures of safety.

In lieu of further rulemaking or the need for a new or modified memorandum of understanding, Ultramar will commit to implement the following:

1. ***Open Path Perimeter HF Sensors.*** In addition to the open path monitors to be installed at the fenceline of the Wilmington Refinery pursuant to Rule 1180, Ultramar will install open path perimeter HF sensors around the Alky ReVAP Unit to further facilitate early detection and prompt response to any potential release of HF. Placement, design, and installation of the sensors will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. These sensors will be installed within one year of the District accepting this proposal.

2. ***Flange Guards.*** Ultramar shall install guards on each flange in the Alky ReVAP Unit in main acid service greater than 2 inches diameter. This measure is expected to improve rain out and subsequent capture of any acid released at a flange by the water mitigation system, and thus is expected to eliminate the potential for flange leaks to result in an offsite release. Design and installation of the flange guards will be done in

Wilmington Refinery • Ultramar Inc., a Valero Company
2402 E. Anaheim • Wilmington, CA 90744 • Telephone (562) 491-6877

accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Absent issues that necessitate delay that are identified at the design phase, the flange guards will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the flange guards during the next scheduled Alky ReVAP turnaround, the flange guards will be installed no later than completion of the subsequent Alky ReVAP turnaround.

3. ***Automation of Water Curtain System.*** Ultramar will complete installation of a system to automate operation of the existing water curtain system in the Alky ReVAP Unit to expedite the activation of the water curtain systems. Design, installation and operation of the curtain automation system will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Absent issues that necessitate delay that are identified at the design phase, the water curtain automation will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the automation during the next scheduled Alky ReVAP turnaround, the automation shall be installed no later than completion of the subsequent Alky ReVAP turnaround.

4. ***Additional Point Source Detectors.*** Ultramar will install additional point source detectors at locations optimized to further facilitate precise, rapid detection and response to any potential release of MHF. This measure is expected to facilitate rapid and accurately targeted activation of the water mitigation and acid dump systems, whether these are activated automatically or manually. Placement, design and installation of the detectors will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. These additional point source detectors will be installed by the completion of the next scheduled Alky ReVAP turnaround.

5. ***Acid Settler Debris Grid.*** In order to reduce the potential for a release resulting from penetration of the acid unit settler by a projectile, Ultramar will evaluate and design a debris grid to mitigate impacts to the elevated section of the acid settler. The debris grid placement, design and installation will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. This debris grid will be designed to prevent the creation of a confined space, to avoid interference with existing HF mitigation systems, to minimize the confinement of flammable vapors, and to continue to provide for free ingress and egress from the unit within the safety and structural limitations of the unit. Within 180 days of the District's acceptance of this proffer, Ultramar shall develop a preliminary engineering design for the debris grid. Absent issues that necessitate delay that are identified at the design phase, the debris

grid will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the grid during the next scheduled Alky ReVAP turnaround, the grid will be installed no later than completion of the subsequent Alky ReVAP turnaround.

6. ***Acid Settler Riser/Leg Rain Out Barrier/Shroud.*** Ultramar will design, engineer, and install Rain Out Barrier/Shroud systems for the Acid Settler Risers and Legs and the Depropanizer Acid Boots to reduce the momentum of any potential release from these systems and redirect the material downward, thus enhancing rain out and capture by the water mitigation systems. These shroud systems will be similar to that already employed on the Acid Coolers within the unit. Additional barriers or shrouding will be installed on the elevated acid piping that feeds the Settler. This mitigation measure reduces the potential for an offsite release resulting from a compromise to the settler system piping by improving rainout and subsequent capture of any released material by the water mitigation systems. The Rain Out Barrier/Shroud placement, design, and installation will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Preliminary design of the Acid Settler Riser/Leg Rain Out Barrier/Shroud and Depropanizer Acid Boot Rain Out Barrier/Shroud systems will be completed within 180 days of the District's acceptance of this proffer. Absent issues that necessitate delay that are identified at the design and engineering phase, the Acid Settler Riser/Leg Rain Out Barrier/Shroud and Depropanizer Acid Boot Rain Out Barrier/Shroud will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of one or both barrier/shroud systems during the next schedules Alky ReVAP turnaround, the Acid Settler Riser/Leg Rain Out/Barrier System and/or Depropanizer Acid Boot Rain Out Barrier/Shroud shall be installed no later than completion of the subsequent Alky ReVAP turnaround.

