LOZEAU DRURY LLP
T 510.836.4200
F 510.836.4205
410 12th Street, Suite 250
Oakland, Ca 94607
www.lozeaudrury.com
rebecca@lozeaudrury.com

January 14, 2016

Via Overnight Delivery and Electronic Mail

President London Breed and
Board of Supervisors of the City and County of San Francisco
c/o Ms. Angela Calvillo, Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689
Email: Board.of.Supervisors@sfgov.org
Bos.legislation@sfgov.org

Re: Appeal of SFMTA Resolution No. 15-161, CEQA Categorical Exemption Determinations for Commuter Shuttle Permit Program

Dear President Breed and Honorable Members of the Board of Supervisors:

I am writing on behalf of the Coalition for Fair, Legal and Environmental Transit ("Coalition"), Service Employees International Union Local Union 1021 ("SEIU 1021"), Sue Vaughan, and Robert Planthold (collectively, "Appellants") concerning the San Francisco Municipal Transportation Agency ("SFMTA") Commuter Shuttle Permit Program and recent amendments to Transportation Code, Division II, to establish a Commuter Shuttle Permit Program to authorize certain shuttle buses to stop in designated Muni stops and passenger loading zones for the purpose of loading or unloading passengers, and establish permit conditions for such permits ("Project" or "Shuttle Project").

Appellants urge the Board to require review of the Shuttle Project under the California Environmental Quality Act ("CEQA"). CEQA review would allow the City to analyze the Project's impacts on traffic, pedestrian and bicyclist safety, public transportation, and air quality, and to consider feasible mitigation measures and alternatives. Feasible mitigation measures and alternatives could include, for example, consideration of alternate stop locations that would reduce interference with MUNI, traffic, pedestrians, and bicyclists, more environmentally friendly buses, and other mitigations. Because the City decided to exempt the Shuttle Project entirely from CEQA review, none of this analysis occurred.

In addition, as discussed below, the Shuttle Project conflicts with the California Vehicle Code, which prohibits private shuttle buses from stopping in Muni zones. As a result, the Project is preempted by State law.

For these reasons, Appellants ask the Board of Supervisors to overturn the adoption of the Shuttle Project and the finding that the Project is exempt from CEQA.

I. THE CITY ABUSED ITS DISCRETION BY FINDING THE SHUTTLE PROJECT EXEMPT IS FROM CEQA.

A. Legal Background

CEQA mandates that "the long-term protection of the environment . . . shall be the guiding criterion in public decisions" throughout California. Pub. Res. Code ("PRC") § 21001(d). The foremost principle under CEQA is that it is to be "interpreted in such a manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Citizens of Goleta Valley v. Bd. of Sups.* (1990) 52 Cal.3d 553, 563-64. An agency's action violates CEQA if it "thwarts the statutory goals" of "informed decisionmaking" and "informed public participation." *Kings Co. Farm Bur. v. City of Hanford* (1990) 221 Cal.App.3d 692, 712.

To achieve its objectives of environmental protection, CEQA has a three-tiered structure. 14 CCR § 15002(k); *Comm. to Save Hollywoodland v. City of Los Angeles* (2008) 161 Cal.App.4th 1168, 1185-86. First, if a project falls into an exempt category, no further agency evaluation is required. *Id*. Second, if there is a possibility the project will have a significant effect on the environment, the agency must perform a threshold initial study. *Id*.; 14 CCR § 15063(a). If the study indicates that there is no substantial evidence that the project may cause a significant effect on the environment, the agency may issue a negative declaration. *Id*., 14 CCR §§ 15063(b)(2), 15070. Finally, if the project will have a significant effect on the environment, an environmental impact report ("EIR") is required. *Id*. Here, since the City exempted the Project from CEQA, we are at the first step of the CEQA process, where the standard is extremely low.

1. Categorical Exemptions

CEQA identifies certain classes of projects that are exempt from the provisions of CEQA. These are called categorical exemptions. PRC § 21084(a); 14 CCR §§ 15300, 15354. Categorical exemptions are certain classes of activities that generally do not have a significant effect on the environment. *Id*. Public agencies utilizing such exemptions must support their determination with substantial evidence. PRC § 21168.5.

CEQA exemptions must be narrowly construed, and "[e]xemption categories are not to be expanded beyond the reasonable scope of their statutory language." *Mountain Lion Found. v. Fish & Game Comm'n* (1997) 16 Cal.4th 105, 125; *McQueen v. Bd. of Dirs*. (1988) 202 Cal. App. 3d 1136, 1148. Strict construction is required in order to interpret categorical exemptions in a manner that affords the greatest environmental protection within the reasonable scope of their statutory language. *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 966. "Since a determination that a project falls within a categorical exemption excuses any further compliance with CEQA whatsoever, we must construe the exemptions narrowly in order to afford the fullest possible environmental protection." *Save Our Carmel*

River v. Monterey Peninsula Water Management Dist. (2006) 141 Cal.App.4th 677, 697. Exemptions "should not be so broadly interpreted so to include a class of [projects] that will not normally satisfy the statutory requirements for a categorical exemption, even if the premises on which such [projects] are conducted might otherwise come within [the exemption]." *Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1192-1193.

2. The Significant Effect Exception to Categorical Exemptions

CEQA contains several exceptions to categorical exemptions. 14 CCR § 15300.2. If an exception applies, the exemption cannot be used, and the agency must instead prepare an initial study and CEQA document. *McQueen*, 202 Cal. App. 3d at 1149; *Hollywoodland*, 161 Cal. App. 4th at 1187. "Even if a project falls within the description of one of the exempt classes, it may nonetheless have a significant effect on the environment based on factors such as location, cumulative impact, or unusual circumstances." *Save Our Carmel River v. Monterey Peninsula Water Mgmt. Dist.* (2006) 141 Cal. App. 4th 677, 689. One such exception, referred to as the "significant effect exception" states that "a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances." 14 CCR 15300.2.

The California Supreme Court recently established two ways a party may invoke the unusual circumstances exception in the case *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1105 ("*Berkeley Hillside*"). First, "a party may establish an unusual circumstance with evidence that the project *will* have a significant environmental effect. That evidence, if convincing, necessarily also establishes 'a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.'" *Berkeley Hillside*, 60 Cal.4th 1086, 1105 (emph. added). Alternatively, "[a] party invoking the exception may establish an unusual circumstance without evidence of an environmental effect, by showing that the project has some feature that distinguishes it from others in the exempt class, such as its size or location. In such a case, to render the exception applicable, the party need only show a reasonable possibility of a significant effect due to that unusual circumstance." *Id*.

B. The Shuttle Project is Beyond the Scope of the Class 8 Exemption.

The City applies two categorical exemptions to the Project. First, the City attempts to exempt the "minor modifications to the existing arterials to install new commuter shuttle stops, as well as the installation of minor improvements such as signage, traffic islands and bus bulbs" from CEQA as a Class 1 "minor alteration" activity.[1] Second, the City attempts to exempt the

[1] The Class 1 exemption:

> [C]onsists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

remainder of the Shuttle Project under CEQA's Class 8 categorical exemption for "Actions by Regulatory Agencies for the Protection of the Environment." 14 CCR § 15308. While Appellants do not take issue with application of the Class 1 exemption to a limited portion of the Project such as addition of signs to bus stops, the remainder of the Shuttle Project requires an environmental analysis under CEQA because it goes beyond the scope of the Class 8 exemption, and therefore an environmental analysis must be conducted under CEQA.

The Class 8 exemption "consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to ***assure*** the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption." 14 CCR § 15308 (emph. added). The Class 8 exemption is inapplicable to the Shuttle Project.

When a project may have significant environmental impacts that are both favorable and unfavorable, the project cannot be exempt under Class 8. *Paulek v. Western Riverside County Regional Conservation Authority* (2015) 237 Cal.App.4th 1005, 1030; *Cal. Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist.* (2009) 178 Cal.App.4th 1225, 1240; *Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 206**.** "[Even a] new regulation that strengthens some environmental requirements may not be entitled to an exemption if the new requirements could result in other potentially significant effects." *Cal. Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist.* (2009) 178 Cal.App.4th 1225, 1240 (quoting 2 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act, § 20.43, p. 981). As the California Supreme Court explains:

> When the impact may be either adverse or beneficial, it is particularly appropriate to apply CEQA which is carefully conceived for the purpose of increasing the likelihood that the environmental effects will be beneficial rather than adverse.

Wildlife Alive v. Chickering (1976) 18 Cal.3d 190, 206.

The Class 8 exemption is inapplicable to the Shuttle Project for three reasons: 1) the Shuttle Project will not *assure* protection of the environment; 2) the Project has significant adverse environmental impacts that preclude reliance on the Class 8 exemption; and 3) the project relaxes standards set in the State Vehicle Code which will result in environmental degradation including impacts to local air quality, and pedestrian and bicycle safety.

