

Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

APPROVED MINUTES

Advisory Council Public Health Committee Meeting  
1:30 p.m., Monday, December 8, 2003

1. **Call to Order – Roll Call.** 1:34 p.m. Quorum Present: Brian Zamora, Chairperson; Elinor Blake, Victor Torreano, Linda Weiner. Absent: Ignatius Ding.
2. **Public Comment Period.** There were no public comments.
3. **Approval of Minutes of October 20, 2003.** Ms. Weiner moved approval of the minutes; seconded by Mr. Torreano; carried unanimously.
4. **Development of Recommendations on Refinery Fenceline Monitoring.** In assessing whether the type of optical monitoring equipment in operation at the ConocoPhillips refinery in Rodeo should be applied to other refineries and chemical plants in the Bay Area, the Committee members identified and discussed the following central issues:
  - There has been no correlation between refinery releases and real-time data.
  - Optical monitors can provide an additional source of data on refinery fugitive emissions.
  - Optical monitoring data have not been standardized for either reading or interpretation.
  - More recent technology has improved upon older optical equipment but is quite costly.
  - Rodeo and Crockett community members feel positive about the optical monitoring system even though it may not be predictive of release events.
  - The District's website has been significantly improved with the addition of monitoring data, but the broader question concerns how to provide the community with useful air quality data and the availability of other District tools that would achieve such a result.

Ms. Blake stated that the Committee could recommend the refinery continue to conduct optical monitoring, work with community groups, and refine and post the data on the Contra Costa County website. Also, the District's website should contain a link to the refinery's optical monitoring data page on the Contra Costa County website. She added that the citizens of Rodeo and Crockett also wanted to see the District put the real-time optical monitoring data to use. However, the Committee has not yet ascertained from staff what that might entail. These types of data may be more useful in the analysis of chronic than in acute health effects.

Ms. Weiner suggested that the Good Neighbor Agreement between the ConocoPhillips refinery and its adjacent communities is a good model for use by other refineries. Chairperson Zamora noted that the Committee would evaluate optical technology primarily from a public health perspective, although associated issues are not excluded from the review. He added that the referral requires more of a contextual rather than a *per se* evaluation of the optical monitoring technology, based on whether its technical capability justifies a broader application. Ms. Blake added that staff suggestions regarding additional aspects of this issue include:

- evaluating various monitoring deployments of fixed and canister samplers
- reviewing the ground level monitoring (GLM) requirements for possible update
- further improving the continuous emissions monitoring system
- requiring each refinery equip a van with remote sensing devices, and/or other monitoring and sampling equipment, for use in emergency release situations.

Cost considerations for each monitoring and sampling technology must also factor into the review. Whether data from other monitoring systems could be posted on line, in addition to District monitoring network data, should also be considered. The District's website could be further improved by including explanatory material that clarifies monitoring data symbols and tables of chemical compounds, and explains how these relate to meteorological data. The availability of funding from industry or various foundations should be considered as well.

Chairperson Zamora suggested that as a standard feature of presentations at community meetings, the District should include an introduction to the District's website. Kelly Wee, Compliance & Enforcement Division Director, stated that at the community meetings in which a new or modified rule is being presented, the most typical questions concern monitor siting. However, such an introduction could certainly be provided. Gary Kendall, Technical Division Director, added that under the District's flare monitoring rule gas flow rates to the refinery flares will be measured and monthly reports will be provided to the District. As part of the rule, combustion at the flare tip will be recorded on DVD and then posted on-line.

Noting that the community is concerned over both acute and chronic health effects, Ms. Blake suggested that the District's website include a link to the Crockett health study. In addition, since the District posts incident reports that contain monitoring data after a certain period of time after the incident has elapsed, it would be useful to post such data on the District's website.

Mr. Kendall replied that longer-term studies usually require a minimum of one year's worth of monitoring data that health experts use to assess chronic health risks since annual averages are developed and used in risk assessment. Fenceline monitoring, and mobile monitoring with grab samples, each focus on the acute health effects. In emergency incidents, sharp data variations are reviewed for possible correlation with observed health effects. In the General Chemical release of sulfuric acid mist, adverse health effects were indeed observed. Some incidences concern odor nuisances or visible emissions but do not always pose highly acute health risks.

Ms. Blake observed that health experts will have to recognize and evaluate increasing trends in the diagnosis of asthma among residents of communities near the refineries. Mr. Kendall replied that sufficient levels of SO<sub>2</sub> on a short-term basis can aggravate asthma. Ms. Weiner added that apart from asthma, issues concerning cumulative risk also arise. Ms. Blake offered to develop a list of major findings and recommendations for review at the next Committee meeting.

Chairperson Zamora noted that in evaluating whether asthma and other respiratory illnesses have increased around refineries, other factors such as the age of the community, personal history, and mobility factor into the analysis. Data on the health of refinery employees would be of importance as a barometer since on-site workers are the most likely to show health impacts.

Chairperson Zamora called for public comment and the following individual spoke:

Dennis Bolt  
Senior Coordinator, Bay Area  
Western States Petroleum Association

stated that some companies have conducted epidemiological work and he will evaluate what data can be publicly reported to the Committee at a future meeting. Dr. Wendell Brunner of the Contra Costa County Health Department has noted that in west Contra Costa County asthma rates have increased, although they are only one third of the levels that are currently found in Alameda County. Former Air District Board member Sunne McPeak has noted that asthma is increasing while emissions of criteria and toxic air pollutants are decreasing in the Bay Area.

Mr. Bolt added that while there are abundant emissions data that could be made available by the refineries, most of the record is in hard copy. Some of the data are also proprietary and contain some process knowledge that cannot be distributed. The District's posting of emissions data on the website is a good first step. Clarification of that data in subsequent iterations can follow. In particular, clarification of the summary flare data would be the most useful to the public.

Ms. Blake replied that the refineries can post emissions data on their respective websites as well. The matter of providing funding to further disseminate data to the public is also worthy of consideration. Mr. Bolt replied that he would relay this discussion to the refinery staff. The refineries can collaborate with the District to get meaningful information on the website.

Peter Hess, Deputy Air Pollution Control Officer, noted that if optical fence line monitors do not fulfill community information needs in emergency situations, perhaps other mechanisms are available. The use of a color-coded screen for presentation of emissions data on the District's website could be considered. If GLMs have focused on hydrogen sulfide (H<sub>2</sub>S) and sulfur dioxide (SO<sub>2</sub>) due to their odoriferous qualities, additional pollutants could now be considered.

Ms. Blake urged consideration of the extent to which toxics can be folded into the data posted on the website, in addition to the criteria pollutants that the District monitors. Mr. Kendall noted that data for toxic pollutants are not available in real-time. The District's laboratory analyzes for low concentrations of toxic materials from fixed samples. Accordingly, it may be preferable to present toxics data to the public in terms of the categories of risk assessment.

5. **Committee Member Comments/Other Business.** Ms. Blake stated that the September 2003 issue of the *American Journal of Public Health* focuses on smart growth and indoor air quality.
6. **Time and Place of Next Meeting.** At the call of the Chair.
7. **Adjournment.** 2:40 p.m.

James N. Corazza  
Deputy Clerk of the Boards