It is important to note that the District and Ultramar already have an existing Memorandum of Understanding from 2003 (Agreement), under which the District agreed to refrain from further regulation of HF. Nothing in this letter from Ultramar, nor the District's acceptance or rejection of this proffer, shall supersede or alter the existing Agreement. However, by accepting this proffer, the District and Ultramar will avoid the potential for litigation arising out of the Agreement.

District, Ultramar and other stakeholders have expended almost three years in considering mitigation measures and alternatives. This has taxed the resources of all those involved and resulted in no viable alternatives beyond enhanced mitigation measures described in this letter. We believe there is limited benefit from continuing on this course. Ultramar has a long history of safely operating the Wilmington HF alkylation unit and has remained in compliance with the Agreement.

We have already installed the best mitigation systems available and continuously work to improve them. Now, we stand ready to facilitate the closure of this process by committing publicly to implement even more safety improvements.

Thank you for your consideration of our proposal.

Sincerely,

Mark Phair
VP & General Manager
Ultramar Inc.

cc: Richard Walsh, VP & Deputy General Counsel
Elizabeth Bourbon, Sr. Managing Counsel
Scott Folwarkow, Executive Director Governmental Affairs

Congress of the United States
Washington, DC 20515

February 10, 2021

The Honorable Michael S. Regan
Administrator
U.S. Environmental Protection Agency
Office of the Administrator, 1101A
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Administrator Regan,

We write to you in support of the adoption of a proposal submitted by the Torrance Refinery Action Alliance (TRAA) to the U.S. Environmental Protection Agency (EPA) regarding changes to the agency's Risk Management Program (RMP) regulations and related goals. These proposed changes to RMP rules are aimed at strengthening these rules to better protect the American people against chemical plant explosions that could harm people residing near refineries.

As members of Congress serving communities near major oil refineries, we have direct experience with concerns regarding the safety of the refining process near densely populated communities. Two refineries in the region, located in the communities of Torrance and Wilmington, still use hydrofluoric acid (HF) and modified hydrofluoric acid (MHF) in the refining process. As reported by the Torrance Fire Department, the Torrance Refinery, which uses MHF alkylation process, has experienced more than 20 MHF-related incidents since 2010. MHF, if accidentally leaked, will release a ground-hugging fog that could travel several miles in concentrations sufficient to cause death or irreparable injury to those in its path.

For years, our constituents have voiced strong concerns about the volatility and deadliness of HF and MHF, and they are alarmed that an accidental release of these chemicals could lead to a catastrophe in the surrounding residential and business areas. MHF alkylation poses a grave public health risk to our constituents, and it is time to end its use. Already, many refineries use safer alternatives in the petroleum refining process while limiting the risks of chemical explosions to nearby communities.

In January 2017, the EPA issued a rule meant to create protections for plant workers and surrounding communities by preventing chemical releases and explosions that could harm thousands. This rule was a strong start, and the EPA can build upon this reform with stronger measures to stop the use of dangerous chemicals in the refining process.

We believe the EPA should go further and strengthen RMP rules by phasing out the use of HF and MHF in the alkylation process, in order to improve safety at and near petroleum refineries around the nation. The experience of residents living near the Torrance and Wilmington

refineries, who have fought for safer measures to protect the region illustrate the need to make these changes.

Thank you for your consideration of this matter. We look forward to your response.