1. The Shuttle Program Fails to Assure Protection of the Environment.

First, the Class 8 exemption is inapplicable because the Shuttle Project does not ***assure*** protection of the environment. In its CEQA Exemption Report, the Planning Department

---

14 CCR § 15301.

determined that the Class 8 exemption was applicable because the Shuttle Project "provides procedures ***intended to*** facilitate operation of commuter shuttles, ***enable*** vehicle trip reduction, and ***minimize*** impacts to users or other transportation modes in San Francisco." SFPD, p. 24. The Planning Department further explained that, "[a]s such, [the Shuttle Project] constitutes actions by SFMTA ***meant to*** enhance and protect the environment involving regulatory procedures for shuttle activity." *Id.* As this language makes clear, the Shuttle Project in no way ***assures*** the maintenance, restoration, enhancement, or protection of the environment. As the below discussion makes clear, despite the City's lofty intentions, the Shuttle Project will have environmental impacts.

We know that the Pilot Program had these same goals, but that the Pilot fell far short of meeting them. For example, one of the goals of the Pilot Program was to manage the movement of commuter shuttles by providing shuttle operators with clear guidelines on where and when to stop at curbs. To achieve this goal, the City included various permit conditions, such as requiring shuttles to pull all the way in to shuttle stops, and not double parking. The Shuttle Project has these same permit conditions. During the Pilot Program, between August 2014 and May 2015, SFMTA enforcement officers issued 1200 citations to shuttle buses. Evaluation, p. 26. The most common citation issued was for double-parking and non-permitted use of a Muni zone, both of which were prohibited under the Pilot. *Id*. In October 2014 alone, more than 90 citations were issued for commuter shuttles double-parking in Muni zones. *Id.* at 27. The idea that commuter shuttles will now comply with all permit conditions under the Shuttle Project, when they clearly did not under the Pilot Program, is not supported by evidence. More importantly, the permit conditions alone cannot be said to ***assure*** that commuter shuttles will comply with permit terms.

2. The Shuttle Project Will Have Significant Adverse Environmental Impacts on Pedestrians, Bicycle Safety and Air Quality.

Second, the City may not rely on the Class 8 exemption because, as discussed below, the Shuttle Project will have significant adverse environmental impacts on pedestrian and bicyclist safety and air quality. In finding the Project exempt under Class 8, the City is essentially ignoring all of these significant negative environmental impacts based on the Project's potentially positive impact on reduction of vehicle miles traveled. The City does not get to choose which environmental impact to protect, and then ignore all others. Under the Planning Commission's reasoning, one could exempt any project, regardless of its impacts, as long as it had some environmentally beneficial aspect. CEQA does not allow for this. Despite the Shuttle Project's potential to reduce vehicle miles traveled, the City must conduct CEQA analysis of these Shuttle Project's significant adverse environmental impacts.

3. The Shuttle Project Relaxes Standards Set Forth in the State Vehicle Code, and as a Result, Causes Significant Adverse Impacts to Pedestrians, Bicycle Safety and Public Transit.

As discussed below, the Shuttle Project violates the State Vehicle Code. The Vehicle Code prohibits private vehicles from stopping on red curb zones marked for public buses. The

Shuttle Project expressly allows this violation of state law. As such the Shuttle Project relaxes state standards. As a result, the Shuttle Project causes adverse impacts to pedestrian safety, bicycle safety and public transit.

C. The Class 8 Exemption is Inapplicable Because the Shuttle Project will have Significant Environmental Impacts due to Unusual Circumstances.

Even if the Shuttle Project did fit within the scope of the Class 1 and Class 8 exemptions, which it does not, the exemptions would still be inapplicable because of the significant effect exception. *See* 14 Cal. Code Regs. § 15300.2(c). The Shuttle Project does not present the same general risk of environmental impacts as other projects falling under the Class 1 and Class 8 exemptions, and therefore the exemptions are inapplicable.

1. The Shuttle Project will have a significant environmental impact, thereby establishing an unusual circumstance.

Under *Berkeley Hillside*, evidence that a project *will* have a significant environmental effect "does tend to prove that some circumstance of the project is unusual." *Berkeley Hillside*, 60 Cal.4th at 1105. Here, there is substantial evidence that the Shuttle Project will – and is – having a significant environmental impact, thereby necessarily establishing an unusual circumstance.

i. The Shuttle Project *will have* a significant impact on bicycle safety.

The City has created a list of eight "transportation significance criteria," which act as thresholds of significance to determine if a project's environmental impact is significant under CEQA. The fourth transportation significance criteria states:

> The project would have a significant effect on the environment if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.

San Francisco Planning Department, Transportation Significance Criteria (June 2, 2013).

Traffic Engineer Tom Brohard, P.E., prepared a detailed analysis of the Shuttle Project and concluded that it will have a significant adverse impact because it creates potentially hazardous conditions for bicyclists. Exhibit A, Brohard Comment, p. 4. According to Mr. Brohard, "[s]huttle buses blocking bicycle lanes would cause bicyclists to sharply veer into vehicle travel lanes to avoid the shuttle bus at the stop, creating a potentially hazardous condition." *Id*.

The Exemption Report attempts to couch the impacts of commuter shuttles on bicyclists as "infrequent," yet the Evaluation says that ***on average, shuttles block travel and bike lanes approximately 35% of the time that they stop.*** Evaluation, p. 25. Indeed, during the pilot, at four of the 20 zones studied by SFMTA, ***commuter shuttles blocked travel or bike lanes more***

than 90% of the times they stopped.[2] Evaluation, p. 24. Even more telling, at all four stops where shuttles blocked traffic and bike lanes more than 90% of the time, the frequency of conflicts increased dramatically from pre-pilot to pilot. For example, pre-pilot, commuter shuttles blocked traffic and bike lanes 18% of the time they stopped at 16th & Mission/South Van Ness, but during the pilot, they blocked traffic and bike lanes 94% of the times they stopped. Evaluation, p. 24. These conflicts can hardly be said to be "infrequent."

In addition, "[a]t five of the eight shuttle-only zones, blocked travel and bike lanes as a percentage of shuttle stop-events increased from pre-pilot to during-pilot, sometimes substantially." Evaluation, p. 27.

The Exemption Report concludes, without any supporting evidence, that "[b]ecause of their infrequency, and the Program's ability to address any potential conflicts through modification of the shuttle stop length or location, the proposed Program would not be expected to result in a significant impact related to bicycles." Exemption Report, p. 15. In other words, since the City says the conflicts are infrequent (without any supporting evidence), and since any impacts can be mitigated (which, as discussed below, cannot be considered at the exemption stage of CEQA), there is no significant impact. CEQA does not allow this kind of circular and conclusory analysis.

Since expert evidence, and the City's own reports, establishes that the Shuttle Project will create potentially hazardous conditions for bicyclists, the CEQA exemption is improper. *See*, *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1105. CEQA review is required to analyze the Project's bicycle safety impacts and to implement feasible mitigation measures.

ii. The Shuttle Project *will have* a significant impact on pedestrian safety.

The Shuttle Project will also have significant impacts on pedestrian safety. The City's third "transportation significance criteria," states:

> The project would have a significant effect on the environment if it would result in substantial overcrowding on public sidewalks, ***create potentially hazardous conditions for pedestrians***, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.

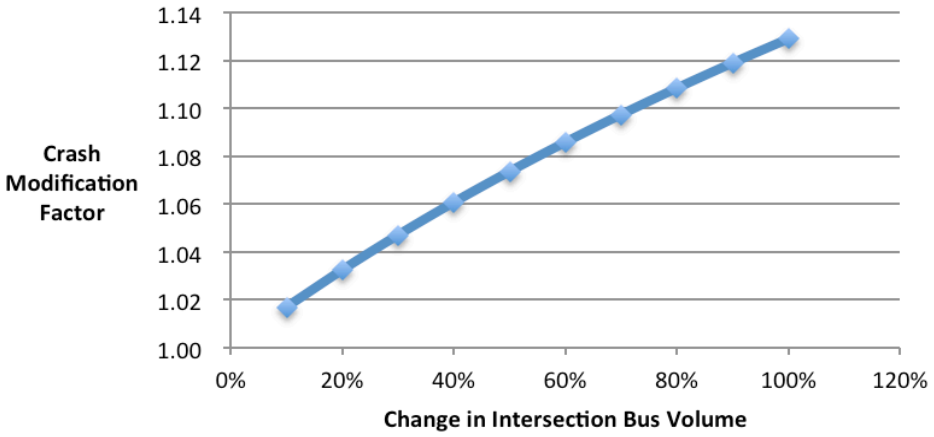
San Francisco Planning Department, Transportation Significance Criteria (June 2, 2013) (emph. added). Commuter shuttles create potentially hazardous conditions for pedestrians, and therefore CEQA review is required.

[2] Indeed, the Evaluation states that commuter shuttles blocked travel or bike lanes 105% of the time at Valencia and 24th, explaining that the "zone blocked travel in excess of 100% because two shuttles managed to block both the bike lane and travel lane at the same time." Evaluation, p. 26 fn. 10.

