

PLANNING COMMISSION MEETING
THURSDAY, JANUARY 25, 2018

Documents Received After Published Agenda

PH 18-003

WEST WINTON AVENUE INDUSTRIAL PROJECT

MINANE JAMESON

Miriam Lens

From: Minane Jameson <m77jameson@gmail.com>
Sent: Wednesday, January 24, 2018 12:50 PM
To: Miriam Lens
Cc: Al Mendall; Jay Lee; Jennifer Koney; Mimi
Subject: 2655-2893 West Winton

Hi Miriam,
Plases share with PC.
Thanks,
Minane

Dear Planning Commissioners,

I requested at a recent HASPA meeting that the property being proposed at the W. Winton location include solar. I was told that the builder would make the project solar ready so future tenants could install solar to suit their needs.

I was satisfied with this solution at first, then realized we need to be more proactive in acquiring clean energy locally, especially since hopefully soon East Bay Clean Energy will be up and running and will need to collect clean energy to sell to it's users. My point is this: Why not take advantage of this project that is still in the design phase and that is over 500,000 sf, and insist that solar cover as much of the roof as possible and be installed immediately? Whatever energy the tenant does not use can be sold back to our new green utility....in fact, this arrangement could be very profitable for the tenant (or the owner of the building).

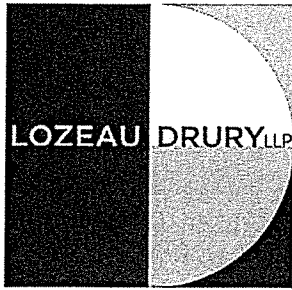
Thank you for considering my request.

Minane Jameson

PH 18-003

WEST WINTON AVENUE INDUSTRIAL PROJECT

RICHARD DRURY, LOZEAU DRURY LLP



T 510.836.4200
F 510.836.4205

410 12th Street, Suite 250
Oakland, Ca 94607

www.lozeaudrury.com
richard@lozeaudrury.com

E-Mail and Hand Delivery

January 25, 2018

City of Hayward
Planning Commission
c/o Sara Buizer, Planning Manager
777 B Street
Hayward, CA 94541
Sara.Buizer@hayward-ca.gov

City of Hayward Planning Department
Attn: Jay Lee
777 B Street
Hayward, CA 94541
jay.lee@hayward-ca.gov

RE: 2695 W. Winton Avenue Industrial Project Initial Study/Mitigated Negative Declaration SCH No. 2017122045

Honorable Members of the City of Hayward Planning Commission:

I am writing on behalf of the Erasamo Estrada and Laborers International Union of North America, Local Union 304 and its members living in and around the City of Hayward ("LIUNA") regarding the Initial Study and Mitigated Negative Declaration (IS/MND) prepared for the 2695 W. Winton Avenue Industrial Project ("Project") (SCH No. 2017122045). After reviewing the IS/MND, along with Wildlife Biologist Dr. Shawn Smallwood, it is clear that there is a "fair argument" that the Project may have unmitigated adverse environmental impacts. An environmental impact report (EIR) is therefore required to analyze these impacts and to propose all feasible mitigation measures to reduce those impacts. We urge the Planning Commission to decline to approve the IS/MND, and to direct staff to prepare an EIR for the Project prior to any Project approvals.

I. PROJECT BACKGROUND

Industrial Property Trust proposes to construct an approximately 507,500-square-foot light industrial building, comprised of up to 491,000 square feet of industrial warehouse space; up to 10,000 square feet of office space; and approximately 6,500 square feet of mezzanine space on an approximately 23.4-acre project site west of the intersection of West Winton Avenue and Cabot Boulevard in Hayward, CA. The building exterior would be 44 feet high, with interior heights of 36 feet, and designed for a total of 82 dock-high truck doors on the east and west sides of the building. An employee break area would be located at the southeastern corner of the building. Assessor's Parcel Numbers [APN] 438-0030-001-04, 438-0030-001-06, 438-0030-001-08, 438-0030-006-00, 438-0030-008-02, 438-0030-009-02, 438-0030-013-01, 438-0030-013-02, 438-0030-014-00, 438-0030-015-00, and 438-0101-020-01.

II. LEGAL STANDARD

As the California Supreme Court held, “[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR.” *Communities for a Better Env’t v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 319-320 [“CBE v. SCAQMD”], citing, *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505. “Significant environmental effect” is defined very broadly as “a substantial or potentially substantial adverse change in the environment.” Pub. Res. Code [“PRC”] § 21068; see also 14 CCR § 15382. An effect on the environment need not be “momentous” to meet the CEQA test for significance; it is enough that the impacts are “not trivial.” *No Oil, Inc., supra*, 13 Cal.3d at 83. “The ‘foremost principle’ in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” *Communities for a Better Env’t v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109 [“CBE v. CRA”].

The EIR is the very heart of CEQA. *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927. The EIR is an “environmental ‘alarm bell’ whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return.” *Bakersfield Citizens*, 124 Cal.App.4th at 1220. The EIR also functions as a “document of accountability,” intended to “demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.” *Laurel Heights Improvements Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392. The EIR process “protects not only the environment but also informed self-government.” *Pocket Protectors*, 124 Cal.App.4th at 927.

An EIR is required if “there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment.” PRC § 21080(d); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs. § 15371), only if there is not even a “fair argument” that the project will have a significant environmental effect. PRC, §§ 21100, 21064.) Since “[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process,” by allowing the agency “to dispense with the duty [to prepare an EIR],” negative declarations are allowed only in cases where “the proposed project will not affect the environment at all.” *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.

Where an initial study shows that the project may have a significant effect on the environment, a mitigated negative declaration may be appropriate. However, a mitigated negative declaration is proper only if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study “to a point where clearly no significant effect on the environment would occur, and...there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.” PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331. In that context, “may” means a reasonable possibility of a significant effect on the environment. PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors, supra*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, 904–905.

Under the “fair argument” standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency’s decision. 14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602. The “fair argument” standard creates a “low threshold” favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors*, 124 Cal.App.4th at 928.

The “fair argument” standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

This ‘fair argument’ standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument

standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

Kostka & Zishcke, *Practice Under CEQA*, §6.29, pp. 273-274. The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." *Pocket Protectors*, 124 Cal.App.4th at 928.

III. ANALYSIS.

A. There is a Fair Argument that the Project May Have Unmitigated Adverse Environmental Impacts.

1. Greenhouse Gas.

The Project will involve a half-million square feet of warehouse space and 82 truck docks. Obviously, this will generate massive amounts of greenhouse gas emissions, both from direct emissions from operation of the Project itself, and also from indirect emissions from trucks and cars associated with the Project. The CEQA document must analyze both direct and indirect emissions from the Project. *Kings County Farm Bureau v. Hanford* (1990) 221 Cal. App. 3d 692, 720.

The Bay Area Air Quality Management District (BAAQMD) has published CEQA significance thresholds. Such air quality thresholds are treated as dispositive in evaluating the significance of a project's air quality impacts. See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD's "published CEQA quantitative criteria" and "threshold level of cumulative significance"). See also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 ("A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"). The California Supreme Court recently made clear the substantial importance that a BAAQMD significance threshold plays in providing substantial evidence of a significant adverse impact. *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 ("As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact").

BAAQMD has determined that a project may have significant greenhouse gas (GHG) emissions if it will generate more than 1,100 metric tons of carbon dioxide equivalents per year (1,100 MT of CO₂e/yr). BAAQMD has published a table of project types and sizes that will generate more than 1,100 MT of GHG per year. (Exhibit A). According to BAAQMD, a warehouse of greater than 64,000 square feet in size will generate more than 1,100 MT of GHG per year. The instant Project will be over 500,000 square feet in size – more than 7 times above the BAAQMD CEQA screening threshold. Thus, there is a fair argument that it will generate GHG emission far above the BAAQMD CEQA significance threshold. An EIR is therefore required to analyze and mitigate the Project GHG impacts.

Feasible mitigation measures may include a requirement for solar panels to generate GHG-free electricity, electrified forklifts, electric car charging stations, evaporative cooling systems, and many other measures. The California Attorney General has proposed numerous feasible GHG mitigation measures that should be considered in an EIR. (Exhibit B).

2. Air Quality.

The Project will have significant emissions of ozone precursors from both construction and operation of the Project. Ozone precursors are nitrogen oxides (NO_x) and reactive organic gases (ROGs, also known as volatile organic compounds (VOCs)). According to the U.S. Environmental Protection Agency (US EPA), even short-term exposure to ozone can have significant irreparable health impacts. US EPA states:

Ozone can cause the muscles in the airways to constrict, trapping air in the alveoli. This leads to wheezing and shortness of breath.

Ozone can:

- Make it more difficult to breathe deeply and vigorously.
- Cause shortness of breath, and pain when taking a deep breath.
- Cause coughing and sore or scratchy throat.
- Inflammation and damage the airways.
- Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.
- Increase the frequency of asthma attacks.
- Make the lungs more susceptible to infection.
- Continue to damage the lungs even when the symptoms have disappeared.
- Cause chronic obstructive pulmonary disease (COPD).

These effects have been found even in healthy people, but can be more serious in people with lung diseases such as asthma. They may lead to

increased school absences, medication use, visits to doctors and emergency rooms, and hospital admissions.

Long-term exposure to ozone is linked to aggravation of asthma, and is likely to be one of many causes of asthma development. Long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children.

Recent studies consistently report associations between short-term ozone exposures and total non-accidental mortality, which includes deaths from respiratory causes. Studies suggest that long-term exposure to ozone also may increase the risk of death from respiratory causes, but the evidence is not as strong as the evidence for short-term exposure.

People with asthma, children, older adults, and people who are active outdoors, especially outdoor workers are most susceptible to health effects caused by ground level ozone.

EPA has found "strong and convincing evidence that exposure to ozone is associated with exacerbation of asthma-related symptoms." 66 Fed. Reg. 5002, 5012 (Jan. 18, 2001).

BAAQMD has set a CEQA significance threshold for ozone of 54 pounds per day (ppd) for either NOx or ROG. The same threshold is applied to either construction or operational emissions. (Exhibit C). BAAQMD screen table concludes that a warehouse project of greater than 259,000 square feet will generate significant NOx emissions from construction. At 500,000 square feet, the instant Project is almost twice the size set forth by BAAQMD and will therefore generate significant emissions of NOx. There is therefore a fair argument that the Project may have significant adverse air quality impacts.

No Health Risk Assessment was conducted for the Project because, according to the IS/MND, there are no sensitive receptors within 1,000 feet of the Project. IS/MND, p. 4-13. However, Project related traffic may create a significant health risk for the residential communities that flank either side of Winton Avenue, the route through which the Project's truck traffic will travel. This potential impact must be fully analyzed and mitigated.

An EIR is required to analyze this impact and to propose feasible mitigation measures. The EIR should analyze feasible mitigation measures, including:

- Alternatively-fueled and/or electric on-site equipment
- Installation of solar panels
- Accelerated phase-in of non-diesel powered trucks

- Electric vehicle charging stations
- Use energy efficient space heating and cooling equipment

These and other mitigation measures must be considered and adopted to fully mitigate the Project's significant operational NOx emissions.

3. Traffic.

The Project will generate large amounts of truck traffic, in addition to automobile traffic from workers. This traffic will contribute to already significant traffic in the area. Cumulative traffic impacts of the Project together with already unacceptable existing levels of traffic will be a significant impact. An EIR must be prepared to analyze the Project's traffic impacts and to propose feasible mitigation measures. The Project proponent should be required to make a "fair share" contribution to any traffic mitigation measures.

4. Biological Impacts.

Wildlife biologist Dr. Shawn Smallwood, Ph.D., concludes that the Project may have significant impacts on several special status species. An EIR is required to analyze and mitigate these impacts. Dr. Smallwood's expert comments and resume are attached hereto as Exhibit D.

Dr. Smallwood concludes that the biological analyses conducted by consultants for the City, LSA and Rincon, are woefully incomplete and inadequate. The IS/MND concludes that no special-status species were detected at the Project site. However, "[n]o protocol-level surveys were performed for any special-status species, meaning that no surveys were performed according to standardized survey protocols established by species experts for determining absence of a species." Smallwood, p. 2.

Instead, the IS/MND indicates that a biologist performed a reconnaissance survey for Rincon on June 5, 2017, and an LSA biologist walked the site on October 13, 2017. The IS/MND provides no information on time of arrival, duration of stay, survey methods, or tools used. *Id.* According to the information provided, these visits may have lasted no more than 5 minutes. Dr. Smallwood states "[m]ost special-status species are difficult to detect, requiring intense survey effort, special survey times, or specialized survey methods. Only cursory visits were made by two biologists, on one day each, so it seems hollow to state that no special-status species were detected." *Id.* An EIR should be prepared that includes adequate protocol-level surveys for special status species.