Sincerely,

Nanette Diaz Barragán
Member of Congress

Karen Bass
Member of Congress

Ted W. Lieu
Member of Congress

Maxine Waters
Member of Congress

TRAA Announces Campaign Urging Governor Gavin Newsom To Request an Investigation of the Torrance Refining Company and Wilmington's Valero Refinery

The Campaign

On the five-year anniversary of the Torrance refinery explosion, the Torrance Refinery Action Alliance (TRAA) announced a campaign urging Governor Gavin Newsom to request Atty. Gen. Xavier Becerra's office to investigate — *based on newly available irrefutable evidence* — the lack of basis for two legal processes that allow the Torrance Refining Company and Wilmington's Valero Refinery to use massive amounts of hydrogen fluoride that imperil the surrounding communities. ***An investigation is the essential precursor to a lawsuit by the State Attorney General to ban the use of HF in the refineries.***

Copy of the letter to Governor Gavin Newsom being delivered to the Torrance Refining Company at 8:50.a.m. on Tuesday, February 18, 2020, the precise time of the the 5th Anniversary of the February 18, 2015 Torrance Refinery Explosion.

The campaign was kicked off with the delivery of the letter below from the six-member TRAA Science Advisory Panel to Governor Gavin Newsom on Tuesday, February 18, 2020 — the 5th Anniversary of the February 18, 2015 Torrance Refinery Explosion. It will continue over the next several months with TRAA enlisting elected officials of the affected region, city and neighborhood councils, community

organizations, and members of the community to add their voices to call for an investigation. TRAA will continue to inform the public of the danger posed by the refineries and the deceptive information and science that they continue to disseminate. The TRAA Science Advisory Panel will stand by to assist Atty. Gen. Xavier Becerra's Staff in the investigation.

Background and Rationale

The full realization of the hazard of hydrogen fluoride (HF) as an alkylation catalyst in refineries happened in the **1986 Nevada HF release tests** conducted for Amoco by Lawrence Livermore National Laboratory under the direction of Dr. Ronald Koopman. The results surprised and shocked the engineering community — 100% of the HF liquid released under refinery conditions formed a ground-hugging cloud of aerosol and vapor. Contrary to what was anticipated, ***none fell to the ground***. **Watch** Dr. Koopman's illuminating presentation to the AQMD Refinery Committee.

The refineries' primary response was an additive they relentlessly and falsely claim results in the majority of an HF release falling to the ground, in spite of the fact that the additive has to be kept at such a low level it is ineffective.

Over the last three decades, in a David-and-Goliath struggle between the innovation of converting to a vastly safer alkylation catalyst and the South Bay refineries' clinging to the status quo — hoping a calamitous event beyond their control won't release their store of HF into the community — the refineries have won at every turn: 1) the 1989 Walker Initiative, 2) the 1990 Torrance lawsuit settled in a consent decree allowing the Torrance refinery to use HF, 3) the original 1991 AQMD 1410 Rule overturned on a clerical error, 4) the AQMD/Ultramar MOU allowing Valero to use HF, 5) two bills in the State Assembly that died in committee, and 6) the recent collapse of the second AQMD Rule 1410.

Innovation at loggerheads with the status quo is a subject of the celebrated book ***Men, Machines, and Modern Times*** by Elting Morrison (1909–1995), renowned Professor of Science and Technology at MIT. The book, based on a series of famous lectures Morrison gave at Caltech, sets out a roadmap for progress illustrated by a

case study of an innovation around 1900 that greatly increased the accuracy of guns on U.S. Navy warships and the Navy's opposition to it. The innovation/status-quo deadlock was broken in favor of innovation ***only when the issue was elevated to a higher level of authority,*** Theodore Roosevelt, the President of the United States at the time. TRAA won't be elevating the HF issue to the current (45th) holder of the office of President. Instead, TRAA is elevating the issue to the informed leadership of Governor Gavin Newsom and Atty. Gen. Xavier Becerra.

