

**U.S. Chemical Safety and  
Hazard Investigation Board**

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**Rafael Moure-Eraso, Ph.D.**  
Chairperson

**Mark Griffon**  
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October 28, 2014

EPA Docket Center  
William Jefferson Clinton (WJC) West Building (Air Docket)  
Attention: Docket ID Number EPA-HQ-OAR-2010-0682  
U.S. Environmental Protection Agency  
Mailcode: 28221T  
1200 Pennsylvania Ave. NW  
Washington, DC 20460

Re: Docket Number EPA-HQ-OAR-2010-0682

Dear Ms. Shine –

The U.S. Chemical Safety and Hazard Investigation Board (CSB) supports EPA’s proposed revision to require fence line monitoring at refineries and offers the following comments to strengthen the proposal and to make the information collected more accessible to the public. First, CSB suggests that the EPA require use of active monitors in lieu of passive monitors at large refineries or those near population centers. Second, the CSB suggests that EPA shorten the timeline for implementation at refineries which are permitted to conduct fence line monitoring by use of passive monitors in order for possible corrective actions to occur much sooner than proposed. Third, EPA should revise the proposed rule to provide for improved public access to fenceline data collected by passive monitors. Fourth, CSB suggests that the rule explicitly state that any EPA fence line requirement would not preempt current or future state or local efforts to require fence line monitoring through use of active monitors or open path systems.

**EPA Should Require Use of Active Monitors for Fence Line Measurements**

**EPA Proposal:** EPA proposes the use of passive monitors to measure concentrations of benzene at a refinery’s fenceline but specifically requested “comment on the application of alternative monitoring for purposes of fence line monitoring at refineries.”<sup>1</sup>

**CSB Comment:** The CSB suggests that EPA require use of active monitors at large refineries and those located in close proximity to population centers. The CSB considers the use of active

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<sup>1</sup> “Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards,” *Federal Register*, Vol. 79, No. 125, Monday, June 30, 2014 (Hereafter “Proposed Rule, 79 FR at \_\_\_.”)

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monitors preferable to the use of passive samplers for carcinogens, such as benzene, and other substances of high toxicity. Other reasons for the CSB suggestion are explained below.

The EPA has a number of complex responsibilities in relation to U.S. refineries, including but not limited to reducing overall emissions as proposed in this rule, preventing catastrophic accidental releases under section 112(r), and facilitating a community's emergency response capabilities in the event of a significant release. While the EPA is in the process of finalizing this rule, it is also soliciting comments on *possible* revisions to its current Risk Management Plan, 40 C.F.R. Part 68 (RMP).

Specifically, EPA has sought a number of specific comments concerning the possibility of requiring automated monitoring systems at facilities which fall within the scope of the RMP, including the refineries subject to this proposed rule.<sup>2</sup> Thus, EPA may in the near future require passive monitoring for benzene under this proposed rule for purposes of gaining a clearer picture of actual emissions, and subsequently require active monitoring systems in order to achieve objectives under the RMP. The CSB suggests that EPA instead consider requiring the use of active fence line monitoring systems under this rule. Such a system could then be expanded, if needed, to fulfill the purposes of the RMP or even certain security issues that might be within the domain of the Department of Homeland Security.

Three large U.S. refineries have already installed fence line monitoring systems which provide real time data on public web sites.<sup>3</sup> Further, EPA has already committed to using enforcement actions and consent decrees to require both continuous emissions monitoring systems on specific sources and fence line monitoring at U.S. refineries.<sup>4</sup> A fence line monitoring system using active monitors to provide real time data to local communities is therefore consistent with ongoing EPA prevention and enforcement initiatives and future EPA objectives.

Furthermore, a real time fence line system would better serve EPA's commitment to environmental justice,<sup>5</sup> geospatial mapping,<sup>6</sup> and advanced air monitoring technology initiatives.<sup>7</sup> Active

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<sup>2</sup> The CSB is filing separate comments on the EPA's RMP RFI.

