



Chief Executive Office.

COUNTY OF LOS ANGELES

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To: Supervisor Janice Hahn, Chair
Supervisor Hilda L. Solis
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From: Fesia A. Davenport 
Chief Executive Officer

COUNTY INITIATIVE TO IMPROVE SAFETY AND ADVANCE THE CONVERSION OF MODIFIED HYDROFLUORIC ACID TO SAFER ALTERNATIVES AT LOCAL REFINERIES (ITEM NO. 41-F, AGENDA OF FEBRUARY 15, 2022)

On February 15, 2022, the Board approved a motion by Supervisor Hahn for the County of Los Angeles (County) to prepare a coordinated emergency response effort should a Modified Hydrofluoric Acid (MHF) release occur. The motion directed the Office of Emergency Management in collaboration with the Department of Public Health (DPH) Environmental Health Division and Emergency Preparedness and Response Division, the Department of Health Services Emergency Medical Services and Fire Department Health Hazmat Division along with County Counsel to:

1. Review the risk management, emergency response and notification plans for a release of MHF and request an update from South Coast Air Quality Management District (SCAQMD) Refinery Committee on the status of the proffer and the progress of commercially available alternative technologies.
2. Make recommendations on how to enhance risk management and emergency planning and any other steps the County should take to protect the health and safety of communities living near two refineries until MHF can be phased out.

A background on the use of MHF, the danger it poses as well as applicable regulations are included in Attachment I. As directed by the Board Motion, a working group was established, and external stakeholders were invited to support



planning considerations. A list of all participating agencies is available in Attachment II. The working group also received presentations from several stakeholders on MHF and its impacts. The list of stakeholders and their key discussion points are included in Attachment III. The working group also received an update on the status of the proffer from the SCAQMD Refinery Committee. A summary of findings is included in Attachment IV. Finally, a summary of recent events is included in Attachment V.

Steps the County Should Take to Protect the Health and Safety of the Communities that Live Near the Two Refineries

In October 2017, Governor Brown approved AB 1646 which mandates a "local implementing agency" to develop an integrated alerting and notification system, in coordination with local emergency management and first response agencies and the public, to be used to notify the community surrounding a petroleum refinery in the event of an incident. A local working group was established to develop a Memorandum of Understanding (MOU) that would require the County, Consolidated Fire Protection District of Los Angeles County, and the Cities of Carson, El Segundo, Los Angeles and Torrance to develop an integrated alerting and notification system. The MOU would also require that jurisdictions periodically convene and evaluate the processes and procedures being used for consistent communications with each other and the community. The execution of the MOU, led by the Los Angeles County Fire Department, is currently being finalized and expected to be approved by February 2023.

In addition, DPH is currently developing an operational area-wide Oil Refinery Emergency Response Concept of Operations (ConOps). The planning group for this ConOps includes operational area partners and County departments. The purpose of the ConOps is to develop a unified command structure for any incident at a refinery that can impact the surrounding population. The ConOps also includes procedures for initial notification of responder agencies and the impacted community, highlights the need for quick incident assessment, roles and responsibilities of response partners, and consideration of protective actions, including evacuation orders. DPH anticipates completion of the development of the ConOps by April 2023. DPH will also continue to engage partners as the plan is being developed. Once finalized, this ConOps will allow County stakeholders to rapidly develop initial situational awareness, conduct assessments, understand consequences, and safeguard the lives of the surrounding communities upon accidental release of MHF.

Recommendations on How to Enhance Risk Management and Emergency Planning

Based on input from County departments, community groups and other key stakeholders, the working group would like to make the following recommendations to enhance risk management and emergency planning:

- Continue to advocate for transition of MHF to safer alternatives with the Governor's Office, Attorney General, California Legislature, California Energy Commission, and SCAQMD.
- Monitor and research the feasibility of alternative technologies, including ionic liquids and solid acid catalyst, as they become commercially available and implemented at other refineries.
- Assess the current stockpile of calcium gluconate to determine whether it is sufficient to respond to a catastrophic release and adjust stockpile accordingly.
- Complete the development and implementation of the Oil Refinery Emergency Response ConOps.
- Improve local alert and notification capabilities in coordination with response partners as required by AB 1646.
- Continue engagement with community and stakeholder groups and provide them a forum to share their concerns with all stakeholders and include them in the planning process.
- Continue to advocate for environmental justice and equity in communities that share a higher burden of risk and pollution.

The departments will continue to explore additional opportunities to enhance their preparedness capabilities, response plans and recovery initiatives. Should you have any questions or concerns regarding this matter, please contact Mr. Leslie Luke at (323) 980-2269 or lluke@ceoem.lacounty.gov.