Make Your Voice Heard—Urge the State of California to Investigate Use of HF

Click **here** to send a note to Governor Newsom urging him to request California Attorney General Xavier Becerra to investigate how the refineries at Torrance and Wilmington have been allowed to store and use enormous quantities of hydrogen fluoride (HF), one of the world's most dangerous industrial chemicals, in a highly populated area.

The Letter to Governor Newsom

TORRANCE REFINERY ACTION ALLIANCE
PRIORITIZING COMMUNITY SAFETY

Torrance Refinery Action Alliance

February 18, 2020

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

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.

Continue reading . . .

41-F. In Favor

County Initiative to Improve Safety and Advance the Conversion of Modified Hydrofluoric Acid to Safer Alternatives at Local Refineries

Comment:

All refineries in California must transition away from HF/MHF (MHF is HF) at as soon as possible, the safety of the public depends on it.

I can personally comment on the lack of safety in my area regarding the Torrance refinery as well as the Wilmington refinery, which continue to pose a significant safety risk to a 4.3 mile hazard zone, as reported by even Valero.

Especially during the COVID-19 pandemic, the refinery is even more likely than ever to be unprepared for a disaster, such as the near miss of a tank containing HF in 2015 at the Torrance Refinery.

No matter how much lobbying and buying off unrelated non-profits (such groups are absolutely contemptible and should reject further money if they want to serve their local communities at all) such refineries are endangering the public's safety.

One possible alkylation method that they could use as an alternative to HF is Sufluric Acid alkylation, which while imperfect, would be far less catastrophic in the event of a natural disaster.

Thank you,
Timothy Beyer

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 TRW Chemical Technology Dept. *Christopher Shih*, Ph.D.

TRAA Science Advisory Panel
4733 Torrance Blvd. #200
Torrance CA 90503

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

Valero

February 14, 2022

The Honorable Holly Mitchell, Chair
County of Los Angeles Board of Supervisors
Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Re: Motion re County Initiative to Improve Safety and Advance the Conversion of Modified Hydrofluoric Acid to Safer Alternative at Local Refineries (the "Motion")

Dear Chair Mitchell:

Ultramar Inc. ("Ultramar") is writing to express its concern regarding the above-referenced Motion. Ultramar spent more than three years addressing this issue through the South Coast Air Quality Management District ("SCAQMD") process. We continue to believe our HF alkylation unit already had/has state of the art mitigation measures in place. We nonetheless, worked with SCAQMD to reach agreement on additional mitigation measures after multiple technical meetings, numerous community meetings, including several official meetings of the District's Refinery Committee. After this extensive collaborative effort, the SCAQMD Governing Board voted 8-3 to accept Ultramar's commitments (attached) at its September 6, 2019 Governing Board meeting. At that meeting, then-Chairman Dr. William Burke expressed his support of the implementation of Ultramar's mitigation measures. Ultramar has spent the last three years implementing these additional mitigation measures, investing substantial engineering and financial resources and is within one month of completing this work, as discussed in our most recent quarterly update.

These additional mitigation measures were fully researched, analyzed and acted upon by the appropriate jurisdictional agency and have been implemented in good faith by Ultramar. To now assert that these mitigation measures are insufficient undermines the collaborative process in which the parties engaged. We do not believe the path forward presented in the motion is appropriate and should not be brought to a vote without further discussion by all interested parties.