The City has a "Vision Zero SF" goal to reduce to zero the number of traffic-related deaths in San Francisco by 2024.[3] Every year, approximately 30 people lose their lives and more than 200 others are seriously injured while traveling on San Francisco streets.[4] Seventy-one percent of traffic fatalities in 2013 and 2014 were bicyclists and pedestrians.[5] As part of Vision Zero SF, the City identified corridors for targeted safety measures because they encompass 6% of streets, but account for over 60% of serious and fatal injuries. Many of these corridors correspond to those zones used by commuter shuttles. In addition, according to the Vision Zero SF website, large vehicles, such as commuter shuttles, account for four percent of collisions with people walking and bicycling but 17 percent of the fatalities form those collisions.[6]

In 2013 the San Francisco Department of Public Health conducted a detailed study of injuries at signalized intersections in San Francisco.[7] As part of the study, the Department of Public Health created a Pedestrian Injury Model which evaluated the impact of bus volume on intersection level pedestrian injury. The study estimated that an increase in bus volumes of approximately 50% resulted in an increased injury frequency of about 7%. See Figure 1. The effect of bus volumes was independent of traffic volume and the proximity of bus stops.

Figure 1. Pedestrian Injury Collision Frequency as a Function of Bus Volumes at Signalized Intersections in San Francsico (Source: SF Department of Public Health, 2013)



[3] http://visionzerosf.org/about/two-year-action-strategy/
[4] http://visionzerosf.org/about/how-are-we-doing/
[5] Vision Zero San Francisco, Two-Year Action Strategy, Eliminating Traffic Deaths by 2024, p. 5 (Feb. 2015), *available at* http://www.joomag.com/magazine/vision-zero-san-francisco/0685197001423594455?short.
[6] http://visionzerosf.org/vision-zero-in-action/educating-the-public/
[7] San Francisco Dept. of Health. Modeling Vehicle-Pedestrian Injury collisions at Signalized Intersections: A Health Forecasting Approach to Informing Pro-active Pedestrian Safety Improvements, Fall 2013.

The City assumes that under the Shuttle Project, the number of shuttles will increase by 41% from pre-pilot levels, but the Project itself allows for an unlimited increase in the number of shuttles. Based on the City's own study, this increase in bus volume will create potentially hazardous conditions for pedestrians. A CEQA review is required to study and mitigate this significant environmental impact.

According to the Exemption Report, pedestrian safety impacts from commuter shuttles "were one of the primary reasons that the Commuter Shuttle Program, upon implementation, would include identifying shuttle zones that may be moved from the near side of the intersection to the far side of the intersection." Exemption Report, p. 15. But without a CEQA analysis, nothing in the Shuttle Project ***requires*** the City to identify or move any shuttle zones to protect pedestrians. Under CEQA, the City would be required to implement all feasible mitigation measures, such as moving the location of shuttle zones to protect pedestrians.

2. The Shuttle Project presents an unusual circumstance that may result in significant air quality impacts.

When a project has some feature that distinguishes it from others in the exempt class, to render the significant effect exception applicable, one need only show a reasonable possibility of a significant effect due to that unusual circumstance." *Berkeley Hillside*, 60 Cal.4th 1086, 1105 Even if Petitioners had not presented evidence that the Shuttle Project *will* have significant environmental impacts, the unusual circumstances exception would still apply because four characteristics of the Shuttle Project distinguish it from other projects in the exempt class, and these characteristics create environmental risks not generally present for Class 8 projects.

i. The Shuttle Project is unusual compared to other Class 8 projects.

The Shuttle Project is unusual compared to other Class 8 projects for three reasons. First, the Shuttle Project is unusual because it is illegal. The Shuttle Project presents an unusual circumstance because actions taken to assure the maintenance, restoration, enhancement or protection of the environment do not normally authorize activity that is illegal under state law. There are no other Class 8 projects that authorize illegal activity. The court in *Azusa* held that the fact that a project violated state law was an unusual circumstance. *Azusa*, 52 Cal.App.4th at 1208-09 (violation of state water code was unusual circumstance).

Second, the large scale, and ability for unlimited growth allowed under the Shuttle Project are unusual circumstances that differ from other Class 8 projects. The Shuttle Project does not limit the number of commuter shuttles that may apply for and receive permits to operate commuter shuttles in the City, and there is no limit on the number of shuttle stops that the City may approve at Muni zones around the City. Since the Pilot Project began, daily commuter shuttle stop-events have increased nearly 30%. The City predicts that the Shuttle Project will continue to increase in scale, with stop events increasing by an additional 29% and the number of shuttles increasing by an estimated 41%. But the Project puts no limit on its growth, allowing for an unlimited number of additional shuttles, additional stop locations, and additional stop-events per day. Each new commuter shuttle and each new commuter stop creates new risks and

health hazards, and increases the Project's environmental impacts.

Finally, the Shuttle Project also presents an unusual circumstance because actions for the protection of the environment do not ordinarily cause impacts to human health,[8] but the Shuttle Project does. The Shuttle Project creates increased hazards for pedestrians and bicyclists, and increases the cancer risk of those people living near shuttle stops.

ii. There is a reasonable possibility that the Shuttle Project will have a significant air quality impact due to unusual circumstances.

The expert analysis conducted by Soil, Water, Air Protection Enterprise ("SWAPE"), attached hereto as Exhibit B, indicates that the City's air quality analysis is flawed, and that the Shuttle Project's diesel engine exhaust will likely have a significant local air quality impact, causing increased cancer rates above the threshold of significance.

According to SWAPE, the air quality assessment fails to adequately evaluate the Project's health risk impacts for a number of reasons. First, the analysis fails to account for the 41% growth in participating shuttles that is anticipated by the City under the Shuttle Project. SWAPE Comment, p. 2. Second, the analysis failed to account for the increased stop-events that will occur because of the requirement that limits permitted shuttles longer than 35 feet to arterial streets. *Id.* at 3. Finally, the analysis is flawed because there is no evidence that supports the City's estimate that the Project growth will be limited to 41%, when the Project allows for unlimited growth in shuttles, stop locations, and stop-events. The diesel emissions from commuter shuttles "will most likely be much higher than anticipated and result in an increased health risk, potentially above the level of significance." *Id*. at 2. This potentially significant impact must be fully evaluated and mitigated under CEQA.

D. The City Improperly Relied on Mitigation Measures in Finding the Shuttle Project Exempt.

In finding the Shuttle Project exempt, the City improperly relied on mitigation measures.[9] The City's conclusion that the Project will not result in adverse impacts is founded on dozens of

[8] Impacts to human health are significant under CEQA. CEQA § 21083(b)(3) provides that a project has significant impacts if it "will cause substantial adverse effects on human beings, either directly or indirectly."

[9] Under the CEQA Guidelines, "mitigation" includes: "(a) Avoiding the impact altogether by not taking a certain action or parts of an action. [¶] (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation. [¶] (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment. [¶] (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. [¶] (e) Compensating for the impact by replacing or providing substitute resources or environments." CEQA Guidelines, § 15370.

conditions that have been applied to mitigate and reduce the possibility of adverse environmental impacts.

In deciding whether or not a categorical exemption may apply, an agency many not rely on mitigation measures as a basis for determining that a project is categorically exempt or that one of the significant effects exceptions does not apply. *Salmon Protection & Watershed Network v. County of Marin* (2004) 125 Cal.App.4th 1098, 1102 ("*SPAWN*"); *Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1200. If mitigation measures are needed to avoid significant impacts, then at a minimum a mitigated negative declaration must be prepared. An agency must decide whether a project is eligible for a categorical exemption as part of its preliminary review of the project, not in the second phase when mitigation measures are evaluated. *Azusa*, 52 Cal.App.4th at 1198-1200. If a project will have a significant effect on the environment, CEQA review must occur, and only then are mitigation measures relevant. *SPAWN*, 125 Cal.App.4th at 1102; *Berkeley Hillside*, 60 Cal.4th at 1105.

The court in *S.P.A.W.N.* and *Azusa* both held that an agency cannot evade the procedural and informational requirements for a mitigated negative declaration of an EIR by imposing mitigation measures to make a project fit within a categorical exemption. Instead, if there is a reasonable possibility that the project does not fit within the exemption or will have a significant impact without the mitigation measures, an agency cannot rely on a categorical exemption. *S.P.A.W.N.*, 125 Cal.App.4th at 1107; *Azusa*, 52 Cal.App.4th at 1199-1200.

In *S.P.A.W.N*, an agency found that the proposed construction of a home was categorically exempt under CEQA based on an exemption for single-family homes, despite the fact that the home was adjacent to a protected anadromous fish stream of "critical concern." *S.P.A.W.N.*, 125 Cal.App.4th at 1106. In finding the exemption applicable, the agency relied on proposed mitigation measures including drainage features for erosion and sediment control. *Id.* at 1106-07. The court set aside the exemption stating:

> Reliance upon mitigation measures (whether included in the application or later adopted) involves an evaluative process of assessing those mitigation measures and weighing them against potential environmental impacts, and that process must be conducted under established CEQA standards and procedures for EIRs [(environmental impact reports)] or negative declarations.

Id. at 1108. The court further stated:

> [T]here are sound reasons for precluding reliance upon mitigation measures at the preliminary stage of determining eligibility for a categorical exemption. Regulatory guidelines dealing with the environmental review process under CEQA 'contain elaborate standards – as well as significant procedural requirements – for determining whether proposed mitigation will adequately protect the environment and hence make an EIR unnecessary; in sharp contrast, the Guidelines governing preliminary review do not contain any requirements that expressly deal with the evaluation of mitigation measures.'