<sup>3</sup> Publicly accessible fence line monitoring information is available for at least three U.S. refineries: Phillips Rodeo Refinery (<http://www.fenceline.org/rodeo/data.php>), Chevron's Richmond, California refinery (<http://www.fenceline.org/richmond/data.php>), and for BP's Whiting, Indiana facility (<http://raqis.radian.com/pls/raqis/bpw.whiting>.) Fenceline monitoring with a public web site is also planned for a fourth U.S. refinery. See *U.S. v. Deer Park Refining*, 4:13-cv-02009, U.S. District Court for the Southern District of Texas, Document 2-1, filed 07/10/13 (requiring fence line monitoring at Shell's Deer Park Refinery in Texas).

<sup>4</sup> U.S. Environmental Protection Agency, *Office of Inspector General, EPA Needs to Demonstrate Whether It Has Achieved the Goals It Set Under the National Petroleum Refinery Initiative*, Report No. 14-P-0184 April 15, 2014, at 6-7, 20.

<sup>5</sup> The population living within 50 km of 142 U.S. petroleum refineries has a higher percentage of minority, lower income and lower education persons when compared to the nationwide percentages of those groups. Proposed Rule, 79 FR at 36938; See also EC/R Incorporated, *Risk and Technology Review -Analysis of Socio-Economic Factors for Populations Living Near Petroleum Refineries*, January 6, 2014. (Prepared for EPA under Contract No. EP-W-12-011).

<sup>6</sup> <http://www.epa.gov/geospatial/about.html>.

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monitors and/or open path systems would also provide for sampling a broader range of chemicals entering into a community. For example, the Chevron Richmond refinery provides real time information on the following substances: Benzene, Carbon Disulfide, Hydrogen Sulfide, Ozone, Sulfur Dioxide, Toluene, and Xylene.<sup>8</sup>

Finally, such a requirement would also support a number of goals outlined in the recently issued interagency report, *Executive Order 13650 Actions to Improve Chemical Safety and Security-a Shared Commitment* (May 2014)(hereafter “E.O. 13650 Report”).<sup>9</sup>

### **EPA Should Reduce the Implementation Timeline**

**EPA Proposal:** The proposed rule provides refineries up to three years to deploy a fence line monitoring system.<sup>10</sup> Refineries would then have an additional year after deployment of a system before EPA will analyze data for compliance.<sup>11</sup>

**CSB Comment:** The CSB respectfully suggests that deployment of passive samplers can proceed much more promptly than that, especially in light of the fact that EPA has simultaneously proposed specific “monitor siting and sample collection requirements as EPA method 325A of 40 CFR part 63, Appendix A, and specific methods analyzing the sorbent tube samples as EPA Method 325B of 40 CFR part 63, Appendix A.” Moreover, a principal reason that EPA selected passive monitors over active monitors was due to the “relative ease of deployment.”<sup>12</sup> This ease of deployment rationale is seriously undermined by a three year grace period to deploy off the shelf passive monitors when EPA is providing very specific criteria for their use. Similarly, it is hard to square EPA’s objectives with the current three year implementation timeline. For example, EPA states that “one objective for this monitoring program is to identify fugitive releases more quickly, so that corrective action can be implemented in a more timely fashion than might otherwise occur without the fenceline monitoring requirement.”<sup>13</sup>

Accordingly, the CSB suggests that the EPA require full compliance with any passive monitoring requirement within one year of the effective date of the rule as opposed to the three years in the current proposal; CSB further suggests that analysis of sampling data for an “exceedance” of the

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<sup>7</sup> Snyder, Emily G. *et al*, “The Changing Paradigm of Air Pollution Monitoring,” *Environmental Science and Technology*, August 27, 2013, Vol. 47, pp. 11369-1137.

<sup>8</sup> <http://www.fenceline.org/richmond/data.php> (accessed 10/28/14, 4:32pm EST).

