Office of Environmental Health Hazard Assessment

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Linda S. Adams
Secretary for Environmental Protection

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Governor

July 9, 2009

Mr. Jack P. Broadbent
Executive Officer/APCO
939 Ellis Street
San Francisco, California 94109

Dear Mr. Broadbent:

You have requested the Office of Environmental Health Hazard Assessment (OEHHA) to review the Summary and Analysis of 2008 air monitoring results from the West Berkeley air monitoring station at 6th and Camelia Streets. The Summary is a well-written report on the results. The Report attempts to place the results in perspective by comparing the 6th and Camelia site monitoring data with other locations in the Bay Area and Los Angeles.

OEHHA has checked the calculations of acute and chronic hazard quotients and indices, as well as the cancer risk calculations. We agree with your risk calculations with the exception of the cancer risk calculations for lead. Your calculation appears to overestimate the cancer risk from lead. However, since lead is a small fraction of the total risk at the monitoring site, the overall cancer risk estimate is not significantly affected. We can work with your staff to resolve the discrepancy.

OEHHA is currently responding to some public comments that we received through the City of Berkeley. One of the comments suggests that a table or figure be added comparing nervous system Hazard Indices at the various monitoring sites. The Hazard Indices for the nervous system are below one at all of the monitoring sites and therefore below a level of public health concern. However, in the interest of transparency, OEHHA would be supportive of the suggestion. It should be noted that tetrachlorethylene has a nervous system endpoint and the endpoint should be included in Table 4. The four chemicals for which the nervous system hazard index would be calculated include manganese, benzene, carbon tetrachloride and tetrachloroethylene.

OEHHA agrees that the acute and chronic noncancer risk from the monitored levels of toxic chemicals at the 6th and Camelia site is below a level of public health concern. As you point out, manganese air concentrations are elevated above the level found at other monitoring sites and the most likely source of the elevated manganese concentrations is Pacific Steel.

You comment in your Summary that the majority of the cancer risks at the 6th and Camelia site is due to diesel exhaust, benzene and 1,3-butadiene and carbon tetrachloride. The source of the vast majority of the air emissions of diesel exhaust, benzene and 1,3-butadiene is known to be cars and trucks, as you explain. The Hot Spots program is designed to ensure that stationary

facilities do not add an unacceptable risk to an already considerable burden from background sources in communities surrounding stationary facilities such as Pacific Steel. This pattern of mobile sources as the predominate source of overall airborne cancer risk is typical in the Bay Area, and urban areas such a Los Angeles.

Although monitoring data at a single site cannot be interpreted as a validation of the AB-2588 risk assessment for Pacific Steel, the results found at the monitoring site is consistent with the findings of the Pacific Steel AB-2588 risk assessment. The risk assessment uses emissions estimates and computer air modeling to estimate ground level air concentrations from facility emissions. Risk to the surrounding community can be estimated from these air concentrations and cancer potency factors, acute and chronic Reference Exposure Levels developed by OEHHA.

In your letter to Mr. Bates dated April 14th, you mention exploring further opportunities to reduce toxic and odorous emissions from Pacific Steel. OEHHA would encourage these efforts. Numerous studies have shown that exposure to odors can cause a number of symptoms including nausea, fatigue and headache in exposed individuals. These symptoms can occur with air concentrations of odorous chemicals well below air concentrations where other, sometimes more serious, toxicological effects are known to occur. Risk assessment procedures, including the AB-2588 risk assessment model, cannot address odors due to a lack of data.

We appreciate the opportunity to comment on the Summary. If you have questions, you can contact me at (510) 622-3150.

Sincerely,

Robert J. Blaisdell

Robert J. Blaisdell, Ph.D., Chief
Exposure Modeling Section