> [Citation.] An agency should not be permitted to evade standards governing the preparation of a mitigated negative declaration 'by evaluating proposed mitigation measures in connection with the significant effect exception to a categorical exception.' [Citation.]"

Id.

Here, the City has included dozens of mitigation measures as part of the Project, but has done so outside of the CEQA framework for determining if those mitigation measures will adequately protect the environment.

Throughout the entire CEQA exemption analysis, the City relies on numerous mitigation measures, specifically meant to mitigate the environmental impacts of the Shuttle Project, as bases for finding the Project exempt, and for finding that it will not have a significant impact.

For example, the SFMTA supports its Class 8 exemption finding by citing as "features that will enhance and protect the environment" the "fleet turnover requirements, restrictions on stopping outside of major and minor arterial streets, idling limits, and minor roadway modifications that will improve vehicular, bicycle, and pedestrian safety, decrease conflicts between commuter shuttles and other transportation modes, and improve regional traffic congestion and air emissions." SFMTA Resolution 15-161, Attachment A, California Environmental Quality Act Findings, pp. 1-2. Each of these measures fall squarely within the definition of "mitigation" because they are specifically designed to minimize the Shuttle Project's impact on air quality, pedestrian and bicyclist safety, traffic, and public transportation.

In addition, the following are examples of mitigation measures that were improperly included as part of the project, rather than as mitigation measures:

- Requiring vehicles longer than 35 feet to limit travel to major and minor arterial streets.
- Restrictions on the bus model year and emissions requirements.
- Expansion of sidewalk area for passengers waiting to board Muni vehicles or commuter shuttles.
- Safety improvements to the existing right-of way to "improve the stop network for both commuter shuttles and users of other modes including: boarding islands, pedestrian bulbs, and bus bulbs.
- Increased enforcement and monitoring at shuttle zones which higher number of cases where commuter shuttles blocked Muni vehicles.
- Identification of specific locations and pursue improvements to better manage the movement of vehicles, transit, bicycles, and pedestrians.

Exemption Report, pp. 5-6, 8, 16.

By including these unvetted mitigation measures as part of the Shuttle Project, the City has attempted to conduct "an 'end run' around the governing standards." *Azuza*, 52 Cal.App.4th at 1201. This shortcutting of CEQA requirements subverts the purposes of CEQA by omitting material necessary to informed decision making and informed public participation. It precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences. The City cannot use a notice of exemption for a project which includes mitigation measures to substitute for an EIR or mitigated negative declaration. The City violated CEQA by relying on mitigation measures in finding the Shuttle Project to be exempt.

E. The Illegal Operation of Commuter Shuttles Cannot Form a CEQA Baseline.

It is not proper to include an activity that violates state law in the baseline, yet the City improperly uses the pre-pilot, illegal shuttle operations as the CEQA baseline. Every CEQA document must start from a "baseline" assumption. The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. *Cmtys. for a Better Env't v. So Coast Air Qual. Mgmt. Dist*. (2010) 48 Cal. 4th 310, 321. Section 15125(a) of the CEQA Guidelines states in pertinent part that a lead agency's environmental review under CEQA:

> "…must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time [environmental analysis] is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant."

Using a skewed baseline "mislead(s) the public" and "draws a red herring across the path of public input." *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 656; *Woodward Park Homeowners v. City of Fresno* (2007) 150 Cal.App.4th 683, 708-711.

The San Francisco Superior Court has held that illegal operations resulting from a failure to enforce the law cannot form the CEQA baseline. The court found that:

> "When a lead agency issues an EIR, it cannot include activities allowed by the agency's complete non-enforcement into the baseline . . . .
>
> "Neither the Guidelines nor case law allows an EIR to set an illusory no-enforcement baseline that absorbs all ongoing illegal actions and ignores the stricter limitations imposed by a new statutory landscape. Although generally the baseline must include the effects of prior illegal activity, the situation is different when an agency has a concurrent, present responsibility to remedy that prior illegality."

Klamath Riverkeeper v. Cal. Dept. of Fish & Game, San Francisco Superior Court No. CPF-09-509915 (Apr. 20, 2011, Goldsmith, J.)

An agency may not fail to enforce the law, and then use that lack of enforcement to form the CEQA baseline. *Id*. Since the pre-pilot shuttle operations involved illegal "pirate shuttles" which violate state law, the pre-pilot shuttle operations cannot form the CEQA baseline. *League to Save Lake Tahoe v. Tahoe Reg. Planning Agency* (E.D. Cal. 2010) 739 F. Supp. 2d 1260.

II. THE STATE VEHICLE CODE PREEMPTS THE SHUTTLE PROJECT.

As was the case with the commuter shuttle pilot program, the California Vehicle Code preempts the Shuttle Project, rendering it illegal. California Vehicle Code § 22500(e) provides that:

> No person shall stop, park, or leave standing any vehicle whether attended or unattended, except when necessary to avoid conflict with other traffic or in compliance with the directions of a peace officer or official traffic control device, in any of the following places:
>
> . . .
>
> (i) Except as provided under Section 22500.5,[10] alongside curb space authorized for the loading and unloading of passengers of a bus engaged as a common carrier[11] in local transportation when indicated by a sign or red paint on the curb erected or painted by local authorities pursuant to an ordinance.

In direct conflict with the State Vehicle Code's prohibition against private buses stopping in public "red-curb" bus stops, the Shuttle Project expressly ***allows*** the same action.[12] The Shuttle Project provides that a shuttle bus bearing a valid permit placard is allowed to stop at any stop designated under the program, including designated red curbs. Transportation Code Sec. 914(h)(2).

Moreover, California Vehicle Code § 42001.5 imposes a minimum $250.00 fine on any person convicted of violating Vehicle Code § 22500. Vehicle Code § 42001.5(b) provides that the fine cannot be suspended, except that the court can waive anything above $100.00, meaning the minimum fine allowed under state law is $100.00. In contrast, the Shuttle Project allows private shuttle operators to stop in public bus stops if they make a payment of a few dollars, an action that is in direct conflict with California law. Transportation Code Sec. 902.

---

[10] Vehicle Code § 22500.5 refers to school buses owned by or operated for a public school district.

[11] Section 211 of the Cal. Public Utilities Code defines "common carriers" as entities that provide transportation to the public for compensation, and the City acknowledges that this does not include the private commuter shuttle buses at issue in this action. AR272.

[12] A statutory exception to this general rule exists, allowing vehicles to stop at each place listed in section 22500 if done "when necessary to avoid conflict with other traffic or in compliance with the direction of a peace officer or official traffic control device."[12] Vehicle Code § 22500. None of these exceptions apply here.

The California Supreme Court has held that cities (including charter cities) may not enact ordinances that conflict with the State Vehicle Code, because the Vehicle Code expressly preempts local regulation. *O'Connell v. City of Stockton* (2007) 41 Cal.4th 1061, 1074. The Supreme Court noted that Vehicle Code section 21 states: "Except as otherwise expressly provided, the provisions of this code are applicable and uniform throughout the State and in all counties and municipalities therein, and no local authority shall enact or enforce any ordinance on the matters covered by this code unless expressly authorized herein." Since the Commuter Shuttle Project expressly allows private buses to stop in public bus stops, and since this action is expressly prohibited by State law, the City policy is preempted by state law and is unlawful.

III. CONCLUSION

Appellants expressly reserve the right to submit additional written and oral comments, and additional evidence in support of this Appeal to the City and Board of Supervisors up to and including at the final hearing on this Appeal and any and all subsequent permitting proceedings or approvals undertaken by the City or any other permitting agency for the Project. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203.

Thank you for your consideration of this Appeal. Please include this letter in the Administrative Record for the Commuter Shuttle Project.

Sincerely,

Rebecca L. Davis
Richard T. Drury
Lozeau Drury LLP

Enclosures

CC: Environmental Review Officer
(pursuant to SF Administrative Code § 31.16(b)(1))

EXHIBIT A

Tom Brohard and Associates

January 13, 2016

Mr. Richard Drury, Attorney at Law
Lozeau Drury LLP
410 12th Street, Suite 250
Oakland, CA 94607

SUBJECT: Commuter Shuttle Program - Exemption from CEQA Review

Dear Mr. Drury:

I, Tom Brohard, P.E., previously reviewed the San Francisco Municipal Transportation Agency (SFMTA) Board of Directors Resolution No. 14-023 which proposed an 18 month pilot, permit program for private commuter shuttle busses as well as other background materials. My March 29, 2014 letter (enclosed) summarized several traffic issues and concerns regarding the Pilot Program.

As requested, I have reviewed the Permanent Commuter Shuttle Program, the October 2, 2015 Evaluation Report (Evaluation) for the Commuter Shuttle Pilot Program as well as the October 22, 2015 San Francisco Planning Department's "Certificate of Determination - Exemption from Environmental Review". The data collected encompasses only the first 12 of the 18 months in the Pilot Program. During the data collection, several traffic impacts and issues have been identified but they have not been studied or addressed. Further study must be made to identify, analyze, evaluate, and mitigate various traffic issues and impacts before the Commuter Shuttle Program is finalized.