The IS/MND also concluded that only six special-status species have the potential to be affected by the Project. Dr. Smallwood points out, however, that LSA never consulted the online database eBird (<https://ebird.org/ebird/map>), which lists

many avian species, not mentioned by LSA, that have been seen within 1,000 meters of the Project site. Smallwood, p. 2. Using this additional reliable data, Dr. Smallwood identified an additional 30 special-status species birds that may be significantly impacted by the Project. *Id.* These potentially significant impacts must be fully analyzed and mitigated in an EIR.

In addition to failing to account for all potentially impacted species, the IS/MND also improperly limits the Project's impact analysis to the 23.4 acre Project site. Smallwood, p. 4. As a distribution center, the Project will be a hub for truck traffic. "[T]he affected environment includes all areas intersected by roads that are likely to be used by trucks traveling to and from the distribution warehouse." *Id.* "An EIR is needed to assess the project's more substantial impact than just the loss of habitat on the Project's footprint." *Id.*

For example, Dr. Smallwood concludes that the American white pelican, Brown pelican, Ridgeway rail, Snowy plover, Long-billed curlew, California gull, and California least tern may be adversely impacted by the noise and lights from the Project. Smallwood, p. 3.

Dr. Smallwood found numerous raptor species are likely to forage on or next to the Project site, and were reported within 1,000 meters of the site on eBird, including Cooper's hawk, Sharp-shinned hawk, Northern harrier, Prairie falcon, American kestrel, and Short-eared owl. *Id.* at 3. As Dr. Smallwood explains:

American kestrels likely hunt for arthropods and small mammals on the project site. Accipiters such as Cooper's hawk and sharp-shinned hawk, as well as red-shouldered hawk peregrine falcon and prairie falcon doubtlessly fly into the project's perimeter seeking grassland birds or birds perched in the on-site willows or coyote bush. Short-eared owls and northern harriers will forage for small mammals while flying over the project site's grasslands. All of these species will suffer habitat loss resulting from the project.

Id.

These are just some of the more than 30 bird species that Dr. Smallwood concludes may be significantly impacted by the Project. As Dr. Smallwood admits, this doesn't even take into account non-avian species that may be present on or near the site.

Given the large number of special status species likely to exist on or near the Project site, and the large number of trucks associated with the Project, Dr. Smallwood concludes that the Project may have significant impacts related to vehicle collisions with species. Dr. Smallwood notes that the Project will generate more than 1,800 vehicle trips per day, and that,

Vehicle collisions have accounted for the deaths of many thousands of reptile, amphibian, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). It is likely project-related traffic impacts will far exceed the impacts of land conversion to a warehouse. But not one word of traffic-related impacts appears in the Initial Study (LSA 2017) – a gross shortfall of the CEQA review

Smallwood, p. 5. Since the IS/MND fails to analyze the risk of vehicle collisions entirely, an EIR is required to analyze and mitigate this impact.

Dr. Smallwood also indicates that the Project may have potential impacts on birds colliding with the Project's reflective windows. The Project illustrations show trees reflected in the windows. These trees, "will be located sufficiently far from the windows to enable birds to achieve high speeds just prior to colliding with the windows in pursuit of habitat cover (the reflected images of trees) or of competitors (their own reflected images)." *Id.* at 6. The IS/MND made no attempt to analyze this potentially significant impact.

Dr. Smallwood also points out that the IS/MND's cumulative impact analysis is flawed. According to the IS/MND, an impact is cumulatively considerable only when it has not been fully mitigated. Dr. Smallwood states:

In essence, the Initial Study implies that cumulative impacts are really residual impacts left over from inadequate project mitigation of direct or indirect impacts. However, individually mitigated impacts at the project level do not negate the significance of cumulative impacts. If they did, then CEQA would not require a cumulative effects analysis. An EIR should be prepared, and it should include an adequate cumulative effects analysis.

Smallwood, p. 6.

Dr. Smallwood concludes that the Project will have significant cumulative impacts with other similar projects in the area. Dr. Smallwood states:

The Initial Study does not address the project's cumulative contribution to road mortality caused by increased traffic volume on the region's roadways. At a minimum the cumulative impacts analysis should have considered other like-kind projects in the region. Cumulative impacts loom large due to crushing and collision fatalities of wildlife along many miles of roadway in the region. These impacts need to be addressed in an EIR.

Smallwood, p. 6. The Project's cumulative biological impacts must be fully analyzed and mitigated in an EIR.

In addition to failing to adequately analyze the Project's potentially significant biological impacts, the mitigation measures proposed in the IS/MND are also inadequate.

To mitigate potential window collision hazards to birds, Dr. Smallwood recommends incorporating building design features produced by the American Bird Conservancy such as:

1. Minimizing use of glass;
2. Placing glass behind some type of screening (grilles, shutters, exterior shades);
3. Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and
4. Turning off lights during migration seasons

Dr. Smallwood also recommends adherence with the City of San Francisco (San Francisco Planning Department 2011) building design guidelines to reduce avian collisions, which are based on guidelines produced by the New York City Audubon Society. Smallwood, p. 7.

To mitigate potentially significant impacts to wildlife from vehicle collisions, Dr. Smallwood recommends requiring funding to wildlife rehabilitation facilities:

Wildlife will be killed and injured by the increased truck and car travel resulting from the project. The impacts to injured wildlife can be rectified by helping to pay the costs of wildlife rehabilitation facilities, which operate on volunteer support and inadequate budgets.

Smallwood, p. 7. Dr. Smallwood proposes a number of options the City should consider in determining how to appropriately compensate for the Project's potential biological impacts. *Id.* at p. 6-7. These and other feasible mitigation measures must be considered in an EIR.

5. Aesthetic Impacts.

Under CEQA, the state adopted a policy to, among other things, "[t]ake all action necessary to provide the people of this state with . . . enjoyment of aesthetic, natural, scenic, and historic environmental qualities." PRC § 21001, subd. (b). Specifically, the CEQA Guidelines recognize that a project will have a significant aesthetic impact if it will substantially degrade the existing visual character or quality of the site or its surroundings. CEQA Guidelines, Appendix G. Thus, courts have recognized that aesthetic issues "are properly studied in an EIR to assess the impacts of a project." *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477; see *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water Dist.* (2004) 116

Cal.App.4th 396, 401; *National Parks & Conservation Assn. v. County of Riverside* (1999) 71 Cal.App.4th 1341, 1360.

The IS/MND concludes that the Project will have less than significant aesthetic impacts. However, the East Bay Regional Park District has submitted a comment letter stating that the Project's height of 44 feet will have adverse impacts on scenic views. EBRPD requested that buildings be maintained at a height of no more than 30 feet, but the City rejects this mitigation measure. The Project is within view the San Francisco Bay Trail, and is taller than other buildings in the area. EBRPD concludes that the Project will have a significant impact of degrading scenic vistas in the area. EBRPD's expert opinion creates a "fair argument" that the Project may have adverse aesthetic impacts. An EIR is therefore required to analyze and mitigate this impact. *Oceanview v. Montecito* (2004) 116 Cal. App. 4th 396.

6. Liquefaction Impacts.

The IS/MND fails to fully analyze the Project's potential liquefaction impacts, and then improperly defers mitigation until after Project approval.

"The project site is located in an area that has been identified by the California Geological Survey as being susceptible to seismically-induced liquefaction." IS/MND at 4-32. A Preliminary Geotechnical Investigation was conducted for the Project, which indicated that "several subsurface layers could potentially experience liquefaction." IS/MND at 4-32. This Preliminary Geotechnical investigation analyzed potential geologic hazards associated with liquefaction based on a design groundwater depth of 5 feet, despite the IS/MND noting that groundwater on site has been measured just beneath ground surface at times. 4-33. The IS/MND indeed admits that "[t]he potential for groundwater to occur at shallower depths than 5 feet and lowering the existing ground surface elevation could potentially affect the estimates for liquefaction related settlement at the project site." *Id.* In other words, the Preliminary Geotechnical Investigation does not accurately represent the project's potential liquefaction impact. Instead, the Preliminary Geotechnical Investigation recommends further investigation during a design-level geotechnical investigation.

While not fully analyzing or disclosing the project's potential liquefaction impact, the IS/MND claims that the impact will be mitigated to a less-than-significant level with the implementation Mitigation Measure GEO-1. Rather than mitigate a potential impact, however, the mitigation measure really requests additional studies, and then requires the developer to comply with the recommendations of those studies. Mitigation Measure GEO-1 requires a licensed Geotechnical Engineer, or their representative, to be retained to perform a design-level geotechnical investigation once site development plans are final. 4-33. This post-project approval study is supposed to "address all the geotechnical concerns described in the Preliminary Geotechnical Investigation and to develop detailed recommendations for design and construction."

This is nothing more than deferred mitigation, which the courts have consistently rejected. CEQA disallows deferring the formulation of mitigation measures to post-approval studies. CEQA Guidelines § 15126.4(a)(1)(B); *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309. Requiring only that a report be prepared and followed, does not provide adequate information for informed decision making under CEQA. *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794; Guidelines § 15126.4(a)(1)(B). Moreover, deferring the development of specific mitigation measures effectively precludes public input into the development of those measures.

Mitigation Measure GEO-1 is also supposed to reduce the Project's impacts related to soil erosion, unstable soils, and expansive fill soils. CEQA requires the Project's potential geologic impact must be fully analyzed and mitigated now, during the CEQA process, not at some later time after the Project has been approved.

7. Hazards and Hazardous Materials.

The Project site has a long history of contamination from prior use as agricultural land, and then as automobile wrecking and salvage yards. IS/MND, p. 4-47-48. While much is known about the historical contamination, the full extent has not been determined. For example,

“[P]ast releases of hazardous materials at the project site have resulted in contamination of soil, soil vapor, and groundwater. The public and/or the environment could be affected by the past releases of hazardous materials by exposing the environment, workers, and/or the public to potentially contaminated soil, soil vapor, and/or groundwater during construction and/or operation of the project.

IS/MND, p. 4-52. This is a potentially significant impact. An EIR must be prepared to analyze the Project's potential impacts to workers, the public, and the environment, and to propose feasible mitigation measures.

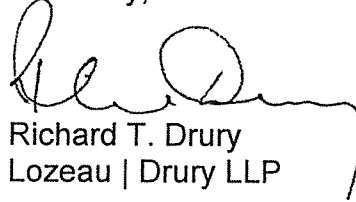
The IS/MND proposes mitigation measure HAZ-1 to reduce potential impacts related to the Project site's hazardous conditions. Mitigation measure HAZ-1 constitutes improper deferral of mitigation. HAZ-1, is nothing more than a description of the testing and analysis that needs to be done now, prior to Project approval, to allow for fully informed decision making and the formulation of adequate mitigation measures.

//
//
//

IV. CONCLUSION

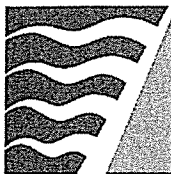
For the foregoing reasons, the IS/MND for the Project should be withdrawn, and EIR should be prepared and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard T. Drury". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Richard T. Drury
Lozeau | Drury LLP

EXHIBIT A



3. SCREENING CRITERIA

The screening criteria identified in this section are **not thresholds of significance**. The Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. In addition, the screening criteria in this section do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, and/or proximate to transit service and local services, emissions would be less than the greenfield type project that these screening criteria are based on.

If a project includes emissions from stationary source engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations, the screening criteria should not be used. The project's stationary source emissions should be analyzed separately from the land use-related indirect mobile- and area-source emissions. Stationary-source emissions are not included in the screening estimates given below and, for criteria pollutants, must be added to the indirect mobile- and area-source emissions generated by the land use development and compared to the appropriate Thresholds of Significance. Greenhouse gas emissions from permitted stationary sources should not be combined with operational emissions, but compared to a separate stationary source greenhouse gas threshold.

3.1. OPERATIONAL-RELATED IMPACTS

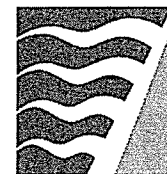
3.1.1. Criteria Air Pollutants and Precursors

The screening criteria developed for criteria pollutants and precursors were derived using the default assumptions used by the Urban Land Use Emissions Model (URBEMIS). If the project has sources of emissions not evaluated in the URBEMIS program the screening criteria should not be used. If the project meets the screening criteria in Table 3-1, the project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* shown in Table 2-2. Operation of the proposed project would therefore result in a less-than-significant cumulative impact to air quality from criteria air pollutant and precursor emissions.

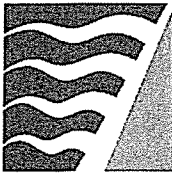
3.1.2. Greenhouse Gases

The screening criteria developed for greenhouse gases were derived using the default emission assumptions in URBEMIS and using off-model GHG estimates for indirect emissions from electrical generation, solid waste and water conveyance. If the project has other significant sources of GHG emissions not accounted for in the methodology described above, then the screening criteria should not be used. Projects below the applicable screening criteria shown in Table 3-1 would not exceed the 1,100 MT of CO₂e/yr GHG threshold of significance for projects other than permitted stationary sources.

If a project, including stationary sources, is located in a community with an adopted qualified GHG Reduction Strategy, the project may be considered less than significant if it is consistent with the GHG Reduction Strategy. A project must demonstrate its consistency by identifying and implementing all applicable feasible measures and policies from the GHG Reduction Strategy into the project.



Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
Single-family	325 du (NOX)	56 du	114 du (ROG)
Apartment, low-rise	451 du (ROG)	78 du	240 du (ROG)
Apartment, mid-rise	494 du (ROG)	87 du	240 du (ROG)
Apartment, high-rise	510 du (ROG)	91 du	249 du (ROG)
Condo/townhouse, general	451 du (ROG)	78 du	240 du (ROG)
Condo/townhouse, high-rise	511 du (ROG)	92 du	252 du (ROG)
Mobile home park	450 du (ROG)	82 du	114 du (ROG)
Retirement community	487 du (ROG)	94 du	114 du (ROG)
Congregate care facility	657 du (ROG)	143 du	240 du (ROG)
Day-care center	53 ksf (NOX)	11 ksf	277 ksf (ROG)
Elementary school	271 ksf (NOX)	44 ksf	277 ksf (ROG)
Elementary school	2747 students (ROG)	-	3904 students (ROG)
Junior high school	285 ksf (NOX)	-	277 ksf (ROG)
Junior high school	2460 students (NOX)	46 ksf	3261 students (ROG)
High school	311 ksf (NOX)	49 ksf	277 ksf (ROG)
High school	2390 students (NOX)	-	3012 students (ROG)
Junior college (2 years)	152 ksf (NOX)	28 ksf	277 ksf (ROG)
Junior college (2 years)	2865 students (ROG)	-	3012 students (ROG)
University/college (4 years)	1760 students (NOX)	320 students	3012 students (ROG)
Library	78 ksf (NOX)	15 ksf	277 ksf (ROG)
Place of worship	439 ksf (NOX)	61 ksf	277 ksf (ROG)
City park	2613 acres (ROG)	600 acres	67 acres (PM10)
Racquet club	291 ksf (NOX)	46 ksf	277 ksf (ROG)
Racquetball/health	128 ksf (NOX)	24 ksf	277 ksf (ROG)
Quality restaurant	47 ksf (NOX)	9 ksf	277 ksf (ROG)
High turnover restaurant	33 ksf (NOX)	7 ksf	277 ksf (ROG)
Fast food rest. w/ drive thru	6 ksf (NOX)	1 ksf	277 ksf (ROG)
Fast food rest. w/o drive thru	8 ksf (NOX)	1 ksf	277 ksf (ROG)
Hotel	489 rooms (NOX)	83 rooms	554 rooms (ROG)
Motel	688 rooms (NOX)	106 rooms	554 rooms (ROG)
Free-standing discount store	76 ksf (NOX)	15 ksf	277 ksf (ROG)
Free-standing discount superstore	87 ksf (NOX)	17 ksf	277 ksf (ROG)
Discount club	102 ksf (NOX)	20 ksf	277 ksf (ROG)
Regional shopping center	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Electronic Superstore	95 ksf (NOX)	18 ksf	277 ksf (ROG)
Home improvement superstore	142 ksf (NOX)	26 ksf	277 ksf (ROG)
Strip mall	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Hardware/paint store	83 ksf (NOX)	16 ksf	277 ksf (ROG)
Supermarket	42 ksf (NOX)	8 ksf	277 ksf (ROG)
Convenience market (24 hour)	5 ksf (NOX)	1 ksf	277 ksf (ROG)
Convenience market with gas pumps	4 ksf (NOX)	1 ksf	277 ksf (ROG)
Bank (with drive-through)	17 ksf (NOX)	3 ksf	277 ksf (ROG)
General office building	346 ksf (NOX)	53 ksf	277 ksf (ROG)



**Table 3-1
Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes**

Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
Office park	323 ksf (NOX)	50 ksf	277 ksf (ROG)
Government office building	61 ksf (NOX)	12 ksf	277 ksf (ROG)
Government (civic center)	149 ksf (NOX)	27 ksf	277 ksf (ROG)
Pharmacy/drugstore w/ drive through	49 ksf (NOX)	10 ksf	277 ksf (ROG)
Pharmacy/drugstore w/o drive through	48 ksf (NOX)	10 ksf	277 ksf (ROG)
Medical office building	117 ksf (NOX)	22 ksf	277 ksf (ROG)
Hospital	226 ksf (NOX)	39 ksf	277 ksf (ROG)
Hospital	334 beds (NOX)	84 ksf	337 beds (ROG)
Warehouse	864 ksf (NOX)	64 ksf	259 ksf (NOX)
General light industry	541 ksf (NOX)	121 ksf	259 ksf (NOX)
General light industry	72 acres (NOX)	-	11 acres (NOX)
General light industry	1249 employees (NOX)	-	540 employees (NOX)
General heavy industry	1899 ksf (ROG)	-	259 ksf (NOX)
General heavy industry	281 acres (ROG)	-	11 acres (NOX)
Industrial park	553 ksf (NOX)	65 ksf	259 ksf (NOX)
Industrial park	61 acres (NOX)	-	11 acres (NOX)
Industrial park	1154 employees (NOX)	-	577 employees (NOX)
Manufacturing	992 ksf (NOX)	89 ksf	259 ksf (NOX)

Notes: du = dwelling units; ksf = thousand square feet; NO_x = oxides of nitrogen; ROG = reactive organic gases. Screening levels include indirect and area source emissions. Emissions from engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations embedded in the land uses are not included in the screening estimates and must be added to the above land uses. Refer to Appendix D for support documentation. Source: Modeled by EDAW 2009.

3.2. COMMUNITY RISK AND HAZARD IMPACTS

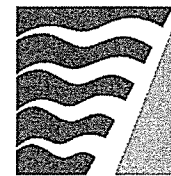
Please refer to Chapter 5 for discussion of screening criteria for local community risk and hazard impacts.

3.3. CARBON MONOXIDE IMPACTS

This preliminary screening methodology provides the Lead Agency with a conservative indication of whether the implementation of the proposed project would result in CO emissions that exceed the *Thresholds of Significance* shown in Table 2-3.

The proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria is met:

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.



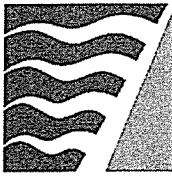
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

3.4. ODOR IMPACTS

Table 3-3 presents odor screening distances recommended by BAAQMD for a variety of land uses. Projects that would site a new odor source or a new receptor farther than the applicable screening distance shown in Table 3-3 from an existing receptor or odor source, respectively, would not likely result in a significant odor impact. The odor screening distances in Table 3-3 should not be used as absolute screening criteria, rather as information to consider along with the odor parameters and complaint history. Refer to *Chapter 7 Assessing and Mitigating Odor Impacts* for comprehensive guidance on significance determination.

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Metal Smelting Plants	2 miles
Refer to Appendix D for support documentation.	

Facilities that are regulated by CalRecycle (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency's discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CalRecycle regulated facilities with an adopted OIMP.



3.5. CONSTRUCTION-RELATED IMPACTS

3.5.1. Criteria Air Pollutants and Precursors

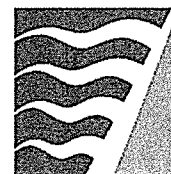
This preliminary screening provides the Lead Agency with a conservative indication of whether the proposed project would result in the generation of construction-related criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* shown in Table 2-4.

If all of the following *Screening Criteria* are met, the construction of the proposed project would result in a less-than-significant impact from criteria air pollutant and precursor emissions.

1. The project is below the applicable screening level size shown in Table 3-1; and
2. All *Basic Construction Mitigation Measures* would be included in the project design and implemented during construction; and
3. Construction-related activities would not include any of the following:
 - a. Demolition;
 - b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
 - c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
 - d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
 - e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

3.5.2. Community Risk and Hazards

Chapter 5, *Assessing and Mitigating Local Community Risk and Hazard Impacts*, contains information on screening criteria for local risk and hazards.



[This Page Intentionally Left Blank]

EXHIBIT B

Addressing Climate Change at the Project Level California Attorney General's Office



Under the California Environmental Quality Act (CEQA), local agencies have a very important role to play in California's fight against global warming – one of the most serious environmental effects facing the State today. Local agencies can lead by example in undertaking their own projects, insuring that sustainability is considered at the earliest stages. Moreover, they can help shape private development. Where a project as proposed will have significant global warming related effects, local agencies can require feasible changes or alternatives, and impose enforceable, verifiable, feasible mitigation to substantially lessen those effects. By the sum of their actions and decisions, local agencies will help to move the State away from “business as usual” and toward a low-carbon future.

Included in this document are various measures that may reduce the global warming related impacts at the individual project level. (For more information on actions that local governments can take at the program and general plan level, please visit the Attorney General's webpage, “CEQA, Global Warming, and General Plans” at <http://ag.ca.gov/globalwarming/ceqa/generalplans.php>.)

As appropriate, the measures can be included as design features of a project, required as changes to the project, or imposed as mitigation (whether undertaken directly by the project proponent or funded by mitigation fees). The measures set forth in this package are examples; the list is not intended to be exhaustive. Moreover, the measures cited may not be appropriate for every project. The decision of whether to approve a project – as proposed or with required changes or mitigation – is for the local agency, exercising its informed judgment in compliance with the law and balancing a variety of public objectives.

Mitigation Measures by Category

Energy Efficiency

Incorporate green building practices and design elements.	<p>The California Department of Housing and Community Development's Green Building & Sustainability Resources handbook provides extensive links to green building resources. The handbook is available at http://www.hcd.ca.gov/hpd/green_build.pdf.</p> <p>The American Institute of Architects (AIA) has compiled fifty readily available strategies for reducing fossil fuel use in buildings by fifty percent. AIA “50 to 50” plan is presented in both guidebook and wiki format at http://wiki.aia.org/Wiki%20Pages/Home.aspx.</p>
---	---

<p>Meet recognized green building and energy efficiency benchmarks.</p>	<p>For example, an ENERGY STAR-qualified building uses less energy, is less expensive to operate, and causes fewer greenhouse gas emissions than comparable, conventional buildings. http://www.energystar.gov/index.cfm?c=business.bus_index.</p> <p>California has over 1600 ENERGY STAR-qualified school, commercial and industrial buildings. View U.S. EPA's list of Energy Star non-residential buildings at http://www.energystar.gov/index.cfm?fuseaction=labeled_buildings locator. Los Angeles and San Francisco top the list of U.S. cities with the most ENERGY STAR non-residential buildings. http://www.energystar.gov/ia/business/downloads/2008_Top_25_cities_chart.pdf.</p> <p>Qualified ENERGY STAR homes must surpass the state's Title 24 energy efficiency building code by at least 15%. Los Angeles, Sacramento, San Diego, and San Francisco-Oakland are among the top 20 markets for ENERGY STAR homes nationwide. http://www.energystar.gov/ia/new_homes/mil_homes/top_20_markets.html. Builders of ENERGY STAR homes can be more competitive in a tight market by providing a higher quality, more desirable product. See http://www.energystar.gov/ia/partners/manuf_res/Horton.pdf.</p> <p>There are a variety of private and non-profit green building certification programs in use in the U.S. See U.S. EPA's Green Building / Frequently Asked Questions website, http://www.epa.gov/greenbuilding/pubs/faqs.htm.</p> <p>Public-Private Partnership for Advancing Housing Technology maintains a list of national and state Green Building Certification Programs for housing. See http://www.pathnet.org/sp.asp?id=20978. These include the national Leadership in Energy and Environmental Design (LEED) program, and, at the state level, Build it Green's GreenPoint Rated system and the California Green Builder program.</p> <p>Other organizations may provide other relevant benchmarks.</p>
<p>Install energy efficient lighting (e.g., light emitting diodes (LEDs)), heating and cooling systems, appliances, equipment, and control systems.</p>	<p>Information about ENERGY STAR-certified products in over 60 categories is available at http://www.energystar.gov/index.cfm?fuseaction=find_a_product.</p> <p>The California Energy Commission maintains a database of all appliances meeting either federal efficiency standards or, where there are no federal efficiency standards, California's appliance efficiency standards. See http://www.appliances.energy.ca.gov/.</p> <p>The Electronic Product Environmental Assessment Tool (EPEAT) ranks computer products based on a set of environmental criteria, including energy efficiency. See http://www.epeat.net/AboutEPEAT.aspx.</p> <p>The nonprofit American Council for an Energy Efficient Economy maintains an Online Guide to Energy Efficient Commercial Equipment, available at http://www.aceee.org/oqeece/ch1_index.htm.</p> <p>Utilities offer many incentives for efficient appliances, lighting, heating and cooling. To search for available residential and commercial incentives, visit Flex Your Power's website at http://www.fypower.org/.</p>