Sincerely,

Kyle Sharon
Vice President and General Manager

CC (e-mail): Hon. Hilda Solis, LA County Board of Supervisors, District 1
Hon. Sheila Kuehl, LA County Board of Supervisors, District 3
Hon. Janice Hahn, LA County Board of Supervisors, District 4
Hon. Kathryn Barger, LA County Board of Supervisors, District 5

Wilmington Refinery • Ultramar Inc., a Valero Company
2402 E. Anaheim • Wilmington, CA 90744 • Telephone (562) 491-6877

Valero

January 31, 2022

Mr. Wayne Nastri
Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mr. Nastri,

In response to your November 15, 2019 request for quarterly updates regarding implementation of the enhanced mitigation measures described in our August 30, 2019 letter to the Hon. Larry McCallon, Chair of the South Coast Air Quality Management District Refinery Committee, Ultramar Inc. (hereafter "Valero") provides the following update for the fourth quarter of 2021.

Valero continues to actively progress all aspects of the commitments detailed in our August 30, 2019 Proffer letter and is on track to complete all projects based on the milestones outlined in our letter, notwithstanding the COVID-19 pandemic that continues to impact society. While it is possible that the continuing fallout of the pandemic could lead to material, labor and / or agency approval delays, we are not aware of any specific potential delays at this time. Full funding for all portions of our commitments, which have not already been completed were approved on May 7, 2021. All installations will be completed by end of the next scheduled Alky ReVAP unit turnaround in 1Q2022. The projects outlined in our letter include:

- *Item 1 - Installation of Open Path Perimeter HF Sensors.* Valero committed to install open path detection monitors around the perimeter of the alkylation unit within one year of adoption of the Board's resolution in this matter, i.e., by September 6, 2020. This project has been completed and was fully commissioned by August 28, 2020, as noted in our September 2, 2020 letter.
- *Item 2 - Installation of Flange Guards.* Valero committed to install flange guards on each flange in the alkylation unit in main acid service greater than 2 inches in diameter by the completion of the next scheduled turnaround. To date, we have installed 114 flange guards. Delivery of flange guards has been delayed due to material supply and labor shortages. The remaining flange guards are expected to be delivered by January 24, 2022, and installed during the unit turnaround. We remain on schedule to have all committed flange guards in place by completion of the next scheduled Alky ReVAP turnaround in 1Q2022.
- Item 3 - *Automation of Water Curtain System.* Valero committed to automation of the water curtain system upon completion of the next scheduled Alky ReVAP turnaround. Engineering funding was approved in September 2019 for this project. Preliminary engineering design was completed in May, 2020. The refinement engineering phase was completed in March, 2021, including finalization of the Cause and Effect logic. Associated sensor electronics and PLC were received in mid-April. Installation of the water valve modifications and PLC modifications started in August, 2021, and are now 80% complete. We are on schedule to have this project implemented by completion of the next scheduled Alky ReVAP turnaround in 1Q2022.

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- *Item 4 - Installation of Additional Point Source Detectors.* In conjunction with the water curtain automation project described above, Valero committed to install additional point source detectors by completion of the next scheduled Alky ReVAP turnaround. As noted above, engineering funding was approved in September 2019, preliminary engineering was completed in May, 2020, with refinement engineering completed in March, 2021. As outlined in our January update there will be 13 additional point source detectors installed, as well as an additional 21 open path detectors as part of the water automation scope. An additional 3 open path detectors will be installed around the acid boots. Installation of the new point source detectors started August, 2021, and is 85% complete. Installation of new open path detectors started August, 2021, and is 80% complete. We are on schedule to have this project implemented by completion of the next scheduled Alky ReVAP turnaround in 1Q2022.
- Item 5 - *Acid Settler Debris Grid.* Valero committed to develop a preliminary engineering design for a debris grid as described in Valero's August 30, 2019 letter within 180 days of the District's acceptance of Valero's proffer; based on the Board's adoption of Resolution No. 19-19 on September 6, 2019, the debris grid preliminary design is to be completed by March 4, 2020. Preliminary design engineering has been completed, with the results sent to you on March 3, 2020. The refinement phase of engineering was completed in March, 2021. On July 6, 2021, we received approval from the City of Los Angeles for the associated structural steel. Construction started in August, 2021, and was completed December 17, 2021.
- Item 6 – *Acid Settler Riser/Leg Rain Out Barrier/Shroud.* Valero committed to develop a preliminary engineering design for barrier/shroud systems for the acid settler risers and legs and the depropanizer acid boot, as described in Valero's August 30, 2019 letter, within 180 days of the District's acceptance of Valero's proffer. Based on the Board's adoption of Resolution No. 19-19 on September 6, 2019, the barrier/shroud preliminary engineering designs are to be completed by March 4, 2020. Preliminary design engineering has been completed, with the results sent to you on March 3, 2020. The refinement phase of engineering was completed in March, 2021. On July 6, 2021, we received approval from the City of Los Angeles. Construction started in August, 2021, and was completed December 17, 2021.