FAD:JMN:AC
KM:LL:SK:md

Attachments

c: Executive Office, Board of Supervisors
County Counsel
Fire
Health Services
Public Health

BACKGROUND AND AUTHORITIES

Modified Hydrofluoric Acid (MHF) is a highly toxic chemical that is used to make high-octane gasoline and even a small accidental release could be catastrophic, resulting in severe health effects and mass casualties. There are currently two refineries in California that continue to use hydrofluoric alkylation, and both are located in Los Angeles County. Both the Torrance and Valero Refineries are adjacent to underserved communities that already bear a disproportionate pollution burden and have residents who are especially vulnerable to pollution. The Exxon-Mobil refinery explosion in Torrance in 2015, reminds us of the life-threatening and catastrophic risk that MHF continues to pose to Los Angeles County residents. Various federal laws and regulations, including the Clean Air Act, 42 U.S.C. § 7412(r) and Chemical Accident Prevention Provisions, 40 CFR part 68, regulate hydrofluoric acid and provide the federal Environmental Protection Agency authority to regulate the use of hydrofluoric acid, including the prevention of accidental releases, in oil refineries. In addition, the federal Occupational Safety and Health Administration also regulates MHF under the Process Safety Management of Highly Hazardous Chemicals standards. Locally, the use of hydrofluoric acid is regulated by South Coast Air Quality Management District, which conducted an extensive two-year rulemaking process (2017-2019) that would have required the refineries to convert to safer alternatives. In 2019, South Coast Air Quality Management District accepted the refineries' proffers to voluntarily install safety enhancements in the alkylation unit at each of their refineries.

**LOS ANGELES COUNTY MODIFIED HYDROFLUORIC ACID
WORKING GROUP MEMBERS**

1. Los Angeles County Departments
 - a. Chief Executive Office (CEO)
 - i. Office of Emergency Management (OEM)
 - b. Department of Public Health (DPH)
 - i. Environmental Health Division
 - ii. Emergency Preparedness and Response Division (EPRD)
 - c. Department of Health Services (DHS)
 - i. Emergency Medical Services (EMS)
 - d. Los Angeles County Fire Department
 - i. Command and Control Division
 - ii. Health HazMat Division
 - e. County Counsel

2. External Stakeholders Invited
 - a. City of Los Angeles Fire Department (LAFD)
 - b. City of Torrance Fire Department
 - c. City of Los Angeles Office of Petroleum and Natural Gas

INPUT RECEIVED FROM STAKEHOLDERS

The working group invited several stakeholders to present their point of views on the issue, in order to provide the working group a 360 view. These stakeholders that presented to the working group include:

- Torrance Refinery Action Alliance (TRAA)
- California Energy Commission
- Torrance Refinery
- Valero Refinery

The working group also reached out to the South Coast Air Quality Management District for their input. In addition, an email address was established for stakeholders to provide their input on an ongoing basis. The working group also attended a community meeting hosted by the TRAA and meetings hosted by the Community Awareness Emergency Response. Below is a summary of the major discussion points from the presentations:

- The TRAA provided presentations by several community members that highlighted their concerns and risks associated with the use of Modified Hydrofluoric Acid at the Torrance and Valero Refineries. The group also highlighted how several refineries have successfully converted or are currently converting to modern, proven commercially available alternatives. TRAA also emphasized the consequences of an accidental release on the community and the need for change.
- Both Torrance and Valero Refineries presented on the enhancements and modifications that have been made over the last few years, in order to improve the safety at the facilities. Both refineries also noted that they have completed safety enhancements as required by the South Coast Air Quality Management District proffer.
- Finally, the California Energy Commission's presentation to the working group highlighted that the cost of modifications that would be required for safer alternatives are higher than the net worth of the two facilities.

**UPDATE FROM THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
REFINERY COMMITTEE**

As per the South Coast Air Quality Management District (SCAQMD) Refinery Committee Report, in 2019, SCAQMD Governing Board accepted the refineries' proffers to install safety enhancements including improved monitoring for Modified Hydrofluoric Acid, increased water mitigation, and protective structures around the alkylation units. According to their January 2022 quarterly report, Valero refinery was on track to complete the implementation of all proposed safety enhancements at the end of the first quarter of 2022. SCAQMD inspectors conducted an onsite inspection in February 2022 and confirmed the progress of the installation of mitigation measures that could visually be observed, as described in Valero's quarterly reports. In a memo to SCAQMD dated April 29, 2022, Valero reported that it had completed all aspects of the commitments detailed in the proffer. The Valero refinery also reiterated this progress in their presentation to the working group.

According to their February 2022 quarterly report, Torrance Refining Company had completed the implementation of all proposed safety enhancements at the end of 2021. SCAQMD conducted two inspections to assess the safety enhancements around Torrance Refining Company's alkylation unit. The inspector's latest observations confirmed the installation of the enhanced safety elements that could visually be observed, including construction of the steel structure surrounding the unit, installation of open path monitors, and additional water mitigation. The Torrance Refinery Company also reiterated this progress as a part of their presentation to the working group.

SUMMARY OF RECENT EVENTS

South Coast Air Quality Management District reported a total of ten Modified Hydrofluoric Acid leaks in the two-year period of 2017 to 2019 at both the Torrance and Valero Refineries. Recently, County departments responded to two incidents, underscoring the continued need for multi-agency emergency planning. On May 26, 2022, a pin hole leak in a hydrofluoric acid storage apparatus at the Torrance refinery was reported. While the incident was resolved without a chemical release beyond the facility property, the risk to public health and safety remains a threat. Additionally, on June 2, 2022, a kerosene leak from an underground pipe at the Torrance Refinery resulted in odor complaints from nearby residents. The refinery worked quickly to repair the leak, the Fire Department observed the clean-up, South Coast Air Quality Management District monitored the air at the clean-up site, and the Department of Public Health conducted a field assessment to determine community odors and communicate to the public. These incidents highlight the need for continued planning and collaboration between all stakeholders.