<p>Use passive solar design, e.g., orient buildings and incorporate landscaping to maximize passive solar heating during cool seasons, minimize solar heat gain during hot seasons, and enhance natural ventilation. Design buildings to take advantage of sunlight.</p>	<p>See U.S. Department of Energy, Passive Solar Design (website) http://www.energysavers.gov/your_home/designing_remodeling/index.cfm/mytopic=10250.</p> <p>See also California Energy Commission, Consumer Energy Center, Passive Solar Design (website) http://www.consumerenergycenter.org/home/construction/solardesign/index.html.</p> <p>Lawrence Berkeley National Laboratories' Building Technologies Department is working to develop innovative building construction and design techniques. Information and publications on energy efficient buildings, including lighting, windows, and daylighting strategies, are available at the Department's website at http://btech.lbl.gov.</p>
<p>Install light colored "cool" roofs and cool pavements.</p>	<p>A white or light colored roof can reduce surface temperatures by up to 100 degrees Fahrenheit, which also reduces the heat transferred into the building below. This can reduce the building's cooling costs, save energy and reduce associated greenhouse gas emissions, and extend the life of the roof. Cool roofs can also reduce the temperature of surrounding areas, which can improve local air quality. See California Energy Commission, Consumer Energy Center, Cool Roofs (webpage) at http://www.consumerenergycenter.org/coolroof/.</p> <p>See also Lawrence Berkeley National Laboratories, Heat Island Group (webpage) at http://eetd.lbl.gov/HeatIsland/.</p>
<p>Install efficient lighting, (including LEDs) for traffic, street and other outdoor lighting.</p>	<p>LED lighting is substantially more energy efficient than conventional lighting and can save money. See http://www.energy.ca.gov/efficiency/partnership/case_studies/TechAsstCity.pdf (noting that installing LED traffic signals saved the City of Westlake about \$34,000 per year).</p> <p>As of 2005, only about a quarter of California's cities and counties were using 100% LEDs in traffic signals. See California Energy Commission (CEC), Light Emitting Diode Traffic Signal Survey (2005) at p. 15, available at http://www.energy.ca.gov/2005publications/CEC_400_2005_003/CEC_400_2005_003.PDF.</p> <p>The California Energy Commission's Energy Partnership Program can help local governments take advantage of energy saving technology, including, but not limited to, LED traffic signals. See http://www.energy.ca.gov/efficiency/partnership/.</p>
<p>Reduce unnecessary outdoor lighting.</p>	<p>See California Energy Commission, Reduction of Outdoor Lighting (webpage) at http://www.energy.ca.gov/efficiency/lighting/outdoor_reduction.html.</p>

<p>Use automatic covers, efficient pumps and motors, and solar heating for pools and spas.</p>	<p>During the summer, a traditional backyard California pool can use enough energy to power an entire home for three months. Efficiency measures can substantially reduce this waste of energy and money. See California Energy Commission, Consumer Energy Center, Pools and Spas (webpage) at http://www.consumerenergycenter.org/home/outside/pools_spas.html.</p> <p>See also Sacramento Municipal Utilities District, Pool and Spa Efficiency Program (webpage) at http://www.smud.org/en/residential/saving-energy/Pages/poolspa.aspx.</p>
<p>Provide education on energy efficiency to residents, customers and/or tenants.</p>	<p>Many cities and counties provide energy efficiency education. See, for example, the City of Stockton's Energy Efficiency website at http://www.stocktongov.com/energysaving/index.cfm. See also "Green County San Bernardino," http://www.greencountysb.com at pp. 4-6.</p> <p>Businesses and development projects may also provide education. For example, a homeowners' association (HOA) could provide information to residents on energy-efficient mortgages and energy saving measures. See The Villas of Calvera Hills, Easy Energy Saving Tips to Help Save Electricity at http://www.thevillashoa.org/green/energy/. An HOA might also consider providing energy audits to its residents on a regular basis.</p>

Renewable Energy and Energy Storage

<p>Meet "reach" goals for building energy efficiency and renewable energy use.</p>	<p>A "zero net energy" building combines building energy efficiency and renewable energy generation so that, on an annual basis, any purchases of electricity or natural gas are offset by clean, renewable energy generation, either on-site or nearby. Both the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) have stated that residential buildings should be zero net energy by 2020, and commercial buildings by 2030. See CEC, 2009 Integrated Energy Policy Report (Dec. 2009) at p. 226, available at http://www.energy.ca.gov/2009publications/CEC-100-2009-003/CEC-100-2009-003-CMF.PDF; CPUC, Long Term Energy Efficiency Strategic Plan (Sept. 2008), available at http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eespl/.</p>
<p>Install solar, wind, and geothermal power systems and solar hot water heaters.</p>	<p>The California Public Utilities Commission (CPUC) approved the California Solar Initiative on January 12, 2006. The initiative creates a \$3.3 billion, ten-year program to install solar panels on one million roofs in the State. Visit the one-stop GoSolar website at http://www.gosolarcalifornia.org/. As mitigation, a developer could, for example, agree to participate in the New Solar Homes program. See http://www.gosolarcalifornia.org/builders/index.html.</p> <p>The CPUC is in the process of establishing a program to provide solar water heating incentives under the California Solar Initiative. For more information, visit the CPUC's website at http://www.cpuc.ca.gov/puc/energy/solar/swh.htm.</p> <p>To search for available residential and commercial renewable energy incentives, visit Flex Your Power's website at http://www.fypower.org/.</p>

<p>Install solar panels on unused roof and ground space and over carports and parking areas.</p>	<p>In 2008 Southern California Edison (SCE) launched the nation's largest installation of photovoltaic power generation modules. The utility plans to cover 65 million square feet of unused commercial rooftops with 250 megawatts of solar technology – generating enough energy to meet the needs of approximately 162,000 homes. Learn more about SCE's Solar Rooftop Program at http://www.sce.com/solarleadership/solar-rooftop-program/general-faq.htm.</p> <p>In 2009, Walmart announced its commitment to expand the company's solar power program in California. The company plans to add solar panels on 10 to 20 additional Walmart facilities in the near term. These new systems will be in addition to the 18 solar arrays currently installed at Walmart facilities in California. See http://walmartstores.com/FactsNews/NewsRoom/9091.aspx.</p> <p>Alameda County has installed two solar tracking carports, each generating 250 kilowatts. By 2005, the County had installed eight photovoltaic systems totaling over 2.3 megawatts. The County is able to meet 6 percent of its electricity needs through solar power. See http://www.acgov.org/gsa/Alameda%20County%20-%20Solar%20Case%20Study.pdf.</p> <p>In 2007, California State University, Fresno installed a 1.1-megawatt photovoltaic (PV)-paneled parking installation. The University expects to save more than \$13 million in avoided utility costs over the project's 30-year lifespan. http://www.fresnostatenews.com/2007/11/solarwrapup2.htm.</p>
<p>Where solar systems cannot feasibly be incorporated into the project at the outset, build "solar ready" structures.</p>	<p>U.S. Department of Energy, A Homebuilder's Guide to Going Solar (brochure) (2008), available at http://www.eere.energy.gov/solar/pdfs/43076.pdf.</p>
<p>Incorporate wind and solar energy systems into agricultural projects where appropriate.</p>	<p>Wind energy can be a valuable crop for farmers and ranchers. Wind turbines can generate energy to be used on-site, reducing electricity bills, or they can yield lease revenues (as much as \$4000 per turbine per year). Wind turbines generally are compatible with rural land uses, since crops can be grown and livestock can be grazed up to the base of the turbine. See National Renewable Energy Laboratory, Wind Powering America Fact Sheet Series, Wind Energy Benefits, available at http://www.nrel.gov/docs/fy05osti/37602.pdf.</p> <p>Solar PV is not just for urban rooftops. For example, the Scott Brothers' dairy in San Jacinto, California, has installed a 55-kilowatt solar array on its commodity barn, with plans to do more in the coming years. See http://www.dairyherd.com/directories.asp?pgID=724&ed_id=8409 (additional California examples are included in article.)</p>

<p>Include energy storage where appropriate to optimize renewable energy generation systems and avoid peak energy use.</p>	<p>See National Renewable Energy Laboratory, Energy Storage Basics (webpage) at http://www.nrel.gov/learning/eds_energy_storage.html.</p> <p>California Energy Storage Alliance (webpage) at http://storagealliance.org/about.html.</p> <p>Storage is not just for large, utility scale projects, but can be part of smaller industrial, commercial and residential projects. For example, Ice Storage Air Conditioning (ISAC) systems, designed for residential and nonresidential buildings, produce ice at night and use it during peak periods for cooling. See California Energy Commission, Staff Report, Ice Storage Air Conditioners, Compliance Options Application (May 2006), available at http://www.energy.ca.gov/2006publications/CEC-400-2006-006/CEC-400-2006-006-SF.PDF.</p>
<p>Use on-site generated biogas, including methane, in appropriate applications.</p>	<p>At the Hilarides Dairy in Lindsay, California, an anaerobic-lagoon digester processes the run-off of nearly 10,000 cows, generating 226,000 cubic feet of biogas per day and enough fuel to run two heavy duty trucks. This has reduced the dairy's diesel consumption by 650 gallons a day, saving the dairy money and improving local air quality. See http://www.arb.ca.gov/newsrel/nr021109b.htm; see also Public Interest Energy Research Program, Dairy Power Production Program, Dairy Methane Digester System, 90-Day Evaluation Report, Eden Vale Dairy (Dec. 2006) at http://www.energy.ca.gov/2006publications/CEC_500_2006_083/CEC_500_2006_083.PDF.</p> <p>Landfill gas is a current and potential source of substantial energy in California. See Tom Frankiewicz, Program Manager, U.S. EPA Landfill Methane Outreach Program, Landfill Gas Energy Potential in California, available at http://www.energy.ca.gov/2009_energypolicy/documents/2009-04-21_workshop/presentations/05-SCS_Engineers_Presentation.pdf.</p> <p>There are many current and emerging technologies for converting landfill methane that would otherwise be released as a greenhouse gas into clean energy. See California Integrated Waste Management Board, Emerging Technologies, Landfill Gas-to-Energy (webpage) at http://www.ciwmb.ca.gov/LEACentral/TechServices/EmergingTech/default.htm.</p>

<p>Use combined heat and power (CHP) in appropriate applications.</p>	<p>Many commercial, industrial, and campus-type facilities (such as hospitals, universities and prisons) use fuel to produce steam and heat for their own operations and processes. Unless captured, much of this heat is wasted. CHP captures waste heat and re-uses it, e.g., for residential or commercial space heating or to generate electricity. See U.S. EPA, Catalog of CHP Technologies at http://www.epa.gov/chp/documents/catalog_of_%20chp_tech_entire.pdf and California Energy Commission, Distributed Energy Resource Guide, Combined Heat and Power (webpage) at http://www.energy.ca.gov/distgen/equipment/chp/chp.html.</p> <p>The average efficiency of fossil-fueled power plants in the United States is 33 percent. By using waste heat recovery technology, CHP systems typically achieve total system efficiencies of 60 to 80 percent. CHP can also substantially reduce emissions of carbon dioxide. http://www.epa.gov/chp/basic/efficiency.html.</p> <p>Currently, CHP in California has a capacity of over 9 million kilowatts. See list of California CHP facilities at http://www.eea-inc.com/chpdata/States/CA.html.</p> <p>The Waste Heat and Carbon Emissions Reduction Act (Assembly Bill 1613 (2007), amended by Assembly Bill 2791 (2008)) is designed to encourage the development of new CHP systems in California with a generating capacity of not more than 20 megawatts. Among other things, the Act requires the California Public Utilities Commission to establish (1) a standard tariff allowing CHP generators to sell electricity for delivery to the grid and (2) a "pay as you save" pilot program requiring electricity corporations to finance the installation of qualifying CHP systems by nonprofit and government entities. For more information, see http://www.energy.ca.gov/wasteheat/.</p>
---	--

Water Conservation and Efficiency

<p>Incorporate water-reducing features into building and landscape design.</p>	<p>According to the California Energy Commission, water-related energy use – which includes conveyance, storage, treatment, distribution, wastewater collection, treatment, and discharge – consumes about 19 percent of the State's electricity, 30 percent of its natural gas, and 88 billion gallons of diesel fuel every year. See http://www.energy.ca.gov/2007publications/CEC_999_2007_008/CEC_999_2007_008.PDF. Reducing water use and improving water efficiency can help reduce energy use and greenhouse gas emissions.</p>
<p>Create water-efficient landscapes.</p>	<p>The California Department of Water Resources' updated Model Water Efficient Landscape Ordinance (Sept. 2009) is available at http://www.water.ca.gov/wateruseefficiency/landscapeordinance/technical.cfm.</p> <p>A landscape can be designed from the beginning to use little or no water, and to generate little or no waste. See California Integrated Waste Management Board, Xeriscaping (webpage) at http://www.ciwmb.ca.gov/organics/Xeriscaping/.</p>

