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April 9, 2018

Bob Silvestri
Community Venture Partners, Inc.
73 Surrey Avenue
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Subject: Comments on the adequacy of responses to air quality issues in the *Sir Francis Drake Boulevard Rehabilitation Project Final Environmental Impact Report Volume II (Response to DEIR Comments)*.

Dear Mr. Silvestri:

Thank you for asking me to review the EIR consultant's responses to my letter (November 29, 2017) on the air quality analysis in the *Sir Francis Drake Boulevard Rehabilitation* DEIR. I find that the important deficiencies in the DEIR have not been corrected. Below I quote the full text of their air quality responses with **bolding** and underline added to text where the errors are most apparent, then I explain the reasons for my disagreement.

*"C36-20: The commenter contends the Draft EIR did not substantiate the ambient air quality consequences of construction or operation of the project. Construction emissions were estimated for the proposed project and the results are shown in Table 4.2.E of the Draft EIR. **Per BAAQMD Guidance, no single project is sufficient in size to by itself to result in an exceedance of ambient air quality standards.** In developing the thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be **cumulatively conservable [sic]** and would potentially contribute to ambient air quality impacts. As shown in Table 4.2.E of the Draft EIR, construction emissions associated with the project would be less than the significance threshold established by the BAAQMD, **therefore, the project would not impact ambient air quality.** Also, as identified on page 125 of the Draft EIR, once constructed, the project would not result in an increase in operational emissions. The project consists of roadway improvements that would reduce vehicle delay, which would improve air quality. **The project consists of roadway improvements, including repaving***

and installation of pedestrian and bicyclist features. Once operational these project features would not have any effect on the ambient air quality. *The project features that promote pedestrian and bicyclist travel and reduce intersection delay are recognized by the BAAQMD as beneficial to air quality and such projects are part of the BAAQMD's strategy to improve ambient air quality within the San Francisco Bay Area Air Basin."*

The EIR air quality consultants are interpreting the BAAQMD *CEQA Guidelines* very selectively to justify their limited approach to the project air quality analysis – focusing on project overall construction and operational emissions, and not on local ambient impacts by project CO and PM2.5 or project TACs on local health risks/hazards. Meeting the BAAQMD regional emission limits does not guarantee that significant local ambient air quality impacts will not happen. The BAAQMD has significance thresholds for local ambient impacts from PM2.5 and TACs that can only be addressed by BAAQMD screening methodologies or by applying dispersion models where appropriate due to project complexity.

The EIR air quality consultants misinterpret the BAAQMD's views on the connection between project emissions and ambient air quality impacts. On page 2-1 of the *CEQA Guidelines* the BAAQMD makes the following statement (underline emphasis added):

"Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards."

The BAAQMD means that emissions from individual projects are too small to affect an air basin's official attainment status as determined by the EPA or CARB with respect to federal/state ambient air quality standards. An individual project's pollutant emissions, even if they are below the daily/annual limits set in the *CEQA Guidelines*, could still adversely impact local ambient air quality.

The *CEQA Guidelines* also include incremental limits on ambient PM2.5 levels and on TAC risk/hazard, and screening methodologies to assure that project emissions would not cause local exceedances of the ambient and risk/hazard thresholds. The EIR air quality analysis has not addressed the local ambient impacts of project construction PM2.5 and DPM at all. And except for applying the BAAQMD risk/PM2.5 screening spreadsheet to an added eastbound lane proposed for a section of SFDB, it has not employed the CAL3QHCR model to address other project design features (e.g., lane narrowing, traffic flow speeds, etc.) that could affect local air quality.

It may be that some project design features would lead to improvements in local air quality. But the residents living along SFDB deserve to have this demonstrated by the application of an accepted dispersion model incorporating project design features as specified in the EIR Project

Description and traffic analysis, rather than by the consultant's conclusory statements.

"C36-21: The comment states that the BAAQMD provides guidance for evaluating project impacts in their CEQA Guidelines. The County agrees and as noted on page 103 of the Draft EIR, the BAAQMD CEQA Guidelines were followed in the preparation of the Air Quality Analysis presented in the Draft EIR."

The BAAQMD CEQA Guidelines were selectively followed to include only estimation of project overall construction emissions. The EIR mistakenly concluded that since these construction emissions were below the BAAQMD daily/annual thresholds, there could/would not be any potential for local air quality standard violations or exceedance of TAC risk/hazard thresholds. There needs to be a quantitative evaluation of project construction ambient PM2.5 impacts and of TAC risk/hazard by applying BAAQMD screening methodology (i.e., the SCREEN3 model). For operational aspects, the EIR only considered addition of a strait section eastbound travel lane using a BAAQMD screening spreadsheet. There needs to be a more complete quantitative modeling of all aspect of SFDB changes (i.e., roadway configuration changes including lane narrowing, intersection traffic flows, etc.) using the full CAL3QHCR model.

This is a complex project affecting a major traffic arterial in Marin County, which justifies a more elaborate treatment of project ambient air quality impacts by an accepted roadway air quality model that is recommended by the BAAQMD.