Traffic Issues and Concerns

Based on my review, the SFMTA's Commuter Shuttle Program must be modified to address the following traffic issues and environmental impacts as follows:

1) Data Is Incomplete – The 18 month Pilot Program was approved in August 2014 and was scheduled to run through January 2016. According to Page 5 of the Evaluation, one of the primary objectives of the Pilot Program was to "Gather data regarding shuttle activity in the City." Before the Pilot Program, SFMTA did not understand the scope of the problems and issues associated with commuter shuttles. During the time covered by the Evaluation, changes have been made in the Program such as relocation of a few commuter shuttle bus stops from near-side to far-side as well as from local streets to arterial streets. Most of the collected data covers 12 months from August 2014 through July 2015 rather than the entire 18 months planned for the Pilot Program. Some comparisons in the Evaluation cover different time periods, perhaps to cast the numbers in a better light.

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885 Fax (760) 398-8897
Email tbrohard@earthlink.net

The Pilot Program required all shuttle operators to provide real-time data on shuttle stop events and shuttle vehicle movements. Page 34 of the Evaluation notes some operators have failed to provide data regularly and accurately. After more than a year into the Pilot Program, the real-time vehicle data is still not being received completely or accurately from all operators.

2) Evaluation Skews the Data - Pages 6 and 7 of the Evaluation appear to distort the data, draw untimely conclusions or provide meaningless comparisons without further explanation as follows:

   a) "Shuttle dwell times between June 2014 and June 2015 increased from 58 to 62 seconds." With all of the changes and with the rapid increase in the number of shuttles particularly later in 2015, the data collected during the pre-pilot and pilot programs during June likely does not represent today's dwell times. Dwell time comparisons must be made to current data.

   b) The number of shuttle busses has increased dramatically above the 30% shown in the Evaluation. The impact on shuttle dwell times caused by the significant 41% increase in shuttles from September 2014 to October 2015 has not been reported in the Evaluation as it occurred after June 2015. In addition, there is no limit on either the number of commuter shuttles that can participate in the Program or on the number of shuttle stops. For future forecasts and analysis, more shuttles and more stops will create even more congestion and delay in the City. By limiting its analysis of environmental impacts to a 41% increase in shuttles from pre-pilot to the permanent program, the Planning Department has not evaluated the impact of the entire scope of the Project, since the Project allows for unlimited growth. In addition, the Planning Department merely "assumes" the growth in shuttles under the Project will be limited to 41%, without providing any evidence to support this claim.

   c) "Instances of shuttles blocking Muni have decreased by 35% from the pre-pilot to pilot data collection periods." Without further discussion, this percentage and the statement have no real meaning. What is the level of delay caused by the current amount of blocking? Only 12 of the 20 stops observed in June 2015 experienced no blocking – 60% is impressive but does the same percentage relate to all 200 stops in the Program?

   d) "Shuttles block driver's views of pedestrians or block crosswalks less than 2% of the time that they stop." While the percentage is small, it is really meaningless. The Program should have a goal to totally eliminate blocked views of pedestrians and crosswalks by relocating the stops to open up visibility of pedestrians and crosswalks.

e) "Shuttles block travel lanes and bike lanes about 35% of the time that they stop." When shuttles block travel lanes and bicycle lanes, the potential for collisions significantly increases as drivers cannot see each other in order to take evasive action. Shuttles blocking travel lanes also increase delay to motorists. Levels of congestion and levels of service have not been measured or quantified when shuttles block adjacent travel lanes.

f) "Between August 2014 and the end of May 2015, enforcement officers issued an average of 103 citations per month." At that level, ten enforcement personnel assigned to monitor the commuter shuttles in peak hours were writing 10 citations per officer per month, or about one citation every other weekday. Obviously, the officers were not issuing citations as they should. Page 34 of the Evaluation claims there are limited enforcement resources and that they are unable to keep shuttles out of Muni and other no stopping zones. To the contrary, it appears that the number of citations written by the shuttle enforcement team (one every other day) is dismal. The level of enforcement must be increased to reduce double parking and other illegal practices that block traffic lanes, bike lanes, and crosswalks.

3) Traffic, Transit, and Safety Issues Have Not Been Addressed – Page 18 of the Evaluation states "A chief objective of the Pilot Program was to dedicate curb space for loading and unloading of private shuttles in order to minimize commuter shuttles' conflict with Muni and other users of the streets. Delays to Muni, boardings away from the curb, traffic back-ups, blocking bicycle lanes, or blocking crosswalks or pedestrian visibility may occur when multiple vehicles (either more than one shuttle or a shuttle bus and a Muni bus) are competing for limited curb space, or when shuttle drivers do not take care to pull entirely out of the travel lane to load or unload."

   While the Evaluation found that commuter shuttles could account for up to 9.5% of the traffic volumes on certain streets, no capacity analyses were conducted and no estimate of delay resulting from increased congestion was calculated. No comprehensive formal study has been conducted on the significant impacts of shuttles on pedestrian and bicycle safety, on Muni passengers with disabilities, on reducing capacity by blocking traffic lanes, and on increased delay and response times for emergency vehicles. Without such a study, it is impossible to support the conclusion that these evaluations are unnecessary and that the Program is exempt from CEQA review because it will not have a significant impact on traffic.

4) Exemption from CEQA Review Cannot Be Supported – The October 22, 2015 Report prepared by the San Francisco Planning Department indicates that the Commuter Shuttle Program is exempt from CEQA review. Traffic impacts are

discussed on Pages 13 through 16. The conclusions reached in the Report together with my comments are reviewed in the following paragraphs:

a) Transportation – Page 13 states "The relatively minor increase in shuttle activity, compared to the overall peak hour volumes, would not substantially degrade traffic operations and would not have a significant impact on traffic operations at arterial roadways." No traffic data or capacity calculations are presented to support this statement. To the contrary as indicated above, shuttle volumes account for 9.5% of the traffic volume on certain streets. If a complete traffic study was conducted, this may be shown to be a significant impact under CEQA. The statement that traffic operations would not be significantly impacted cannot be supported by the data presented because no study was conducted, and the conclusion that there will be no significant impact is fatally flawed.

b) Transit – Page 14 presents limited data from the first 12 months of the Pilot Program and concludes "...the proposed project would not result in a significant impact related to transit operations." The data presented does not include the last 6 months of the Pilot Program when conditions have changed dramatically from August 2014 including a 41% increase in shuttle volumes. The statement that transit operations would not be significantly impacted cannot be supported by the data presented and the conclusion is fatally flawed.

c) Bicycles – Page 15 presents generalities and concludes that potential conflicts have been addressed. The Evaluation indicated that bicycle lanes were blocked 35% of the time by shuttle busses. While a few stops have been relocated or lengthened, the statement that bicycles would not be significantly impacted cannot be supported by the data presented and the conclusion is fatally flawed.

   Furthermore, the City's Transportation Significance Criteria state that "The project would have a significant effect on the environment if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas." Shuttle busses blocking bicycle lanes would cause bicyclists to sharply veer into vehicle travel lanes to avoid the shuttle bus at the stop, creating a potentially hazardous condition, a significant impact as defined by the City's own Transportation Significance Criteria.

d) Pedestrians – Page 15 downplays the conflicts that occur between shuttle busses and pedestrians, and attempts to dismiss blocking of crosswalks as very infrequent. The Report suggests that additional stops could be relocated or lengthened but there is no program to do this. The statement

that pedestrians would not be significantly impacted cannot be supported by the data presented and the conclusion is fatally flawed.

e) Loading – Page 16 states that commercial loading zones (yellow curb) would not be eliminated as part of the Program. The Report fails to indicate that California Vehicle Code (CVC) Section 21458 a) allows stopping in commercial loading zones for the purpose of loading or unloading passengers or freight. The statement that commercial loading zones would not be significantly impacted cannot be supported without any data presented (since the CVC allows passenger loading in commercial loading zones) and the conclusion is fatally flawed.

f) Conclusion – Page 25 states that "The proposed project would not substantially increase traffic on the existing street system and no significant environmental impacts would occur." As pointed out throughout this letter, there are numerous instances where there will be significant impacts. SFMTA has not properly studied, evaluated, or analyzed the Proposed Project in regard to potentially significant impacts to traffic, transit, bicycles, pedestrians, and loading.

In summary, further study must be undertaken to properly identify the traffic impacts of the SFMTA's Commuter Shuttle Program. As discussed in this letter, there is at least a "fair argument" that this Program will have adverse environmental impacts that have not been properly disclosed, analyzed, or mitigated. Each of these significant impacts must be addressed by proposing feasible and effective mitigation measures. If you have questions regarding these comments, please call me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard

Tom Brohard, PE
Principal

Enclosure
March 29, 2014 Letter

Tom Brohard and Associates

March 29, 2014

Mr. Richard Drury, Attorney at Law
Lozeau Drury LLP
410 12th Street, Suite 250
Oakland, CA 94607

SUBJECT: San Francisco Municipal Transportation Agency (SFMTA) Commuter Shuttle Policy and Pilot Program – Traffic Issues and Concerns

Dear Mr. Drury:

Tom Brohard, P.E., has reviewed the San Francisco Municipal Transportation Agency (SFMTA) Board of Directors Resolution No. 14-023 which proposes an 18 month pilot, permit program allowing private shuttle busses to use up to 200 Muni bus stops to pick up and discharge over 35,000 passengers each day. I have also reviewed other background material including the San Francisco County Transportation Authority's June 28, 2011 Strategic Analysis Report entitled "The Role of Shuttle Services in San Francisco's Transportation System" and the July 19, 2013 presentation to SFMTA entitled "Private Commuter Shuttle Policy Draft Proposal".