<p>Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and use water-efficient irrigation methods.</p>	<p>U.S. Department of Energy, Best Management Practice: Water-Efficient Irrigation (webpage) at http://www1.eere.energy.gov/femp/program/waterefficiency_bmp5.html.</p> <p>California Department of Water Resources, Landscape Water Use Efficiency (webpage) at http://www.water.ca.gov/wateruseefficiency/landscape/.</p> <p>Pacific Institute, More with Less: Agricultural Water Conservation and Efficiency in California (2008), available at http://www.pacinst.org/reports/more_with_less_delta/index.htm.</p>
<p>Make effective use of graywater. (Graywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines. Graywater to be used for landscape irrigation.)</p>	<p>California Building Standards Commission, 2008 California Green Building Standards Code, Section 604, pp. 31-32, available at http://www.documents.dgs.ca.gov/bsc/2009/part11_2008_calgreen_code.pdf.</p> <p>California Department of Water Resources, Dual Plumbing Code (webpage) at http://www.water.ca.gov/recycling/DualPlumbingCode/.</p> <p>See also Ahwahnee Water Principles, Principle 6, at http://www.lgc.org/ahwahnee/h2o_principles.html. The Ahwahnee Water Principles have been adopted by City of Willits, Town of Windsor, Menlo Park, Morgan Hill, Palo Alto, Petaluma, Port Hueneme, Richmond, Rohnert Park, Rolling Hills Estates, San Luis Obispo, Santa Paula, Santa Rosa, City of Sunnyvale, City of Ukiah, Ventura, Marin County, Marin Municipal Water District, and Ventura County.</p>
<p>Implement low-impact development practices that maintain the existing hydrology of the site to manage storm water and protect the environment.</p>	<p>Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site. See U.S. EPA, Low Impact Development (webpage) at http://www.epa.gov/nps/lid/.</p> <p>Office of Environmental Health Hazard Assessment and the California Water and Land Use Partnership, Low Impact Development at http://www.coastal.ca.gov/nps/lid-factsheet.pdf.</p>
<p>Devise a comprehensive water conservation strategy appropriate for the project and location.</p>	<p>The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.</p>
<p>Design buildings to be water-efficient. Install water-efficient fixtures and appliances.</p>	<p>Department of General Services, Best Practices Manual, Water-Efficient Fixtures and Appliances (website) at http://www.green.ca.gov/EPP/building/SaveH2O.htm.</p> <p>Many ENERGY STAR products have achieved their certification because of water efficiency. See California Energy Commission's database, available at http://www.appliances.energy.ca.gov/.</p>

<p>Offset water demand from new projects so that there is no net increase in water use.</p>	<p>For example, the City of Lompoc has a policy requiring new development to offset new water demand with savings from existing water users. See http://www.cityoflompoc.com/utilities/pdf/2005_uwmp_final.pdf at p. 29.</p>
<p>Provide education about water conservation and available programs and incentives.</p>	<p>See, for example, the City of Santa Cruz, Water Conservation Office at http://www.ci.santa-cruz.ca.us/index.aspx?page=395; Santa Clara Valley Water District, Water Conservation at http://www.valleywater.org/conservation/index.shtml; and Metropolitan Water District and the Family of Southern California Water Agencies, Be Water Wise at http://www.bewaterwise.com. Private projects may provide or fund similar education.</p>

Solid Waste Measures

<p>Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).</p>	<p>Construction and demolition materials account for almost 22 percent of the waste stream in California. Reusing and recycling these materials not only conserves natural resources and energy, but can also save money. For a list of best practices and other resources, see California Integrated Waste Management Board, Construction and Demolition Debris Recycling (webpage) at http://www.ciwmb.ca.gov/condemo/.</p>
<p>Integrate reuse and recycling into residential industrial, institutional and commercial projects.</p>	<p>Tips on developing a successful recycling program, and opportunities for cost-effective recycling, are available on the California Integrated Waste Management Board's Zero Waste California website. See http://zerowaste.ca.gov/.</p> <p>The Institute for Local Government's Waste Reduction & Recycling webpage contains examples of "best practices" for reducing greenhouse gas emissions, organized around waste reduction and recycling goals and additional examples and resources. See http://www.ca-ilg.org/wastereduction.</p>
<p>Provide easy and convenient recycling opportunities for residents, the public, and tenant businesses.</p>	<p>Tips on developing a successful recycling program, and opportunities for cost effective recycling, are available on the California Integrated Waste Management Board's Zero Waste California website. See http://zerowaste.ca.gov/.</p>
<p>Provide education and publicity about reducing waste and available recycling services.</p>	<p>Many cities and counties provide information on waste reduction and recycling. See, for example, the Butte County Guide to Recycling at http://www.recyclebutte.net.</p> <p>The California Integrated Waste Management Board's website contains numerous publications on recycling and waste reduction that may be helpful in devising an education project. See http://www.ciwmb.ca.gov/Publications/default.asp?cat=13. Private projects may also provide waste and recycling education directly, or fund education.</p>

Land Use Measures

<p>Ensure consistency with "smart growth" principles – mixed-use, infill, and higher density projects that provide alternatives to individual vehicle travel and promote the efficient delivery of services and goods.</p>	<p>U.S. EPA maintains an extensive Smart Growth webpage with links to examples, literature and technical assistance, and financial resources. See http://www.epa.gov/smartgrowth/index.htm.</p> <p>The National Oceanic and Atmospheric Administration's webpage provides smart growth recommendations for communities located near water. See Coastal & Waterfront Smart Growth (webpage) at http://coastalsmartgrowth.noaa.gov/. The webpage includes case studies from California.</p> <p>The California Energy Commission has recognized the important role that land use can play in meeting our greenhouse gas and energy efficiency goals. The agency's website, Smart Growth & Land Use Planning, contains useful information and links to relevant studies, reports, and other resources. See http://www.energy.ca.gov/landuse/.</p> <p>The Metropolitan Transportation Commission's webpage, Smart Growth / Transportation for Livable Communities, includes resources that may be useful to communities in the San Francisco Bay Area and beyond. See http://www.mtc.ca.gov/planning/smart_growth/.</p> <p>The Sacramento Area Council of Governments (SACOG) has published examples of smart growth in action in its region. See Examples from the Sacramento Region of the Seven Principles of Smart Growth / Better Ways to Grow, available at http://www.sacog.org/regionalfunding/betterways.pdf.</p>
<p>Meet recognized "smart growth" benchmarks.</p>	<p>For example, the LEED for Neighborhood Development (LEED-ND) rating system integrates the principles of smart growth, urbanism and green building into the first national system for neighborhood design. LEED-ND is a collaboration among the U.S. Green Building Council, Congress for the New Urbanism, and the Natural Resources Defense Council. For more information, see http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148.</p>
<p>Educate the public about the many benefits of well-designed, higher density development.</p>	<p>See, for example, U.S. EPA, Growing Smarter, Living Healthier: A Guide to Smart Growth and Active Aging (webpage), discussing how compact, walkable communities can provide benefits to seniors. See http://www.epa.gov/aging/bhc/guide/index.html.</p> <p>U.S. EPA, Environmental Benefits of Smart Growth (webpage) at http://www.epa.gov/dced/topics/eb.htm (noting local air and water quality improvements).</p> <p>Centers for Disease Control and Prevention (CDC), Designing and Building Healthy Places (webpage), at http://www.cdc.gov/healthyplaces/. The CDC's website discusses the links between walkable communities and public health and includes numerous links to educational materials.</p> <p>California Department of Housing and Community Development, Myths and Facts About Affordable and High Density Housing (2002), available at http://www.hcd.ca.gov/hpd/mythsfacts.pdf.</p>

<p>Incorporate public transit into the project's design.</p>	<p>Federal Transit Administration, Transit-Oriented Development (TOD) (webpage) at http://www.fta.dot.gov/planning/planning_environment_6932.html (describing the benefits of TOD as "social, environmental, and fiscal.")</p> <p>California Department of Transportation (Caltrans), Statewide Transit-Oriented Development Study: Factors for Success in California (2002), available at http://transitorienteddevelopment.dot.ca.gov/miscellaneous/StatewideTOD.htm</p> <p>Caltrans, California Transit-Oriented Development Searchable Database (includes detailed information on numerous TODs), available at http://transitorienteddevelopment.dot.ca.gov/miscellaneous/NewHome.jsp.</p> <p>California Department of Housing and Community Development, Transit Oriented Development (TOD) Resources (Aug. 2009), available at http://www.hcd.ca.gov/hpd/tod.pdf.</p>
<p>Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.</p>	<p>U.S. EPA, Smart Growth and Open Space Conservation (webpage) at http://www.epa.gov/dced/openspace.htm.</p>
<p>Develop "brownfields" and other underused or defunct properties near existing public transportation and jobs.</p>	<p>U.S. EPA, Smart Growth and Brownfields (webpage) at http://www.epa.gov/dced/brownfields.htm.</p> <p>For example, as set forth in the Local Government Commission's case study, the Town of Hercules, California reclaimed a 426-acre brownfield site, transforming it into a transit-friendly, walkable neighborhood. See http://www.lgc.org/freepub/docs/community_design/fact_sheets/er_case_studies.pdf.</p> <p>For financial resources that can assist in brownfield development, see Center for Creative Land Recycling, Financial Resources for California Brownfields (July 2008), available at http://www.cclr.org/media/publications/8-Financial_Resources_2008.pdf.</p>
<p>Include pedestrian and bicycle facilities within projects and ensure that existing non-motorized routes are maintained and enhanced.</p>	<p>See U.S. Department of Transportation, Federal Highway Administration, Bicycle and Pedestrian Program (webpage) at http://www.fhwa.dot.gov/environment/bikeped/.</p> <p>Caltrans, Pedestrian and Bicycle Facilities in California / A Technical Reference and Technology Transfer Synthesis for Caltrans Planners and Engineers (July 2005), available at http://www.dot.ca.gov/hq/traffops/survey/pedestrian/TR_MAY0405.pdf. This reference includes standard and innovative practices for pedestrian facilities and traffic calming.</p>

Transportation and Motor Vehicles

<p>Meet an identified transportation-related benchmark.</p>	<p>A logical benchmark might be related to vehicles miles traveled (VMT), e.g., average VMT per capita, per household, or per employee. As the California Energy Commission has noted, VMT by California residents increased "a rate of more than 3 percent a year between 1975 and 2004, markedly faster than the population growth rate over the same period, which was less than 2 percent. This increase in VMT correlates to an increase in petroleum use and GHG production and has led to the transportation sector being responsible for 41 percent of the state's GHG emissions in 2004." CEC, <i>The Role of Land Use in Meeting California's Energy and Climate Change Goals</i> (Aug. 2007) at p. 9, available at http://www.energy.ca.gov/2007publications/CEC-600-2007-008/CEC-600-2007-008-SF.PDF.</p> <p>Even with regulations designed to increase vehicle efficiency and lower the carbon content of fuel, "reduced VMT growth will be required to meet GHG reductions goals." <i>Id.</i> at p. 18.</p>
<p>Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation.</p>	<p>For example, reduce parking for private vehicles while increasing options for alternative transportation; eliminate minimum parking requirements for new buildings; "unbundle" parking (require that parking is paid for separately and is not included in rent for residential or commercial space); and set appropriate pricing for parking.</p> <p>See U.S. EPA, <i>Parking Spaces / Community Places, Finding the Balance Through Smart Growth Solutions</i> (Jan. 2006), available at http://www.epa.gov/dced/pdf/EPAParkingSpaces06.pdf.</p> <p>Reforming Parking Policies to Support Smart Growth, Metropolitan Transportation Commission (June 2007) at http://www.mtc.ca.gov/planning/smart_growth/parking_seminar/Toolbox_Handbook.pdf.</p> <p>See also the City of Ventura's <i>Downtown Parking and Mobility Plan</i>, available at http://www.cityofventura.net/community_development/resources/mobility_parking_plan.pdf, and Ventura's <i>Downtown Parking Management Program</i>, available at http://www.ci.ventura.ca.us/depts/comm_dev/downtownplan/chapters.asp.</p>
<p>Build or fund a major transit stop within or near the development.</p>	<p>"Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." (Pub. Res. Code, § 21064.3.)</p> <p>Transit Oriented Development (TOD) is a moderate to higher density development located within an easy walk of a major transit stop. http://transitorienteddevelopment.dot.ca.gov/miscellaneous/NewWhatisTOD.htm.</p> <p>By building or funding a major transit stop, an otherwise ordinary development can become a TOD.</p>