"C36-22: Mitigation Measure AIR-1 as outlined in the Draft EIR would reduce fugitive dust as well as PM2.5 emissions associated with diesel engine exhaust. Mitigation Measure AIR-1 requires idling times to be minimized and all construction equipment would be required to be properly tuned and maintained which would reduce PM2.5 exhaust emissions. As shown in Table 4.2.E of the Draft EIR, average daily PM2.5 exhaust emissions associated with construction would be 2.0 pounds per day which is well below the BAAQMD significance threshold of 54 pounds per day. The commenter refers to the BAAQMD guidance document recommended methods for Screening and Modeling Local Risks and Hazards. The guidance document recognizes that the user should apply a screening process to determine whether air quality modeling is necessary. As shown in Table 4.2.E of the Draft EIR, the PM2.5 emissions are well below the significance thresholds; therefore, dispersion modeling is not required to determine health risks associated with construction of the project."

There is no necessary connection between the project's meeting the BAAQMD daily emission thresholds during construction and the assurance that the BAAQMD incremental annual PM2.5 concentration threshold or the cancer risk threshold will also be met at local sensitive receptors. This is not only true for CEQA analysis, but for all aspects of air pollutant regulation and control. For example, in consideration of granting an operating permit for a new stationary source, the BAAQMD regulations not only impose limits on daily/annual pollutant emissions,

but also require demonstration by dispersion modeling that a source meeting these emissions limits would not exceed air quality or health risk standards locally. The EIR analysis must show by accepted CEQA screening methodologies that local sensitive receptors will not be adversely affected by PM2.5 or TACs during project construction.

*“The project would add a **third eastbound travel lane on Sir Francis Drake just west of US 101**. This additional travel lane would be adjacent to commercial land uses, but would move the roadway closer to residential uses located approximately 120 feet from the roadway. **The BAAQMD has provided a Roadway Screening Analysis Calculator** for determining county specific estimates of risk and hazard impacts from roadways in the Bay Area.²⁸ If the screening tool shows a potential exceedance of the BAAQMD thresholds, air dispersion modeling as suggested by the commenter would be required. Using the BAAQMD roadway screening tables, the effect of the project locating the roadway 12 feet closer to a residence would result in an increase in cancer risk associated with roadway emissions of 0.12 cancer risk per million, which is well below the BAAQMD threshold of 10 in 1 million. The average annual PM2.5 concentration change would be 0.002 micrograms per cubic meter which would also be well below the BAAQMD threshold of 0.2 micrograms per cubic meter. The screening output is shown in Attachment A. The project passes the screening and additional modeling is not required.”*

The project’s addition of a 3rd eastbound travel lane is an important aspect of project plans and the use of the BAAQMD screening analysis calculator is a step toward a complete evaluation of operational air quality impacts. It would be sufficient if SFDB were a simple, straight, two-lane roadway and addition of a straight eastbound lane were the only design change under the project. But the planned improvements to SFDB are much more complex and require the full CAL3QHCR model to evaluate their local air quality impacts.

*“This comment goes on to describe the BAAQMD’s modeling process for new roadway projects, which is noted. However, the project would add sidewalks, curb ramps, crosswalks, and other roadway modifications as described in Section 3.0 Project Description of the Draft EIR. As shown Figure 3.11, Sir Francis Drake is an existing roadway. **The project would not change the annual average daily traffic or roadway configuration other than the additional lane described above; therefore, as stated on page 127 of the Draft EIR, the project would not be expected to result in a significant impact**. Following the screening procedures outlined in the referenced BAAQMD document, the project would screen out of additional modeling analysis requirements because the project would not result in a new roadway source of emissions. Dispersion modeling is not required.*

*“The commenter indicates that idling times at intersections were not included. Table 4.12.E of the Draft EIR includes intersection delay with and without the project. As shown in Table 4.23.E, **the project would reduce delay at intersections in the project vicinity**.*

As stated on page 126 of the Draft EIR, implementation of the project would reduce traffic congestion and improve LOS, which would contribute to a reduction in CO concentrations at intersections."

According to the description and diagrams given in the EIR's Project Description and Traffic sections, the project would incorporate many configurational and traffic flow changes to SFDB in addition to the third eastbound travel lane. The BAAQMD roadway screening calculator is not capable of evaluating these more complex design features. Only CAL3QHCR can do that. Such modeling may demonstrate that some project changes (e.g., delay reduction at intersections) may have beneficial impacts. But there must be a demonstration of benefit by modeling before the EIR can make this finding.

*"The commenter indicates that the Draft EIR must conduct dispersion modeling studies of project construction and operational ambient impacts. However, as presented in the Draft EIR and as outlined above, the project would **not result in a change in operational emissions and the project construction emissions would be well below the BAAQMD significance criteria.** Therefore, the project would not result in significant health risks during operation or construction."*

It remains to be conclusively demonstrated that the SFDB project would not have significant ambient air quality impacts during its construction and operation for all the reasons given above.

Sincerely,



Geoffrey Hornek