

Congress of the United States

Washington, DC 20515

May 9, 2016

Mr. Wayne Nastri
Executive Director
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178

Dear Mr. Nastri,

We are writing in regards to the study that the South Coast Air Quality Management District (SCAQMD) is conducting on the use of the highly-toxic substance known as modified hydrofluoric acid (MHF) in California refineries, and the safety and feasibility of alternative catalysts. In the absence of useful independent studies that weigh MHF against the alternatives, a SCAQMD study is welcomed. However, after reading through SCAQMD's contract to Norton Engineering Consultants, Inc. (NEC), we believe the study as constructed is flawed because it does not appear to address two critical questions. Additionally, we would like SCAQMD's response to concerns raised by constituents regarding NEC's objectivity.

In light of the multiple significant incidents that occurred last year at the ExxonMobil refinery in Torrance, CA, we are pleased the SCAQMD is taking action to reevaluate the choice of catalyst. ExxonMobil's own official estimate shows that a major release of MHF could have dramatic health consequences--including death and serious injury--for over 250,000 people in the surrounding communities, underscoring the need for state-of-the-art safety processes and oversight.

The U.S. Chemical Safety Board (CSB) has conducted a preliminary investigation that found intentional misconduct and negligence by ExxonMobil. CSB called last year's explosion a near catastrophic event for the community, partly because an 80,000 pound piece of equipment flew through the air and nearly hit a tank of MHF.

As you know, the SCAQMD adopted a ban on HF in 1990. According to the *Daily Breeze*, if a court had not overturned the ban on a technicality, HF would have been phased out throughout the region.¹ The adoption of a technique to modify HF with an additive--which purportedly makes HF drop to the ground, if released rather than spread as a vapor--was seen as a sufficient improvement at the time and a repeat ban was never attempted. However, we have since learned that ExxonMobil later dramatically reduced the amount of the additive from 30 to 10 percent. We asked CSB and they have no data that modified HF with only 10 percent additive would work as intended to mitigate the severe risk posed by HF to the community.²

¹ Green, Nick. "Could regulators ban modified hydrofluoric acid at Torrance, Wilmington refineries?" *Daily Breeze*, 17 Oct. 2015.

² Green, Nick. "EPA investigating ExxonMobil for understating Torrance refinery risk," *Daily Breeze*, 1 Dec. 2015.

While the SCAQMD study requires MHF to be investigated as one of the possible catalysts, there is no explicit requirement to examine how various levels of additive in MHF—that is, the degree to which HF is diluted—impact the safety of the substance, including the minimum threshold needed to achieve specific safety standards. In fact, there is no definition of what level of MHF should be investigated.

For the SCAQMD study to make any sense, the first question the study must answer is whether HF diluted with only 10 percent additive—as opposed to the original 30 percent additive—would even work in terms of meeting safety standards. Does adding 10 percent additive make most, some, or none of the MHF drop to the ground if released? No one knows at this point. One cannot reasonably compare alternative catalysts without knowing if the current MHF catalyst even works. The study also cannot reasonably evaluate MHF as a possible catalyst without knowing what amount of additives would work to keep the acid from spreading as a vapor throughout the surrounding community.

The second problem with the study is that there does not appear to be any consideration of on-site mitigation measures. On-site mitigation measures at refineries used to contain a leak or incident are essential components of the safety process architecture. However, the contract for the study does not appear to require any evaluation of on-site mitigation measures, including those used in Torrance, that impact the relative safety considerations of MHF and other catalyst alternatives.

Additionally, constituents in the affected community around the Torrance Refinery have expressed strong concerns about the objectivity of NEC as it pertains to the evaluation of MHF. They point out that the CEO of NEC, Mr. James Norton, worked with Exxon for over a decade. They have also presented information regarding a contentious working relationship between SCAQMD and NEC in the recent past. Specifically, NEC wrote two letters in late 2015 expressing strong disagreement with the SCAQMD's position on rules to mitigate pollution. SCAQMD was a client of NEC's at the time the letters were written.

In light of the above information, we would appreciate if SCAQMD would explain the process used to determine why NEC was the best selection for this important task of evaluating the safety and feasibility of MHF. We would also like SCAQMD to address why it believes NEC could be objective in this study.

Last year's refinery explosion and MHF leak at the ExxonMobil refinery served as poignant reminders that the refinery's safety is very much tied to the safety of the hundreds of thousands of people in the surrounding communities, as well as the workers at the refinery itself. Using a substance as toxic as HF, even in modified form, must be carefully weighed against the alternatives, and the SCAQMD is right to examine this issue with an independent study.

But in order for the SCAQMD study to be instructive in determining the safest and most feasible catalyst for the refinery's alkylation process, that study must provide an accurate and complete picture into the substances in question and all available mitigation measures. As currently constructed, the study fails to address several critical issues, including whether the current MHF catalyst modified with only 10 percent additive even works at intended. We urge you to ensure that the critical elements identified in this letter will be covered in the study. Otherwise SCAQMD will end up spending significant time and resources on a study that will be quite unhelpful and potentially misleading.

Thank you for your attention to this important matter to our community.

Sincerely,



Ted W. Lieu
Member of Congress



Maxine M. Waters
Member of Congress

cc:

Torrance City Council

South Coast Air Quality Management District Board of Directors