Further study must be undertaken to properly identify the traffic impacts of the SFMTA's Commuter Shuttle Policy and Pilot Program. Until the issues and concerns raised in this letter are addressed, there is at least a "fair argument" that the Commuter Shuttle Policy and Pilot Program proposed by SFMTA in the City of San Francisco may have adverse and significant environmental impacts that have not been properly disclosed, analyzed, and mitigated.

Education and Experience

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 40 years of professional engineering experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and now serve as the City Traffic Engineer for the City of Indio and as Consulting Transportation Engineer for the Cities of Big Bear Lake and San Fernando. I have extensive experience in traffic engineering and transportation planning. During my career in both the public and private sectors, I have reviewed many environmental documents and traffic studies, with only a few of these shown on the enclosed resume.

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885 Fax (760) 398-8897
Email tbrohard@earthlink.net

Mr. Richard Drury
SFMTA Commuter Shuttle Policy and Pilot Program – Traffic Issues
March 29, 2014

Traffic Issues

Based on my review, there is at least a "fair argument" that the SFMTA's Commuter Shuttle Policy and Pilot Program (Program) in the City of San Francisco will have significant traffic and other environmental impacts as follows:

1) Program Will Likely Increase the Number of Shuttles - With the single exception of school busses identified in CVC Section 22500.5, CVC Section 22500 states that "No person shall stop, park, or leave standing any vehicle whether attended or unattended, except when necessary to avoid conflict with other traffic or in compliance with the directions of a peace officer or official traffic control device, in any of the following places...(i) alongside curb space authorized for the loading and unloading of passengers of a bus engaged as a common carrier in local transportation when indicated by a sign or red paint on the curb erected or painted by local authorities pursuant to an ordinance."

   CVC Section 42001.5 imposes a minimum $250 fine on a person "convicted" of violating CVC Section 22500. CVC Section 42001.5(b) provides that the fine cannot be suspended, except that the court can waive anything above $100. In other words the minimum fine allowed under state law is $100. This financial penalty is significant and it is likely that it currently deters other law-abiding shuttle operators from using Muni bus stops.

   SFMTA claims that the Commuter Shuttle Policy and Pilot Program will not increase impacts since the shuttles are already operating illegally. However, the program makes legal what has been illegal. It also allows any shuttle operator to apply for a permit to participate. At least some shuttle companies would not want to operate a pirate shuttle program at risk of significant penalties. Since SFMTA's Commuter Shuttle Policy and Pilot Program makes it legal for private shuttles to use public bus stops, more companies with even more private shuttles are likely to participate. This will create significant traffic impacts by increasing congestion at Muni bus stops, an extremely likely consequence that has not be envisioned, evaluated or analyzed by SFMTA.

2) Program May Increase Idle Times At Muni Stops - When shuttle stops at Muni bus stops were illegal, private shuttles often tried to get in and out of the public bus stops as quickly as possible to avoid being cited. According to SFMTA, the average dwell time for a private shuttle is up to 60 seconds whereas the average dwell time for a Muni bus is about 20 seconds. Now that the Program is legal, private shuttles may idle even longer to pick up passengers, particularly without risking being cited. While the Program suggests that private shuttles move forward to the front of the Muni bus stop, this will not occur when shuttles are already actively loading or unloading.

If more shuttles are already loading or unloading passengers when the Muni bus arrives, then the already identified conflicts with Muni busses, general traffic, pedestrians, and cyclists will be compounded by additional double parking and idling. Additional shuttles could also easily exceed the capacity of the Muni bus stop locations, creating additional impacts. Each of these occurrences would increase diesel emissions at the Muni bus stop locations and would also create pedestrian impacts related to blocking public bus access to the stops as well as additional safety issues.

In summary, further study must be undertaken to properly identify the traffic impacts of the SFMTA's Commuter Shuttle Policy and Pilot Program. As discussed in this letter, there is at least a "fair argument" that this will have adverse environmental impacts that have not been properly disclosed, analyzed, or mitigated. Each of these significant impacts must be addressed by proposing feasible and effective mitigation measures. If you have questions regarding these comments, please call me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard

Tom Brohard, PE
Principal

Enclosure
Resume

Tom Brohard and Associates

March 29, 2014

Mr. Richard Drury, Attorney at Law
Lozeau Drury LLP
410 12th Street, Suite 250
Oakland, CA 94607

SUBJECT: San Francisco Municipal Transportation Agency (SFMTA) Commuter Shuttle Policy and Pilot Program – Traffic Issues and Concerns

Dear Mr. Drury:

Tom Brohard, P.E., has reviewed the San Francisco Municipal Transportation Agency (SFMTA) Board of Directors Resolution No. 14-023 which proposes an 18 month pilot, permit program allowing private shuttle busses to use up to 200 Muni bus stops to pick up and discharge over 35,000 passengers each day. I have also reviewed other background material including the San Francisco County Transportation Authority's June 28, 2011 Strategic Analysis Report entitled "The Role of Shuttle Services in San Francisco's Transportation System" and the July 19, 2013 presentation to SFMTA entitled "Private Commuter Shuttle Policy Draft Proposal".

Further study must be undertaken to properly identify the traffic impacts of the SFMTA's Commuter Shuttle Policy and Pilot Program. Until the issues and concerns raised in this letter are addressed, there is at least a "fair argument" that the Commuter Shuttle Policy and Pilot Program proposed by SFMTA in the City of San Francisco may have adverse and significant environmental impacts that have not been properly disclosed, analyzed, and mitigated.

Education and Experience

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 40 years of professional engineering experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and now serve as the City Traffic Engineer for the City of Indio and as Consulting Transportation Engineer for the Cities of Big Bear Lake and San Fernando. I have extensive experience in traffic engineering and transportation planning. During my career in both the public and private sectors, I have reviewed many environmental documents and traffic studies, with only a few of these shown on the enclosed resume.

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885 Fax (760) 398-8897
Email tbrohard@earthlink.net

Mr. Richard Drury
SFMTA Commuter Shuttle Policy and Pilot Program – Traffic Issues
March 29, 2014

Traffic Issues

Based on my review, there is at least a "fair argument" that the SFMTA's Commuter Shuttle Policy and Pilot Program (Program) in the City of San Francisco will have significant traffic and other environmental impacts as follows:

1) Program Will Likely Increase the Number of Shuttles - With the single exception of school busses identified in CVC Section 22500.5, CVC Section 22500 states that "No person shall stop, park, or leave standing any vehicle whether attended or unattended, except when necessary to avoid conflict with other traffic or in compliance with the directions of a peace officer or official traffic control device, in any of the following places...(i) alongside curb space authorized for the loading and unloading of passengers of a bus engaged as a common carrier in local transportation when indicated by a sign or red paint on the curb erected or painted by local authorities pursuant to an ordinance."

   CVC Section 42001.5 imposes a minimum $250 fine on a person "convicted" of violating CVC Section 22500. CVC Section 42001.5(b) provides that the fine cannot be suspended, except that the court can waive anything above $100. In other words the minimum fine allowed under state law is $100. This financial penalty is significant and it is likely that it currently deters other law-abiding shuttle operators from using Muni bus stops.

   SFMTA claims that the Commuter Shuttle Policy and Pilot Program will not increase impacts since the shuttles are already operating illegally. However, the program makes legal what has been illegal. It also allows any shuttle operator to apply for a permit to participate. At least some shuttle companies would not want to operate a pirate shuttle program at risk of significant penalties. Since SFMTA's Commuter Shuttle Policy and Pilot Program makes it legal for private shuttles to use public bus stops, more companies with even more private shuttles are likely to participate. This will create significant traffic impacts by increasing congestion at Muni bus stops, an extremely likely consequence that has not be envisioned, evaluated or analyzed by SFMTA.

2) Program May Increase Idle Times At Muni Stops - When shuttle stops at Muni bus stops were illegal, private shuttles often tried to get in and out of the public bus stops as quickly as possible to avoid being cited. According to SFMTA, the average dwell time for a private shuttle is up to 60 seconds whereas the average dwell time for a Muni bus is about 20 seconds. Now that the Program is legal, private shuttles may idle even longer to pick up passengers, particularly without risking being cited. While the Program suggests that private shuttles move forward to the front of the Muni bus stop, this will not occur when shuttles are already actively loading or unloading.

If more shuttles are already loading or unloading passengers when the Muni bus arrives, then the already identified conflicts with Muni busses, general traffic, pedestrians, and cyclists will be compounded by additional double parking and idling. Additional shuttles could also easily exceed the capacity of the Muni bus stop locations, creating additional impacts. Each of these occurrences would increase diesel emissions at the Muni bus stop locations and would also create pedestrian impacts related to blocking public bus access to the stops as well as additional safety issues.