<sup>9</sup> The E.O. 13650 Report focuses in part on strengthening community planning and preparedness. The report reflected broad stakeholder concerns that there was insufficient facility information available to the public. *See e.g.*, E.O. 13650 Report at 93-94.

<sup>10</sup> Proposed Rule, 79 FR at 36923 (“Existing sources would be required to deploy samplers no later than 3 years after the effective date of the final rule.”) Therefore, deployment of samplers would not be required under the proposal until on or after April 18, 2018.

<sup>11</sup> *Id.* “[W]e are proposing that refinery owners and operators would be required to demonstrate compliance with the concentration action level for the first time 1 year following the compliance date.”

<sup>12</sup> Proposed Rule, 79 FR at 36923.

<sup>13</sup> Proposed Rule, 79 FR at 36926.

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benzene concentration action level commence within six months of deployment of the system. This suggestion would result in deployment of sensors no later than April 18, 2016. This would allow EPA to review information and consider possible corrective actions for exceedances prior to the end of 2016. The current proposal would not permit for any consideration of corrective actions prior to the summer of 2019.

### **EPA Should Require Prompt, Public Sharing of Fenceline Information**

EPA proposal: The EPA has proposed that refineries report fenceline data twice per year to EPA.<sup>14</sup> EPA would in turn make the data available to the public through the EPA's electronic reporting and data retrieval portal.<sup>15</sup>

CSB comment: As noted above, the CSB suggests that a fenceline monitoring system which posts real time data to a public web site is preferable to the use of passive samplers to measure fenceline concentrations of benzene. In the event that the EPA opts for the use of passive monitors in a final rule, it should still require each facility to post data collected from the use of passive samplers on a continuous basis so that it is available as promptly as possible to fence line communities.

EPA itself “believes providing actual emissions data to communities living close to refining facilities will serve as a deterrent to serious noncompliance.”<sup>16</sup> Further, EPA recognizes “that the data we are proposing to collect on a semiannual basis may include exceedances of the fenceline action level that a facility could have addressed or could still be actively addressing at the time of the report.”<sup>17</sup> In other words, the proposed rule would create a considerable time lag between the time an exceedance may be present and known to the facility and the time the information is available to EPA or to the public. This lag does not appear to serve any interests as it would appear to create an unnecessary risk to public health and potential legal issues for refiners. For these reasons also, EPA should require prompt public sharing of fence line information collected by *any* fenceline monitoring method. Existing public fence line reporting web sites include information on quality assurance at regular intervals so that the public may maintain a high degree of confidence in the reliability of the equipment and accuracy of real time data.<sup>18</sup> The same quality assurance approach would make sense with respect to the proposed rule. Accordingly, EPA should include a requirement that refiners publicly post periodic quality assurance reports.

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<sup>14</sup> Proposed rule, 79 FR at 36927.

<sup>15</sup> *Id.*

<sup>16</sup> U.S. Environmental Protection Agency, Office of Inspector General, *EPA Needs to Demonstrate Whether It Has Achieved the Goals It Set Under the National Petroleum Refinery Initiative*, Report No. 14-P-0184 April 15, 2014, at 6.

<sup>17</sup> Proposed Rule, 79 FR at 36938.

<sup>18</sup> See e.g., <http://www.fenceline.org/rodeo/data.php>.

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**Specific Anti-Preemption Provision**

The rule is silent on the issue of preemption. The CSB suggests that the rule explicitly acknowledge that state or local requirements that require real time fenceline monitoring through use of active monitors, open path systems, or any other method shall not be preempted by any EPA fenceline rule. Several fenceline communities have fought for many years to obtain real time fence line data from neighboring refineries and many more are in the process of doing so now. The CSB wants to ensure that further innovation in monitoring at the state and local level is not adversely impacted by the proposed federal rule.

Thank you for this opportunity to provide comments on the proposed rule.

Respectfully Submitted,



Rafael Moure-Eraso, Ph.D.  
Chairperson



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Mark Griffon  
Board Member