<p>Provide public transit incentives such as free or low-cost monthly transit passes to employees, or free ride areas to residents and customers.</p>	<p>See U.S. Department of Transportation and U.S. EPA, Commuter Choice Primer / An Employer's Guide to Implementing Effective Commuter Choice Programs, available at http://www.its.dot.gov/JPODOCS/REPTS_PR/13669.html.</p> <p>The Emery Go Round shuttle is a private transportation service funded by commercial property owners in the citywide transportation business improvement district. The shuttle links a local shopping district to a Bay Area Rapid Transit stop. See http://www.emerygoround.com/.</p> <p>Seattle, Washington maintains a public transportation "ride free" zone in its downtown from 6:00 a.m. to 7:00 p.m. daily. See http://transit.metrokc.gov/tops/accessible/paccessible_map.html#fare.</p>
<p>Promote "least polluting" ways to connect people and goods to their destinations.</p>	<p>Promoting "least polluting" methods of moving people and goods is part of a larger, integrated "sustainable streets" strategy now being explored at U.C. Davis's Sustainable Transportation Center. Resources and links are available at the Center's website, http://stc.ucdavis.edu/outreach/ssp.php.</p>
<p>Incorporate bicycle lanes, routes and facilities into street systems, new subdivisions, and large developments.</p>	<p>Bicycling can have a profound impact on transportation choices and air pollution reduction. The City of Davis has the highest rate of bicycling in the nation. Among its 64,000 residents, 17 percent travel to work by bicycle and 41 percent consider the bicycle their primary mode of transportation. See Air Resources Board, Bicycle Awareness Program, Bicycle Fact Sheet, available at http://www.arb.ca.gov/planning/tsaq/bicycle/factsht.htm.</p> <p>For recommendations on best practices, see the many resources listed at the U.S. Department of Transportation, Federal Highway Administration's Bicycle and Pedestrian website at http://www.fhwa.dot.gov/environment/bikeped/publications.htm.</p> <p>See also Caltrans Division of Research and Innovation, Designing Highway Facilities To Encourage Walking, Biking and Transit (Preliminary Investigation) (March 2009), available at http://www.dot.ca.gov/research/researchreports/preliminary_investigations/docs/pi-design_for_walking_%20biking_and_transit%20final.pdf.</p>
<p>Require amenities for non-motorized transportation, such as secure and convenient bicycle parking.</p>	<p>According to local and national surveys of potential bicycle commuters, secure bicycle parking and workplace changing facilities are important complements to safe and convenient routes of travel. See Air Resources Board, Bicycle Awareness Program, Bicycle Fact Sheet, available at http://www.arb.ca.gov/planning/tsaq/bicycle/factsht.htm.</p>

<p>Ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation.</p>	<p>See, e.g., U.S. EPA's list of transit-related "smart growth" publications at http://www.epa.gov/dced/publications.htm#air, including Pedestrian and Transit-Friendly Design: A Primer for Smart Growth (1999), available at www.epa.gov/dced/pdf/ptfd_primer.pdf.</p> <p>See also Toolkit for Improving Walkability in Alameda County, available at http://www.acta2002.com/ped_toolkit/ped_toolkit_print.pdf.</p> <p>Pursuant to the California Complete Streets Act of 2008 (AB 1358, Gov. Code, §§ 65040.2 and 65302), commencing January 1, 2011, upon any substantive revision of the circulation element of the general plan, a city or county will be required to modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users.</p>
<p>Connect parks and open space through shared pedestrian/bike paths and trails to encourage walking and bicycling. Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.</p>	<p>Walk Score ranks the "walkability" of neighborhoods in the largest 40 U.S. cities, including seven California cities. Scores are based on the distance to nearby amenities. Explore Walk Score at http://www.walkscore.com/.</p> <p>In many markets, homes in walkable neighborhoods are worth more than similar properties where walking is more difficult. See Hoak, <i>Walk appeal / Homes in walkable neighborhoods sell for more: study</i>, Wall Street Journal (Aug. 18, 2009), available at http://www.marketwatch.com/story/homes-in-walkable-neighborhoods-sell-for-more-2009-08-18.</p> <p>By creating walkable neighborhoods with more transportation choices, Californians could save \$31 million and cut greenhouse gas emissions by 34 percent, according to a study released by Transform, a coalition of unions and nonprofits. See <i>Windfall for All / How Connected, Convenient Neighborhoods Can Protect Our Climate and Safeguard California's Economy</i> (Nov. 2009), available at http://transformca.org/windfall-for-all#download-report.</p>
<p>Work with the school districts to improve pedestrian and bike access to schools and to restore or expand school bus service using lower-emitting vehicles.</p>	<p>In some communities, twenty to twenty-five percent of morning traffic is due to parents driving their children to school. Increased traffic congestion around schools in turn prompts even more parents to drive their children to school. Programs to create safe routes to schools can break this harmful cycle. See California Department of Public Health, <i>Safe Routes to School</i> (webpage) and associated links at http://www.cdph.ca.gov/HealthInfo/injviosaf/Pages/SafeRoutestoSchool.aspx.</p> <p>See also U.S. EPA, <i>Smart Growth and Schools</i> (webpage), available at http://www.epa.gov/dced/schools.htm.</p> <p>California Center for Physical Activity, <i>California Walk to School</i> (website) at http://www.cawalktoschool.com</p> <p>Regular school bus service (using lower-emitting buses) for children who cannot bike or walk to school could substantially reduce private vehicle congestion and air pollution around schools. See Air Resources Board, <i>Lower Emissions School Bus Program</i> (webpage) at http://www.arb.ca.gov/msprog/schoolbus/schoolbus.htm.</p>

<p>Institute teleconferencing, telecommute and/or flexible work hour programs to reduce unnecessary employee transportation.</p>	<p>There are numerous sites on the web with resources for employers seeking to establish telework or flexible work programs. These include U.S. EPA's Mobility Management Strategies: Commuter Programs website at http://www.epa.gov/otaq/stateresources/rellinks/mms_commproms.htm; and Telework, the federal government's telework website, at http://www.telework.gov/.</p> <p>Through a continuing FlexWork Implementation Program, the Traffic Solutions division of the Santa Barbara County Association of Governments sponsors flexwork consulting, training and implementation services to a limited number of Santa Barbara County organizations that want to create or expand flexwork programs for the benefit of their organizations, employees and the community. See http://www.flexworks.com/read_more_about_the_fSBp.html. Other local government entities provide similar services.</p>
<p>Provide information on alternative transportation options for consumers, residents, tenants and employees to reduce transportation-related emissions.</p>	<p>Many types of projects may provide opportunities for delivering more tailored transportation information. For example, a homeowner's association could provide information on its website, or an employer might create a Transportation Coordinator position as part of a larger Employee Commute Reduction Program. See, e.g., South Coast Air Quality Management District, Transportation Coordinator training, at http://www.aqmd.gov/trans/traing.html.</p>
<p>Educate consumers, residents, tenants and the public about options for reducing motor vehicle-related greenhouse gas emissions. Include information on trip reduction; trip linking; vehicle performance and efficiency (e.g., keeping tires inflated); and low or zero-emission vehicles.</p>	<p>See, for example U.S. EPA, SmartWay Transport Partnership: Innovative Carrier Strategies (webpage) at http://www.epa.gov/smartway/transport/what-smartway/carrier-strategies.htm. This webpage includes recommendations for actions that truck and rail fleets can take to make ground freight more efficient and cleaner.</p> <p>The Air Resources Board's Drive Clean website is a resource for car buyers to find clean and efficient vehicles. The web site is designed to educate Californians that pollution levels range greatly between vehicles. See http://www.driveclean.ca.gov/.</p> <p>The Oregon Department of Transportation and other public and private partners launched the Drive Less/Save More campaign. The comprehensive website contains fact sheets and educational materials to help people drive more efficiently. See http://www.driveless.savemore.com/.</p>
<p>Purchase, or create incentives for purchasing, low or zero-emission vehicles.</p>	<p>See Air Resources Board, Low-Emission Vehicle Program (webpage) at http://www.arb.ca.gov/msprog/levprog/levprog.htm.</p> <p>Air Resource Board, Zero Emission Vehicle Program (webpage) at http://www.arb.ca.gov/msprog/zevprog/zevprog.htm.</p> <p>All new cars sold in California are now required to display an Environmental Performance (EP) Label, which scores a vehicle's global warming and smog emissions from 1 (dirtiest) to 10 (cleanest). To search and compare vehicle EP Labels, visit www.DriveClean.ca.gov.</p>

<p>Create a ride sharing program. Promote existing ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles, and providing a web site or message board for coordinating rides.</p>	<p>For example, the 511 Regional Rideshare Program is operated by the Metropolitan Transportation Commission (MTC) and is funded by grants from the Federal Highway Administration, U.S. Department of Transportation, the Metropolitan Transportation Commission, the Bay Area Air Quality Management District and county congestion management agencies. For more information, see http://rideshare.511.org/.</p> <p>As another example, San Bernardino Associated Governments works directly with large and small employers, as well as providing support to commuters who wish to share rides or use alternative forms of transportation. See http://www.sanbag.ca.gov/commuter/rideshare.html.</p> <p>Valleyrides.com is a ridesharing resource available to anyone commuting to and from Fresno and Tulare Counties and surrounding communities. See http://www.valleyrides.com/. There are many other similar websites throughout the state.</p>
<p>Create or accommodate car sharing programs, e.g., provide parking spaces for car share vehicles at convenient locations accessible by public transportation.</p>	<p>There are many existing car sharing companies in California. These include City CarShare (San Francisco Bay Area), see http://www.citycarshare.org/; and Zipcar, see http://www.zipcar.com/. Car sharing programs are being successfully used on many California campuses.</p>
<p>Provide a vanpool for employees.</p>	<p>Many local Transportation Management Agencies can assist in forming vanpools. See, for example, Sacramento Transportation Management Association, Check out Vanpooling (webpage) at http://www.sacramento-tma.org/vanpool.html.</p>
<p>Create local "light vehicle" networks, such as neighborhood electric vehicle systems.</p>	<p>See California Energy Commission, Consumer Energy Center, Urban Options - Neighborhood Electric Vehicles (NEVs) (webpage) at http://www.consumerenergycenter.org/transportation/urban_options/nev.html.</p> <p>The City of Lincoln has an innovative NEV program. See http://www.lincolnev.com/index.html.</p>
<p>Enforce and follow limits idling time for commercial vehicles, including delivery and construction vehicles.</p>	<p>Under existing law, diesel-fueled motor vehicles with a gross vehicle weight rating greater than 10,000 pounds are prohibited from idling for more than 5 minutes at any location. The minimum penalty for an idling violation is now \$300 per violation. See http://www.arb.ca.gov/enf/complaints/idling_cv.htm.</p>
<p>Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles.</p>	<p>For a list of existing alternative fuel stations in California, visit http://www.cleancarmaps.com/.</p> <p>See, e.g., Baker, <i>Charging-station network built along 101</i>, S.F. Chron. (9/23/09), available at http://articles.sfgate.com/2009-09-23/news/17207424_1_recharging-solar-array-tesla-motors.</p>

Agriculture and Forestry (additional strategies noted above)

<p>Require best management practices in agriculture and animal operations to reduce emissions, conserve energy and water, and utilize alternative energy sources, including biogas, wind and solar.</p>	<p>Air Resources Board (ARB), Economic Sectors Portal, Agriculture (webpage) at http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm. ARB's webpage includes information on emissions from manure management, nitrogen fertilizer, agricultural offroad equipment, and agricultural engines.</p> <p>"A full 90% of an agricultural business' electricity bill is likely associated with water use. In addition, the 8 million acres in California devoted to crops consume 80% of the total water pumped in the state." See Flex Your Power, Agricultural Sector (webpage) at http://www.fypower.org/agri/.</p> <p>Flex Your Power, Best Practice Guide / Food and Beverage Growers and Processors, available at http://www.fypower.org/bpg/index.html?b=food_and_bev.</p> <p>Antle et al., Pew Center on Global Climate Change, Agriculture's Role in Greenhouse Gas Mitigation (2006), available at http://www.pewclimate.org/docUploads/Agriculture's%20Role%20in%20GHG%20Mitigation.pdf.</p>
<p>Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits.</p>	<p>"There are three general means by which agricultural and forestry practices can reduce greenhouse gases: (1) avoiding emissions by maintaining existing carbon storage in trees and soils; (2) increasing carbon storage by, e.g., tree planting, conversion from conventional to conservation tillage practices on agricultural lands; (3) substituting bio-based fuels and products for fossil fuels, such as coal and oil, and energy-intensive products that generate greater quantities of CO₂ when used." U.S. EPA, Carbon Sequestration in Agriculture and Forestry, Frequently Asked Questions (webpage) at http://www.epa.gov/sequestration/faq.html.</p> <p>Air Resources Board, Economic Sectors Portal, Forestry (webpage) at http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm.</p>
<p>Protect existing trees and encourage the planting of new trees. Adopt a tree protection and replacement ordinance.</p>	<p>Tree preservation and planting is not just for rural areas of the state; suburban and urban forests can also serve as carbon sinks. See Cal Fire, Urban and Community Forestry (webpage) at http://www.fire.ca.gov/resource_mgmt/resource_mgmt_urbanforestry.php.</p>

Off-Site Mitigation

If, after analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts, the lead agency determines that additional mitigation is required, the agency may consider additional off-site mitigation. The project proponent could, for example, fund off-site mitigation projects that will reduce carbon emissions, conduct an audit of its other existing operations and agree to retrofit, or purchase verifiable carbon "credits" from another entity that will undertake mitigation.

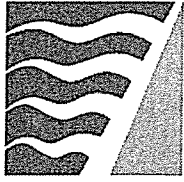
The topic of off-site mitigation can be complicated. A full discussion is outside the scope of this summary document. Issues that the lead agency should consider include:

- The location of the off-site mitigation. (If the off-site mitigation is far from the project, any additional, non-climate related co-benefits of the mitigation may be lost to the local community.)
- Whether the emissions reductions from off-site mitigation can be quantified and verified. (The California Registry has developed a number of protocols for calculating, reporting and verifying greenhouse gas emissions. Currently, industry-specific protocols are available for the cement sector, power/utility sector, forest sector and local government operations. For more information, visit the California Registry's website at <http://www.climateregistry.org/>.)
- Whether the mitigation ratio should be greater than 1:1 to reflect any uncertainty about the effectiveness of the off-site mitigation.