In summary, further study must be undertaken to properly identify the traffic impacts of the SFMTA's Commuter Shuttle Policy and Pilot Program. As discussed in this letter, there is at least a "fair argument" that this will have adverse environmental impacts that have not been properly disclosed, analyzed, or mitigated. Each of these significant impacts must be addressed by proposing feasible and effective mitigation measures. If you have questions regarding these comments, please call me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard

Tom Brohard, PE
Principal

Enclosure
Resume

Tom Brohard, PE

Licenses: 1975 / Professional Engineer / California – Civil, No. 24577
1977 / Professional Engineer / California – Traffic, No. 724
2006 / Professional Engineer / Hawaii – Civil, No. 12321

Education: 1969 / BSE / Civil Engineering / Duke University

Experience: 40+ Years

Memberships: 1977 / Institute of Transportation Engineers – Fellow, Life
1978 / Orange County Traffic Engineers Council - Chair 1982-1983
1981 / American Public Works Association – Life Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. Since May 2005, he has served as Consulting City Traffic Engineer for the City of Indio. He also currently provides "on call" Traffic and Transportation Engineer services to the Cities of Big Bear Lake, Mission Viejo, and San Fernando. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

- Bellflower ..... 1997 - 1998
- Bell Gardens ..... 1982 - 1995
- Huntington Beach ..... 1998 - 2004
- Lawndale ..... 1973 - 1978
- Los Alamitos ..... 1981 - 1982
- Oceanside ..... 1981 - 1982
- Paramount ..... 1982 - 1988
- Rancho Palos Verdes ..... 1973 - 1978
- Rolling Hills ..... 1973 - 1978, 1985 - 1993
- Rolling Hills Estates ..... 1973 - 1978, 1984 - 1991
- San Marcos 1981
- Santa Ana ..... 1978 - 1981
- Westlake Village ..... 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over $5 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

In his service to the City of Indio since May 2005, Tom has accomplished the following:

- Oversaw preparation and adoption of the Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain constraints. Reviewed Riverside County's updated traffic model for consistency with the adopted City of Indio Circulation Plan.

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street over I-10 as well as justifications for protected-permissive left turn phasing at I-10 on-ramps, the first such installation in Caltrans District 8 in Riverside County; reviewed plans and provided assistance during construction of a $1.5 million project to install traffic signals and widen three of four ramps at the I-10/Jackson Street Interchange under a Caltrans encroachment permit.

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Monroe Street over I-10 as well as striping plans to install left turn lanes on Monroe Street at the I-10 Interchange under a Caltrans encroachment permit; reviewed plans to install traffic signals and widen three of four ramps at the I-10/Monroe Street Interchange.

- Reviewed traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvement of the I-10 Interchanges at Jefferson Street, Monroe Street, Jackson Street and Golf Center Parkway.

- Oversaw preparation of plans, specifications, and contract documents and provided construction assistance for over 40 traffic signal installations and modifications.

- Reviewed and approved over 600 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects.

- Oversaw preparation of a City wide traffic safety study of conditions at all schools.

- Prepared over 500 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping.

- Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 200 street segments.

- Reviewed and approved traffic impact studies for more than 25 major developments.

- Developed the Golf Cart Transportation Program and administrative procedures; implemented routes forming the initial baseline system.

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.

Tom Brohard, PE

Licenses: 1975 / Professional Engineer / California – Civil, No. 24577
1977 / Professional Engineer / California – Traffic, No. 724
2006 / Professional Engineer / Hawaii – Civil, No. 12321

Education: 1969 / BSE / Civil Engineering / Duke University

Experience: 45+ Years

Memberships: 1977 / Institute of Transportation Engineers – Fellow, Life
1978 / Orange County Traffic Engineers Council - Chair 1982-1983
1981 / American Public Works Association – Life Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. Since May 2005, he has served as Consulting City Traffic Engineer for the City of Indio. He also currently provides "on call" Traffic and Transportation Engineer services to the Cities of Big Bear Lake and San Fernando. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

- Bellflower ..... 1997 - 1998
- Bell Gardens ..... 1982 - 1995
- Huntington Beach ..... 1998 - 2004
- Lawndale ..... 1973 - 1978
- Los Alamitos ..... 1981 - 1982
- Oceanside ..... 1981 - 1982
- Paramount ..... 1982 - 1988
- Rancho Palos Verdes ..... 1973 - 1978
- Rolling Hills ..... 1973 - 1978, 1985 - 1993
- Rolling Hills Estates ..... 1973 - 1978, 1984 - 1991
- San Marcos 1981
- Santa Ana ..... 1978 - 1981
- Westlake Village ..... 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over $10 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

In his service to the City of Indio since May 2005, Tom has accomplished the following:

- Oversaw preparation and adoption of the 2008 Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain conditions.

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street and on Monroe Street over I-10 as well as justifications for protected-permissive left turn phasing at I-10 on-ramps, the first such installations in Caltrans District 8 in Riverside County; reviewed plans and provided assistance during construction of both $2 million projects to install traffic signals and widen three of four ramps at these two interchanges under Caltrans encroachment permits.

- Reviewed traffic signal, signing, striping, and work area traffic control plans for the County's $45 million I-10 Interchange Improvement Project at Jefferson Street.

- Reviewed traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvements of the I-10 Interchanges at Jefferson Street, Monroe Street, Jackson Street and Golf Center Parkway.

- Oversaw preparation of plans, specifications, and contract documents and provided construction assistance for over 50 traffic signal installations and modifications.

- Reviewed and approved over 1,200 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects.

- Oversaw preparation of a City wide traffic safety study of conditions at all schools.

- Obtained $47,000 grant from the California Office of Traffic Safety and implemented the City's Traffic Collision Database System. Annually reviews "Top 25" collision locations and provides traffic engineering recommendations to reduce collisions.

- Prepared over 900 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping.

- Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 400 street segments.

- Reviewed and approved traffic impact studies for more than 35 major projects and special events including the annual Coachella and Stagecoach Music Festivals.

- Developed and implemented the City's Golf Cart Transportation Program.

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

January 14, 2016

Rebecca Davis
Lozeau | Drury LLP
410 12th Street, Suite 250
Oakland, CA 94607

Subject: Comments on the SFMTA-Commuter Shuttle Program (Case No. 2015-007975ENV)

Dear Ms. Davis,

We have reviewed the October 22, 2015 Certificate of Determination Exemption from Environmental Review ("Certificate of Exemption"), October 2, 2015 Pilot Program Evaluation Report ("Pilot Program Evaluation Report"), and the October 13, 2015 Final Air Quality Technical Report ("FAQTR") for the Commuter Shuttle Program ("Project"). The Project proposes to implement a Commuter Shuttle Program which would permanently continue and expand upon the 18-month Commuter Shuttle Pilot Program that was implemented in San Francisco between August 2014 and January 2016. This would require issuing permits to eligible commuter shuttle operators for the use of public curb space to pick-up and drop-off passengers, as well as include some capital improvements.

Our review concludes that the Project's air quality assessment fails to adequately evaluate the Project's health risk impacts. First, the health risk assessment fails to account for the 41 percent future project growth and fails to address the lack of a limit on the number of shuttles that could be included in the Project. Second, the health risk assessment fails to consider the risk associated with increased emissions from large buses that will be limited to arterial streets and the increased traffic and stop events that will result.

A Draft Environmental Impact Report (DEIR) should be prepared with an updated health risk assessment that addresses these issues.

Air Quality

Failure to Account for Future Project Growth

According to City's Certificate of Exemption, the health risk at four local impact zones were modeled and analyzed to represent the health risk at any stop under the Program (p. 20). These local impact zones were chosen because they exhibited high volumes of stop events, they represented average or above

average idling times for the commuter shuttle under the Pilot Program, and because they were representative of the geographic diversity and configuration of stops within the City (Certificate of Exemption, p. 20). Table 6 of the Certificate of Exemption indicates that, of the four local impact zones modeled, the Project's highest estimated cancer risk is 5.6 in one million, located at Van Ness Avenue and Union Street (p. 21). However, this determination fails to take into account the projected growth in number of shuttles as well as the additional permissible growth of the Project in future years and thus greatly underestimates the potential cancer risk.

The following assumptions were made in the localized air analysis to determine the health effects: "an increase in the number of stop events that could occur between Pilot and Program conditions (estimated at 29 percent) at locations with a higher volume stop events; the same commuter shuttle engine years (2012 or newer) as mentioned above for criteria air pollutants; commuter shuttle fuel type and idling time; and various methodologies consistent with BAAQMD guidance regarding assessing local risks and hazards" (Certificate of Exemption, p. 21). However, this does not include the expected 41 percent increase in the number of participating shuttles projected by the City. This is unlike the regional air quality analysis, in which overall criteria air pollutant emissions for the Project were estimated and did include the 41 percent growth in their assumptions, as below.

> "Based on the number of commuter shuttle permits (placards) issued prior to the implementation of the Pilot and the Commuter Shuttle Program (beginning in 2016), SFMTA estimates that participation in the Program could increase by 41 percent" (Certificate of Exemption, p. 18).