Some additional key milestones include:

- We have received City of Los Angeles Structural Inspection final sign off.
- We have received final Electrical sign off from the City of LA electrical inspector.

We hope this information is helpful to you. We will provide another update on or before April 29, 2022.

Very truly yours,

Kyle Sharon
Vice President and General Manager

CC (e-mail): Hon. Ben Benoit, SCAQMD Governing Board Chair
Hon. Mayor Larry McCallon, SCAQMD Governing Board Member/Refinery Committee Chair

RESOLUTION NO. 19–19

A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) Accepting the Proffered Voluntary Implementation of Additional Safety Enhancements for the Use of Modified Hydrofluoric Acid at the Torrance and Wilmington Refineries

WHEREAS, Modified Hydrofluoric Acid (MHF) Alkylation is used at the Torrance and Wilmington refineries within the South Coast Air Basin for the purpose of producing alkylate, a critical blending component of California Air Resources Board reformulated gasoline; and

WHEREAS, the Torrance Refinery is currently owned and operated by the Torrance Refining Company LLC (TORC); and

WHEREAS, the Wilmington Refinery is currently owned and operated by Ultramar Inc. (Ultramar); and

WHEREAS, pursuant to the City of Torrance Consent Decree, Case No. C 719 9530 (Torrance Consent Decree), issued by the Los Angeles Superior Court in 1990, and several subsequent court orders, the Torrance Refinery agreed to use MHF, a modified form of alkylate catalyst reformulated to significantly reduce safety risks associated with HF; and

WHEREAS, pursuant to a Memorandum of Understanding between the South Coast AQMD and Ultramar, dated February 12, 2003 (2003 MOU), the Wilmington Refinery agreed to use MHF; and

WHEREAS, during the more than two-year extensive public participation rule making process for PR 1410, additional information has been provided to the South Coast AQMD regarding the safety systems and risk mitigation measures currently in use at each of the Torrance and Wilmington Refinery alkylation units to reduce the risk and protect refinery personnel and the community; and

WHEREAS, the South Coast AQMD Governing Board has determined it is desirable, and each of the Torrance and Wilmington refineries is willing, to further reduce the overall risk of the use of MHF in the MHF alkylation units by implementing additional, voluntary safety enhancements and control measures; and

WHEREAS, TORC has submitted a proffer letter, dated August 30, 2019, (TORC Proffer Letter) pursuant to which it is committing to install significant voluntary safety enhancements in the Torrance Refinery's alkylation unit; and

WHEREAS, Ultramar has submitted a proffer letter, dated August 30, 2019, (Ultramar Proffer Letter) pursuant to which it is committing to install significant, voluntary new control measures in the Wilmington Refinery's alkylation unit; and

WHEREAS, the South Coast AQMD Governing Board has determined that the expeditious implementation of the safety enhancements set forth in the TORC Proffer Letter and the Ultramar Proffer Letter is in the best interest of all the stakeholders;

THEREFORE, BE IT RESOLVED that the South Coast AQMD Governing Board, in regular session assembled on September 6, 2019, does hereby accept the safety enhancements and control measures as proffered in the TORC and Ultramar Proffer Letters; and

