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Via Email: mwpatrick@aqmd.gov

September 3, 2019

SCAQMD Governing Board
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Proposed Rule 1410, Hydrogen Fluoride Storage and Use at Petroleum Refineries in LA County

Dear Governing Board Members:

The Los Angeles County Department of Public Health (Public Health) has made recommendations to the Governing Board and the Refinery Committee and South Coast Air Quality Management District (SCAQMD) staff regarding unacceptable health and safety hazards posed by modified hydrofluoric acid (MHF) at two refineries in Los Angeles County: Valero Refining Company and Torrance Refining Company. Our public health recommendations are not yet reflected in SCAQMD's proposed approach to protect communities from MHF.

On March 9, 2017, the County of Los Angeles Board of Supervisors sent a five-signature letter supporting SCAQMD's proposed rule to ban the use of MHF (Rule 1410) and to expedite the process (Attachment 1). The Board of Supervisors summarized severe hazards posed by MHF and the recent history of fires, explosions, leaks, and releases of chemicals at the Torrance Refinery. Shortly after that, on Saturday, April 1, 2017, SCAQMD restarted the rule development process with a full-day investigative hearing attended by more than 250 residents and refinery workers. This hearing was followed by two years of stakeholder meetings, during which the rule development process made minimal progress to mitigate enhancements or to phase out MHF.

On February 1, 2019, Public Health participated in the Governing Board Hearing and meetings with community members, in which both Public Health and SCAQMD staff presented key facts in support of phasing out MHF. The Governing Board provided instruction to SCAQMD to develop both a Rule and Memorandum of Understanding (MOU). However, SCAQMD staff focused on negotiating an MOU with the refineries based on agreed-upon performance standards to continue the storage and use of MHF. Public Health sent a letter to SCAQMD Executive Officer Wayne Natri on April 2, 2019, advising against performance standards in the MOU approach. On May 19, 2019, Public Health provided SCAQMD a summary to reinforce and memorialize the hazards of MHF to the public, to recommend a 3- to 4-year

phase-out of MHF at these refineries, and, in the interim, to formulate necessary and reasonable emergency preparedness plans and mitigation measures.

On June 22, 2019, the SCAQMD Refinery Committee advised SCAQMD staff on the MOU approach. The Refinery Committee's guidance ignores key facts:

- A release of MHF, even at the proposed 1-inch breach and 95 parts per million (ppm) threshold, would be catastrophic, resulting in negative health impacts to hundreds of thousands, including potentially causing mass casualties, within 2 miles.
- There are no existing emergency plans in place to establish the preparedness of first responders and field medical treatment for a mass casualty incident from a release of MHF at these refineries.
- Adequate resources of local medical centers, including personnel and medications, have not been established to treat a mass casualty after a release of MHF at these refineries.

Furthermore, Public Health has identified specific concerns with the MOU approach as currently designed:

1. Selection of a "Health Protective" Threshold: The MOU would require "A demonstration of meeting a health-protective performance standard of an average exposure concentration of 95ppm, over 10 minutes, being measured at the nearest residential receptor." This exposure concentration exceeds scientific estimates of life-threatening levels (between 7 and 50 ppm), according to a review by the Office of Environmental Health Hazard Assessment (Attachment 2). Additionally, emergency exposure guidelines are 1-3ppm for no more than 1 hour. Thus, the proposed threshold of 95 ppm is not health-protective and, in fact, poses life-threatening harm.
2. Consideration of "Credible" Release Scenarios: The MOU would call for "A demonstration based on credible release scenarios specific to each refinery's MHF Alkylation Unit using a 1-inch release hole size." A 1-inch release hole model does not equate to other credible release scenarios such as a large-scale release from a refinery fire, natural disaster, or intentional act. It is non-sensical to ignore these scenarios, as illustrated by the June 21, 2019, Pennsylvania refinery explosion. Such threats could impact hundreds of thousands of people. Thus, Public Health is unable to establish the preparedness of first responders and local hospitals to respond to mass casualty incidents of this scope and magnitude. Further, appropriate evacuation measures have not been established for hospitals, long-term care, and surrounding communities.
3. Assumption of Functional Mitigation Measures: The MOU would allow for "Identification and Credit for all existing passive and active mitigation measures, as well as, new mitigation enhancements proposed in the demonstration of meeting the performance standard." Public Health cannot responsibly count on this unpredictable mitigation assumption for community health protection, and more extensive backup processes must be implemented to address an accidental event scenario.
4. Modeled Exposure at the "Nearest Permanent Resident": The MOU would estimate exposure of MHF concentrations at the "nearest permanent resident" (up to 4,100 feet away) instead of the refinery fence line (470 feet). We are responsible for protecting the health of all residents regardless of their housing or legal status. This estimate of exposure disregards non-permanent residents who live nearby, as well as people walking, biking, and driving in the vicinity. Additionally, walk routes to area schools are not considered.

Given the lack of health protection through the proposed MOU approach, we are encouraged by the July Governing Board Meeting where SCAQMD staff provided assurance to continue work on the Rule option and to provide a proposal to the Governing Board in November 2019.

Public Health and the County of Los Angeles Board of Supervisors have repeatedly provided clear and critical guidance to the SCAQMD regarding the necessary phase out of MHF to protect the public, refinery workers, and the environment. As the Los Angeles County Health Officer, I strongly recommend the SCAQMD Governing Board support a Rule that would require phase out of MHF. In the absence of such regulation, local refineries will continue to jeopardize the health and safety of workers and residents.

Sincerely,



Muntu Davis, M.D., M.P.H.
Los Angeles County Health Officer

Attachments:

- Attachment 1 - March 9, 2017, County of Los Angeles Board of Supervisors letter
- Attachment 2 - Acute Toxicity Summary

c: **SCAQMD Governing Board:** Dr. William A. Burke, Chairman; Ben Benoit, Vice Chairman; Joe Buscaino; Lisa Bartlett; Michael A. Cacciotti; Vanessa Delgado; Janice Hahn; Larry McCallon; Judith Mitchell; V. Manuel Perez; Dwight Robinson (via e-mail to Marie Patrick)
Members of the Refinery Committee: Mayor Pro Tem Larry McCallon, Chair; Mayor Judith Mitchell, Vice-Chair; Supervisor Lisa Bartlett; Council Member Ben Benoit; Supervisor Janice Hahn (via e-mail to Christina Lopez)