This increase in participation in the Program will result in a growth in the number of shuttles within San Francisco and will result in an increase in emissions from the shuttles. By failing to account for the health effects of DPM emissions from 41 percent more shuttles within the City, the health risk is greatly underestimated.

Additionally, the Project does not propose a limit to the number of commuter shuttles that can be incorporated to the program. Without a limitation, the growth in the number of shuttle/buses could potentially grow beyond the 41 percent predicted. According to the Pilot Program Evaluation Report, from June 2014 before the start of the program until July 2015, daily stop events by shuttles increased by 29 percent (p. 6). In addition, between those dates, the number of zones in the network increased by 23 percent, and the shuttle frequency at the zones increased by nearly 80 percent (Pilot Program Evaluation Report, p. 11 and p. 21). Major zones such as Lombard Street, Van Ness Avenue, and Castro Street had shuttle activity double or even triple from prior to the start of the pilot program to during the pilot program (Pilot Program Evaluation Report, p. 21). These statistics clearly show that the program grew at a very fast rate in only approximately one year. As a result, if the program is continued without a limitation on the number of buses, the growth could potentially be much greater than the assumed 41 percent. This scenario would then result in an unknown increase of emissions, much greater than what has been calculated. Because there is a potential for the Project to grow and put an unlimited number of shuttle buses within the City, the increased DPM emissions from the buses will most likely be much higher than anticipated and result in an increased health risk, potentially above the level of significance.

Without taking into account this uncertainty, it is inappropriate to assume that the health risk of the Project is below the level of significance.

Increase in Stops

The Project, unlike the Pilot Program, will limit permitted shuttles longer than 35 feet to travel only on designated major and minor arterial streets (Certificate of Exemption, p. 5). As a result, arterial streets will have increased shuttle activity and will experience an increase in stop events due to the travel limitations of large buses. Table 3 of the Certificate of Exemption shows how this requirement would increase the number of stop events at four arterial locations closest to the current high-activity level non-arterial locations that would need to be located (see table below) (p. 12).

Table 3. Stop Events at Designated Zones (with Commuter Shuttle Program)

Existing Non-Arterial Zone		Nearest Arterial Zone Alternative				Combined Totals After Relocation	
Existing Non-Arterial Zone (to be relocated)	Stop Events[a]	Nearest Existing Arterial Zone[b]	Stop Events	Existing Arterial Traffic Counts[c]	Shuttle % of Current Traffic Counts	Total Stop Events (after relocation)	Shuttle % of Total Traffic Counts (after relocation)
Castro/25th NW corner, near-side	20.0	24th/Church SW corner, near-side	9.6	342	6%	29.6	9%
Church/Market NE corner, AM/PM white zone	10.3	Castro/Market NE corner, PM white zone	10.3	311	3%	20.5	6%
30th/Church SW corner, flag stop	12.9	San Jose/Dolores NW corner, AM white zone	6.9	1159	1.1%	19.7	1.7%
Townsend/4th South side, Mid-block	22.7	Harrison/Embarcadero, white zone	8.7	341	7%	31.4	9.5%

Source: SFMTA, 2015

Notes:

a – Estimated commuter shuttle stop events per hour

b – Peak hour traffic counts collected by SFMTA in 2009, 2011, and 2012

c – Identified zone with existing shuttle stop where nearest non-arterial stop would be located.

This table shows that for the above zones, stop events will increase by between six to ten stops and that the increase in peak hour traffic volumes will be between 0.6 percent and three percent. While this table shows that stop event and traffic volume will increase as a result of the limitation, these values greatly underestimate the true increase in stop events and traffic volumes at arterial streets.

Table 3 only takes into consideration the current stop events occurring at the non-arterial and arterial streets. It does not take into consideration the stop events that would occur as a result of the 41 percent projected increase in the number of shuttles under the Project. As the Project grows and more shuttles are added, they will have to have stop events throughout the City, many of which will be restricted from using non-arterial streets and must make the stops in arterial streets. With the inclusion of extra shuttles and buses and the restrictions that would require many of the buses to use only arterial streets, stop events and traffic volumes would increase to levels much higher than those demonstrated and described in the Certificate of Exemption.

This is further supported by the Certificate of Exemption that states, "Under the Pilot, the most frequently used zones were observed to have as many as 100 shuttle stop events per day..." (p. 5). These locations include Lombard Street, Van Ness Avenue, Divisadero/Castro Streets, Valencia Street, Union/Powell Streets in North Beach, 24th/25th Streets in the Mission/Noe Valley, 30th Street in Noe Valley, and Townsend/Fourth Street near the Caltrain station (p. 5). If any these locations are already experiencing stops as high as 100 per day, restricting all current and future large buses to arterial streets will just increase the number of stops per day to much higher than 100 per day as well as increase traffic and congestions within the streets. Emissions from buses in traffic, in which the buses are continuously running for an extended period of time, combined with emission from the increased number of buses will result in an overall increase in emissions.

However, the health risk assessment conducted did not take into account the increased emissions resulting from limiting large buses to arterial streets and the increased stop events and traffic that will result from them. All of the local impact zones that were analyzed in the health risk assessment appear to be "Large-Vehicle Approved" (major or minor arterial), according to Attachment B of the Certificate of Exemption. As a result, these locations may be impacted by higher levels of traffic and stops because large buses will not be able to make stops in non-arterial streets nearby. Emissions resulting from the above issues were not included in the assumptions for the health risk assessment and as a result, the health risk is greatly underestimated.

As a result of the issues discussed above, the health risk assessment for the proposed Project greatly underestimates the risk posed to nearby sensitive receptors. A draft environmental impact report should be prepared that includes an updated health risk assessment that incorporates the above issues.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Jessie Jaeger

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St.., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

JESSIE MARIE JAEGER

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Mobile: (530) 867-6202
Office: (310) 452-5555
Fax: (310) 452-5550
Email: jessie@swape.com

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES **B.S. CONSERVATION BIOLOGY & ENVIRONMENTAL SCIENCES** *JUNE 2014*

PROJECT EXPERIENCE

SOIL WATER AIR PROTECTION ENTERPRISE ***SANTA MONICA, CA***

AIR QUALITY SPECIALIST

SENIOR ANALYST: CEQA ANALYSIS & MODELING

- Calculated roadway, stationary source, and cumulative impacts for risk and hazard analyses at proposed land use projects.
- Quantified criteria air pollutant and greenhouse gas emissions released during construction and operational activities of proposed land use projects using CalEEMod and EMFAC2011 emission factors.
- Utilized AERSCREEN, a screening dispersion model, to determine the ambient air concentrations at sensitive receptor locations.
- Organized presentations containing figures and tables comparing results of particulate matter analyses to CEQA thresholds.
- Prepared reports that discuss results of the health risk analyses conducted for several land use redevelopment projects.

SENIOR ANALYST: GREENHOUSE GAS MODELING AND DETERMINATION OF SIGNIFICANCE

- Quantified greenhouse gas (GHG) emissions of a "business as usual" scenario for proposed land use projects using CalEEMod.
- Determined compliance of proposed projects with AB 32 GHG reduction targets, with measures described in CARB's Scoping Plan for each land use sector, and with GHG significance thresholds recommended by various Air Quality Management Districts in California.
- Produced tables and figures that compare the results of the GHG analyses to applicable CEQA thresholds and reduction targets.

PROJECT MANAGER: OFF-GASSING OF FORMALDEHYDE FROM FLOORING PRODUCTS

- Determined the appropriate standard test methods to effectively measure formaldehyde emissions from flooring products.
- Compiled and analyzed laboratory testing data. Produced tables, charts, and graphs to exhibit emission levels.
- Compared finalized testing data to Proposition 65 No Significant Risk Level (NSRL) and to CARB's Phase 2 Standard.
- Prepared a final analytical report and organized supporting data for use as Expert testimony in environmental litigation.
- Participated in meetings with clients to discuss project strategy and identify solutions to achieve short and long term goals.

PROJECT ANALYST: EXPOSURE ASSESSMENT OF CONTAMINANTS EMITTED BY INCINERATOR

- Reviewed and organized sampling data, and determined the maximum levels of arsenic, dioxin, and lead in soil samples.
- Determined cumulative and hourly particulate deposition of incinerator and modeled particle dispersion locations using GIS and AERMOD.
- Conducted risk assessment using guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA).
- Utilized LeadSpread8 to evaluate exposure, and the potential adverse health effects from exposure, to lead in the environment.
- Compared final results of assessment to the Environmental Protection Agency's (EPA) Regional Screening Levels (RSLs).

ACCOMPLISHMENTS

- **Recipient**, Bruins Advantage Scholarship, University of California, Los Angeles ***SEPT 2010 – JUNE 2014***
- **Academic Honoree,** Dean's List, University of California, Los Angeles ***SEPT 2013 – JUNE 2014***
- **Academic Wellness Director**, UCLA Undergraduate Students Associated Council ***SEPT 2013 – JUNE 2014***
- **Student Groups Support Committee Member**, UCLA Undergraduate Students Associated Council ***SEPT 2012 – JUNE 2013***