Offsite mitigation measures that could be funded through mitigation fees include, but are not limited to, the following:

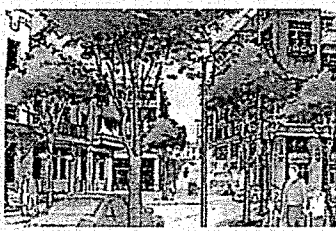
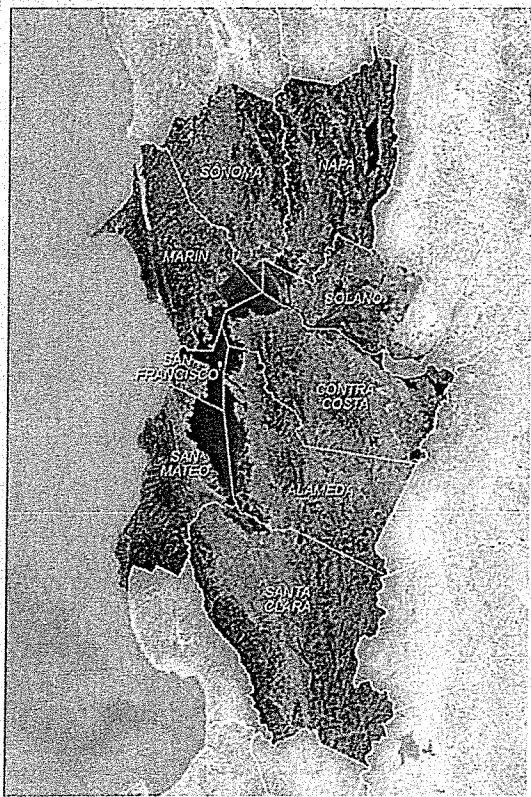
- Energy efficiency audits of existing buildings.
- Energy efficiency upgrades to existing buildings not otherwise required by law, including heating, ventilation, air conditioning, lighting, water heating equipment, insulation and weatherization (perhaps targeted to specific communities, such as low-income or senior residents).
- Programs to encourage the purchase and use of energy efficient vehicles, appliances, equipment and lighting.
- Programs that create incentives to replace or retire polluting vehicles and engines.
- Programs to expand the use of renewable energy and energy storage.
- Preservation and/or enhancement of existing natural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) that provide carbon sequestration benefits.
- Improvement and expansion of public transit and low- and zero-carbon transportation alternatives.

EXHIBIT C



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

California Environmental Quality Act Air Quality Guidelines



May 2010



California Environmental Quality Act
Air Quality Guidelines

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

Project Manager:
Greg Tholen
Principal Environmental Planner
(415) 749-4954

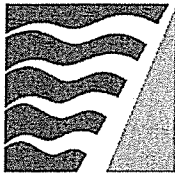
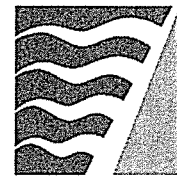


TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS	iii
1. INTRODUCTION.....	1-1
1.1. Purpose of Guidelines.....	1-1
1.2. Guideline Components	1-3
PART I: THRESHOLDS OF SIGNIFICANCE & PROJECT SCREENING	
2. THRESHOLDS OF SIGNIFICANCE	2-1
2.1. Criteria Air Pollutants and Precursors – Project Level.....	2-3
2.2. Greenhouse Gases – Project Level.....	2-4
2.3. Local Community Risk and Hazard Impacts – Project Level.....	2-4
2.4. Local Carbon Monoxide Impacts – Project level.....	2-5
2.5. Odor Impacts – Project Level.....	2-5
2.6. Construction-related Impacts – Project Level	2-6
2.7. Thresholds Of Significance for Plan-Level Impacts	2-7
3. SCREENING CRITERIA.....	3-1
3.1. Operational-Related Impacts	3-1
3.2. Community Risk and Hazard Impacts.....	3-3
3.3. Carbon Monoxide Impacts	3-3
3.4. Odor Impacts.....	3-4
3.5. Construction-Related Impacts.....	3-5
PART II: ASSESSING & MITIGATING PROJECT LEVEL IMPACTS	
4. OPERATIONAL-RELATED IMPACTS	4-1
4.1. Criteria Air Pollutant and Precursor Emissions.....	4-1
4.2. Greenhouse Gas Impacts	4-4
4.3. Greenhouse Gas Reduction Strategies	4-7
4.4. Mitigating Operational-related Impacts	4-12
5. LOCAL COMMUNITY RISK AND HAZARD IMPACTS	5-1
5.1. Toxic Air Contaminants	5-1
5.2. Single Source Impacts	5-3
5.3. Cumulative Impacts	5-15
5.4. Community Risk Reduction Plans.....	5-16
5.5. Mitigating Local Community Risk and Hazard Impacts	5-17
6. LOCAL CARBON MONOXIDE IMPACTS	6-1
6.1. Significance Determination	6-1
6.2. Mitigating Local Carbon Monoxide Impacts.....	6-4
7. ODOR IMPACTS	7-1
7.1. Significance Determination	7-2
7.2. Mitigating Odor Impacts	7-3
8. CONSTRUCTION-RELATED IMPACTS.....	8-1
8.1. Criteria Air Pollutants and Precursors.....	8-1
8.2. Greenhouse Gases.....	8-7
8.3. Toxic Air Contaminants.....	8-7
PART III: ASSESSING & MITIGATING PLAN LEVEL IMPACTS	
9. PLAN-LEVEL IMPACTS	9-1
9.1. Criteria Air Pollutants and Precursor Emissions	9-2



9.2.	Greenhouse Gases	9-3
9.3.	Local Community Risk and Hazard Impacts	9-6
9.4.	Odor Impacts.....	9-7
9.5.	Regional Plans	9-8
9.6.	Mitigating Plan-level Impacts	9-8

Appendices

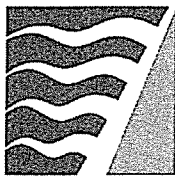
A	Construction Assessment Tools
B	Air Quality Modeling Instructions and Project Examples
C	Sample Air Quality Setting
D	Threshold of Significance Justification
E	Glossary

List of Figures

1-1	Bay Area Air Quality Management District Jurisdictional Boundaries	1-2
1-2	General Steps for Determining Significance of Air Quality Impacts	1-4
5-1	Impacted Communities	5-4
5-2	Phased Approach for Estimating Community Risks and Hazards – Sources	5-6
5-3	Phased Approach for Estimating Community Risks and Hazards – Receptors	5-9

List of Tables

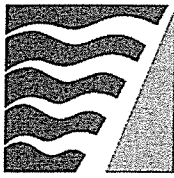
2-1	Proposed Air Quality Ceqa Thresholds Of Significance	2-2
2-2	Thresholds Of Significance For Operational-Related Criteria Air Pollutants And Precursors	2-4
2-3	Thresholds Of Significance For Local Carbon Monoxide Emissions.....	2-5
2-4	Thresholds Of Significance For Construction-Related Criteria Air Pollutants And Precursors	2-6
2-5	Thresholds Of Significance For Plans.....	2-7
3-1	Operational-Related Criteria Air Pollutant And Precursor Screening Level Sizes.....	3-2
3-3	Odor Screening Distances	3-4
4-1	Example Operational Criteria Air Pollutant And Precursor Emissions Analysis	4-4
4-2	Guidance For Estimating A Project’s Operations Ghg Emissions	4-6
4-3	Example Of Operational Greenhouse Gas Emissions Analysis	4-7
5-1	Screening Table For Existing Permitted Stationary Sources* (Within 1,000 Feet Of The Proposed Project).....	5-10
5-2	East Or West Of San Francisco County Highway	5-13
5-3	Cancer And Non-Cancer (Chronic And Acute) Hazard Indices At 440 Feet	5-13



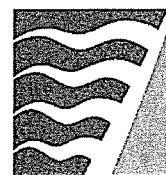
5-4	San Francisco County State Highway Traffic Volumes	5-14
8-1	Example Construction Criteria Air Pollutant And Precursor Significance Determination.....	8-3
8-2	Basic Construction Mitigation Measures Recommended For All Proposed Projects	8-4
8-3	Additional Construction Mitigation Measures Recommended For Projects With Construction Emissions Above The Threshold.....	8-5
8-4	Urbemis Guidance For Assessing Construction-Related Impacts.....	8-6
9-1	Example Plan-Level Greenhouse Gas Emissions Analysis	9-6
B-1	Urbemis Input Parameters For Operation Emissions	1
B-1	Roadway Construction Emissions Model Cell Reference For Unmitigated Off-Road Equipment Emissions.....	12
C.1	Ambient Air Quality Standards And Designations	13
C.2	Common Sources Of Health Effects For Criteria Air Pollutants	15
C.3	Examples Of Greenhouse Gases	18

ACRONYMS AND ABBREVIATIONS

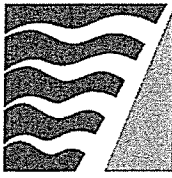
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AB	Assembly Bill
AB 1807	Tanner Air Toxics Act
AB 2588	Air Toxics Hot Spots Information and Assessment Act of 1987
ABAG	Association of Bay Area Governments
AMS	American Meteorological Society
APS	Alternative Planning Strategy
AQP	Air Quality Plan
ARB	California Air Resources Board
ATCM	air toxics control measures
BAAQMD	Bay Area Quality Management District
BACT	Best Available Control Technology
BMPs	Best Management Practices
CCA	Community Choice Aggregation
CAAQS	California Ambient Air Quality Standards
CALINE4	California Line Source Dispersion Model
CAP	criteria air pollutants
CARE	Community Air Risk Evaluation
CAPCOA	California Air Pollution Control Officers Association
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CalRecycle	The California Department of Resources Recycling and Recovery (formally the California Integrated Waste Management Board)
CFC	Chlorofluorocarbon
CH ₄	methane
CHAPIS	Community Health Air Pollution Information System
CO	carbon monoxide
CO Protocol	Carbon Monoxide Protocol
CO ₂	Carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRA	California Resources Agency



DOE	Department of Energy
du	dwelling units
EIR	Environmental Impact Report
EMFAC	On-Road Mobile-Source Emission Factors
EPA	U.S. Environmental Protection Agency
FAR	Floor Area Ratio
FCAA	Federal Clean Air Act
FCAAA	Federal Clean Air Act Amendments of 1990
GHG	greenhouse gas(es)
GRP	General Reporting Protocol
GVW	gross vehicle weight
GWP	global warming potential
H ₂ S	hydrogen sulfide
HEPA	High Efficiency Particulate Arresting (filter)
HI	Hazard Index
HRA	health risk assessment
HVAC	Heating, Ventilation, and Air Conditioning System
IPCC	Intergovernmental Panel on Climate Change
ISR	Indirect Source Review
ksf	thousand square feet
kwh	Kilowatt hour
lb/acre-day	pound per disturbed acre per day
lb/day	pounds per day
lb/kwh	pounds per kilowatt hour
LCFS	Low-Carbon Fuel Standard
LVW	loaded vehicle weight
MACT	maximum available control technology
mg	million gallons
MMT	million metric tons
mph	miles per hour
MPO	Metropolitan Planning Organizations
MT	metric tons
MTC	Metropolitan Transportation Commission
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards



NESHAP	national emissions standards for hazardous air pollutants
NH ₃	mercaptan, ammonia
NOA	Naturally Occurring Asbestos
NOP	Notice of Preparation
NO _x	oxides of nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
PM	particulate matter
PM ₁₀	respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less
PM _{2.5}	fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less
ppm	parts per million
PUC	Public Utilities Commission
RoadMod	Roadway Construction Emissions Model
ROG	reactive organic gases
RTP	Regional Transportation Plan
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SP	Service Population
SSIM	Sustainable Systems Integration Model
TAC	toxic air contaminant
T-BACT	Toxic Best Available Control Technology
TBPs	Toxic Best Practices
tpy	tons per year
UC	University of California
URBEMIS	Urban Land Use Emissions Model
VMT	vehicle miles traveled
VT	vehicle trips
yd ³	cubic yards
yr	year



1. INTRODUCTION

1.1. PURPOSE OF GUIDELINES

The purpose of the Bay Area Air Quality Management District (BAAQMD or District) California Environmental Quality Act (CEQA) Guidelines is to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the San Francisco Bay Area Air Basin (SFBAAB). The Guidelines provides BAAQMD-recommended procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements. These revised Guidelines supersede the BAAQMD's previous CEQA guidance titled *BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans* (BAAQMD 1999).