BE IT FURTHER RESOLVED that the South Coast AQMD Executive Officer is directed to not continue with any PR 1410 rulemaking activities or other efforts seeking additional commitments from TORC or Ultramar regarding the use of HF or MHF; and

BE IT FURTHER RESOLVED that until the new safety enhancements and control measures are fully implemented by TORC and Ultramar as set forth in their respective Proffer Letters, the South Coast AQMD Executive Officer shall report back to the Refinery Committee annually on the progress of the implementation of the new safety enhancements and control measures at the Torrance and Wilmington Refineries; and

BE IT FURTHER RESOLVED that nothing in this resolution or in the South Coast AQMD Governing Board's acceptance of Ultramar's or TORC's respective Proffer Letters shall modify or alter the 2003 MOU or the Torrance Consent Decree.

AYES: Bartlett, Benoit, Burke, Buscaino, Delgado, McCallon, Robinson and Rutherford

NOES: Cacciotti, Hahn and Mitchell

ABSENT: Perez*

DATE: September 6, 2019

Denise Garzaro, Clerk of the Boards

*The member appointed by the Governor is currently Vacant.

August 30, 2019

The Honorable Larry McCallon
South Coast Air Quality Management District
Chairman, Refinery Committee
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mayor McCallon,

On behalf of Ultramar Inc., owner and operator of the Wilmington Refinery (Ultramar), I am pleased to proffer Ultramar's commitment to enhance our state-of-the-art hydrofluoric alkylation mitigation systems with unprecedented additional layers of protection.

As we have maintained throughout the District's consideration of Proposed Rule 1410, Ultramar has served as an industry leader in developing and implementing state-of-the-art approaches to minimize the likelihood that a release of hydrogen fluoride (HF) could occur and to provide for rapid detection and response in the unlikely event that a release were to occur. In addition to the systems currently in place, Ultramar, working with the District and other stakeholders, has identified additional measures that we believe will support and complement our existing systems and will provide additional measures of safety.

In lieu of further rulemaking or the need for a new or modified memorandum of understanding, Ultramar will commit to implement the following:

1. ***Open Path Perimeter HF Sensors.*** In addition to the open path monitors to be installed at the fenceline of the Wilmington Refinery pursuant to Rule 1180, Ultramar will install open path perimeter HF sensors around the Alky ReVAP Unit to further facilitate early detection and prompt response to any potential release of HF. Placement, design, and installation of the sensors will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. These sensors will be installed within one year of the District accepting this proposal.

2. ***Flange Guards.*** Ultramar shall install guards on each flange in the Alky ReVAP Unit in main acid service greater than 2 inches diameter. This measure is expected to improve rain out and subsequent capture of any acid released at a flange by the water mitigation system, and thus is expected to eliminate the potential for flange leaks to result in an offsite release. Design and installation of the flange guards will be done in

Wilmington Refinery • Ultramar Inc., a Valero Company
2402 E. Anaheim • Wilmington, CA 90744 • Telephone (562) 491-6877

accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Absent issues that necessitate delay that are identified at the design phase, the flange guards will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the flange guards during the next scheduled Alky ReVAP turnaround, the flange guards will be installed no later than completion of the subsequent Alky ReVAP turnaround.

3. ***Automation of Water Curtain System.*** Ultramar will complete installation of a system to automate operation of the existing water curtain system in the Alky ReVAP Unit to expedite the activation of the water curtain systems. Design, installation and operation of the curtain automation system will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Absent issues that necessitate delay that are identified at the design phase, the water curtain automation will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the automation during the next scheduled Alky ReVAP turnaround, the automation shall be installed no later than completion of the subsequent Alky ReVAP turnaround.

4. ***Additional Point Source Detectors.*** Ultramar will install additional point source detectors at locations optimized to further facilitate precise, rapid detection and response to any potential release of MHF. This measure is expected to facilitate rapid and accurately targeted activation of the water mitigation and acid dump systems, whether these are activated automatically or manually. Placement, design and installation of the detectors will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. These additional point source detectors will be installed by the completion of the next scheduled Alky ReVAP turnaround.

5. ***Acid Settler Debris Grid.*** In order to reduce the potential for a release resulting from penetration of the acid unit settler by a projectile, Ultramar will evaluate and design a debris grid to mitigate impacts to the elevated section of the acid settler. The debris grid placement, design and installation will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. This debris grid will be designed to prevent the creation of a confined space, to avoid interference with existing HF mitigation systems, to minimize the confinement of flammable vapors, and to continue to provide for free ingress and egress from the unit within the safety and structural limitations of the unit. Within 180 days of the District's acceptance of this proffer, Ultramar shall develop a preliminary engineering design for the debris grid. Absent issues that necessitate delay that are identified at the design phase, the debris

grid will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of the grid during the next scheduled Alky ReVAP turnaround, the grid will be installed no later than completion of the subsequent Alky ReVAP turnaround.

6. ***Acid Settler Riser/Leg Rain Out Barrier/Shroud.*** Ultramar will design, engineer, and install Rain Out Barrier/Shroud systems for the Acid Settler Risers and Legs and the Depropanizer Acid Boots to reduce the momentum of any potential release from these systems and redirect the material downward, thus enhancing rain out and capture by the water mitigation systems. These shroud systems will be similar to that already employed on the Acid Coolers within the unit. Additional barriers or shrouding will be installed on the elevated acid piping that feeds the Settler. This mitigation measure reduces the potential for an offsite release resulting from a compromise to the settler system piping by improving rainout and subsequent capture of any released material by the water mitigation systems. The Rain Out Barrier/Shroud placement, design, and installation will be done in accordance with Ultramar's engineering standards and pursuant to process safety hazard analysis. Preliminary design of the Acid Settler Riser/Leg Rain Out Barrier/Shroud and Depropanizer Acid Boot Rain Out Barrier/Shroud systems will be completed within 180 days of the District's acceptance of this proffer. Absent issues that necessitate delay that are identified at the design and engineering phase, the Acid Settler Riser/Leg Rain Out Barrier/Shroud and Depropanizer Acid Boot Rain Out Barrier/Shroud will be installed no later than the completion of the next scheduled Alky ReVAP turnaround; however, if issues are identified in the design and engineering phase that preclude installation of one or both barrier/shroud systems during the next schedules Alky ReVAP turnaround, the Acid Settler Riser/Leg Rain Out/Barrier System and/or Depropanizer Acid Boot Rain Out Barrier/Shroud shall be installed no later than completion of the subsequent Alky ReVAP turnaround.

It is important to note that the District and Ultramar already have an existing Memorandum of Understanding from 2003 (Agreement), under which the District agreed to refrain from further regulation of HF. Nothing in this letter from Ultramar, nor the District's acceptance or rejection of this proffer, shall supersede or alter the existing Agreement. However, by accepting this proffer, the District and Ultramar will avoid the potential for litigation arising out of the Agreement.

District, Ultramar and other stakeholders have expended almost three years in considering mitigation measures and alternatives. This has taxed the resources of all those involved and resulted in no viable alternatives beyond enhanced mitigation measures described in this letter. We believe there is limited benefit from continuing on this course. Ultramar has a long history of safely operating the Wilmington HF alkylation unit and has remained in compliance with the Agreement.

We have already installed the best mitigation systems available and continuously work to improve them. Now, we stand ready to facilitate the closure of this process by committing publicly to implement even more safety improvements.

Thank you for your consideration of our proposal.

Sincerely,

Mark Phair
VP & General Manager
Ultramar Inc.

cc: Richard Walsh, VP & Deputy General Counsel
Elizabeth Bourbon, Sr. Managing Counsel
Scott Folwarkow, Executive Director Governmental Affairs