Land development plans and projects have the potential to generate harmful air pollutants that degrade air quality and increase local exposure. The Guidelines contain instructions on how to evaluate, measure, and mitigate air quality impacts generated from land development construction and operation activities. The Guidelines focus on criteria air pollutant, greenhouse gas (GHG), toxic air contaminant, and odor emissions generated from plans or projects.

The Guidelines are intended to help lead agencies navigate through the CEQA process. The Guidelines offer step-by-step procedures for a thorough environmental impact analysis of adverse air emissions due to land development in the Bay Area.

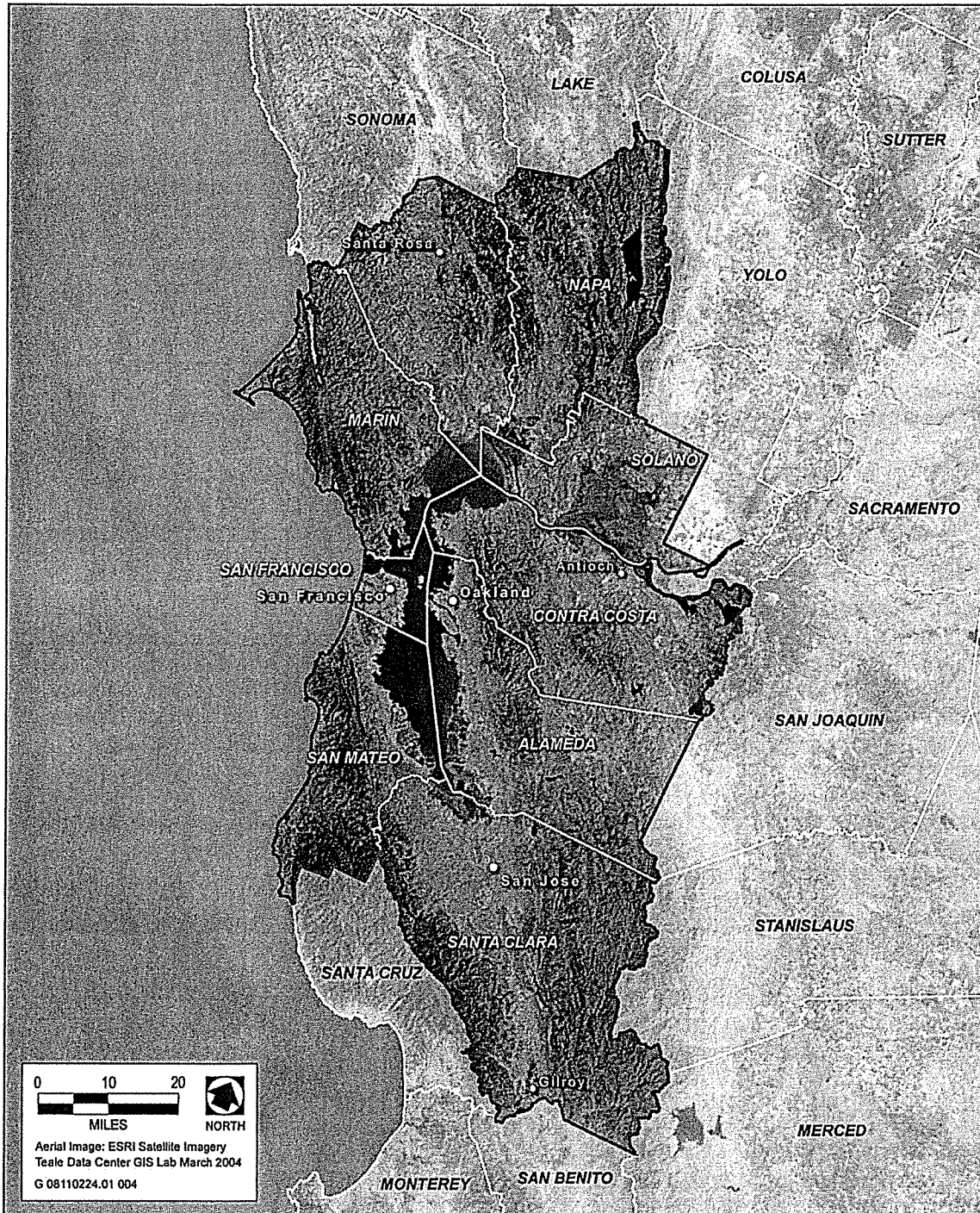
1.1.1. BAAQMD's Role in Air Quality

BAAQMD is the primary agency responsible for assuring that the National and California Ambient Air Quality Standards (NAAQS and CAAQS, respectively) are attained and maintained in the Bay Area. BAAQMD's jurisdiction includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara counties, and the southern portions of Solano and Sonoma counties, as shown in Figure 1-1. The Air District's responsibilities in improving air quality in the region include: preparing plans for attaining and maintaining air quality standards; adopting and enforcing rules and regulations; issuing permits for stationary sources of air pollutants; inspecting stationary sources and responding to citizen complaints; monitoring air quality and meteorological conditions; awarding grants to reduce mobile emissions; implementing public outreach campaigns; and assisting local governments in addressing climate change.

BAAQMD takes on various roles in the CEQA process, depending on the nature of the proposed project, including:

Lead Agency – BAAQMD acts as a Lead Agency when it has the primary authority to implement or approve a project, such as when it adopts air quality plans for the region, issues stationary source permits, or adopts rules and regulations.

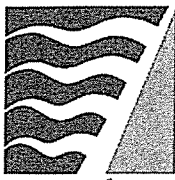
Responsible Agency – BAAQMD acts as a Responsible Agency when it has limited discretionary authority over a portion of a project, but does not have the primary discretionary authority of a Lead Agency. As a Responsible Agency, BAAQMD may coordinate the environmental review process with the lead agency regarding BAAQMD's permitting process, provide comments to the Lead Agency regarding potential impacts, and recommend mitigation measures.



Source: ESRI Satellite 2009

Bay Area Air Quality Management District Jurisdictional Boundaries

Figure 1-1



Commenting Agency – BAAQMD may act as a Commenting Agency when it is not a Lead or Responsible Agency (i.e., it does not have discretionary authority over a project), but when it may have concerns about the air quality impacts of a proposed project or plan. As a Commenting Agency, BAAQMD may review environmental documents prepared for development proposals and plans in the region, such as local general plans, and provide comments to the Lead Agency regarding the adequacy of the air quality impact analysis, determination of significance, and mitigation measures proposed.

BAAQMD prepared the CEQA Guidelines to assist lead agencies in air quality analysis, as well as to promote sustainable development in the region. The CEQA Guidelines support lead agencies in analyzing air quality impacts and offers numerous mitigation measures and general plan policies to implement smart growth and transit oriented development, minimize construction emissions, and reduce population exposure to air pollution risks.

1.2. GUIDELINE COMPONENTS

The recommendations in the CEQA Guidelines should be viewed as minimum considerations for analyzing air quality impacts. Lead agencies are encouraged to tailor the air quality impact analysis to meet the needs of the local community and may conduct refined analysis that utilize more sophisticated models, more precise input data, innovative mitigation measures, and/or other features. The Guidelines contain the following sections:

Introduction – Chapter 1 provides a summary of the purpose of the Guide, and an overview of BAAQMD responsibilities.

Thresholds of Significance – Chapter 2 outlines the current thresholds or significance for determining the significance of air quality impacts.

Screening Criteria – Chapter 3 provides easy reference tables to determine if your project may have potentially significant impacts requiring a detailed analysis.

Assessing and Mitigating Impacts – Chapters 4 through 9 describe assessment methods and mitigation measures for operational-related, local community risk and hazards, local carbon monoxide (CO), odors, construction-related, and plan-level impacts.

Appendix A – Provides construction assessment tools.

Appendix B – Provides detailed air quality modeling instructions.

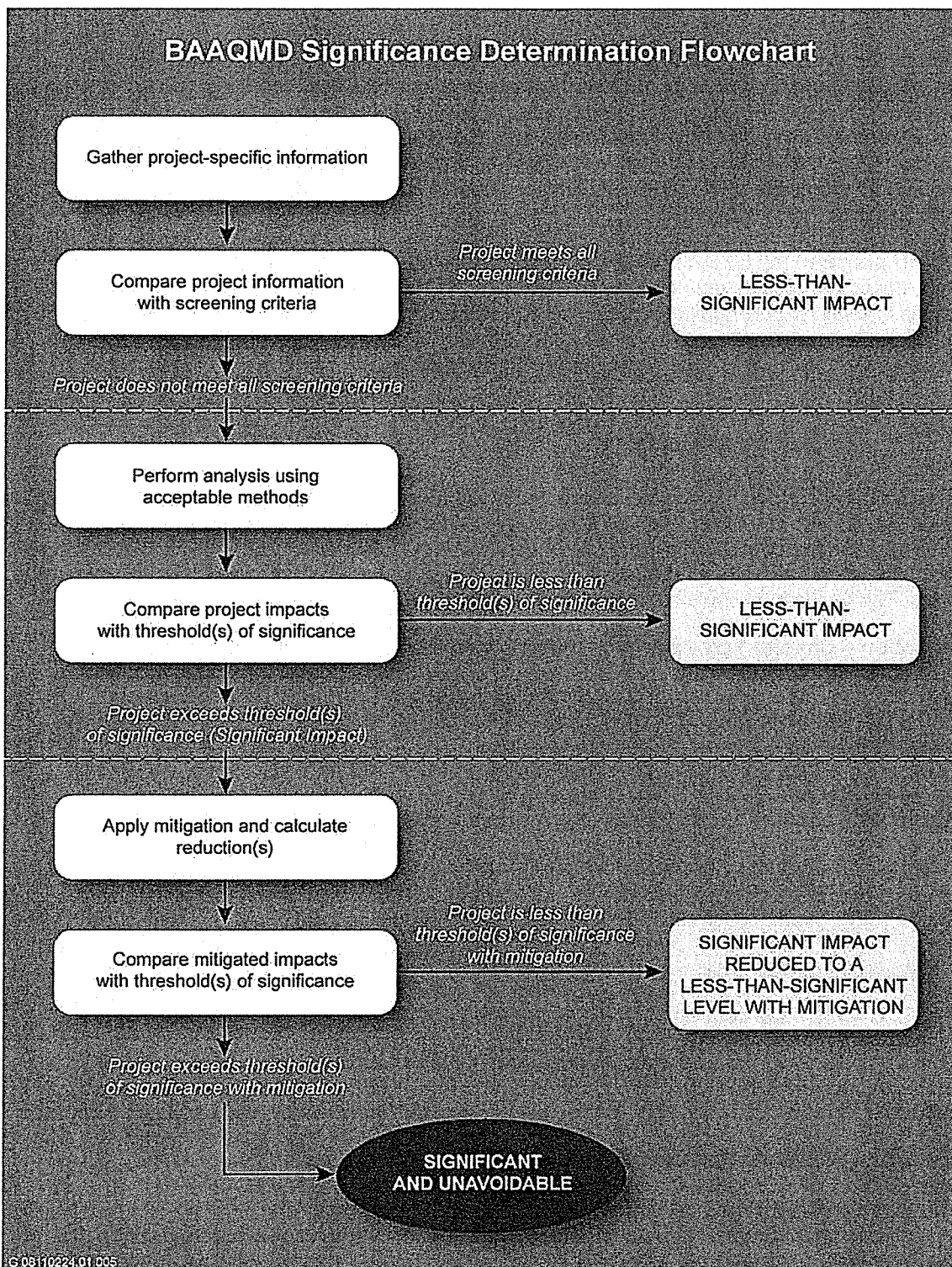
Appendix C – Outlines sample environmental setting information.

Appendix D – Contains justification statements for BAAQMD-adopted thresholds of significance.

Appendix E – Provides a glossary of terms used throughout this guide.

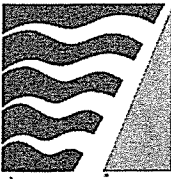
1.2.1. How To Use The Guidelines

Figure 2-1 illustrates general steps for evaluating a project or plan's air quality impacts. The first step is to determine whether the air quality evaluation is for a project or plan. Once identified, the project should be compared with the appropriate construction and operational screening criteria listed in Chapter 2. There are no screening criteria for plans.



General Steps for Determining Significance of Air Quality Impacts

Figure 1-2



If the project meets the screening criteria and is consistent with the methodology used to develop the screening criteria, then its air quality impacts may be considered less than significant. Otherwise, lead agencies should evaluate potential air quality impacts of projects (and plans) as explained in Chapters 4 through 9. These Chapters describe how to analyze air quality impacts from criteria air pollutants, GHGs, local community risk and hazards, and odors associated with construction activity and operations of a project or plan.

If, after proper analysis, the project or plan's air quality impacts are found to be below the significance thresholds, then the air quality impacts may be considered less than significant. If not, the Lead Agency should implement appropriate mitigation measures to reduce associated air quality impacts. Lead agencies are responsible for evaluating and implementing all feasible mitigation measures in their CEQA document.

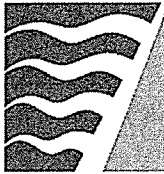
The mitigated project or plan's impacts are then compared again to the significance thresholds. If a project succeeded in mitigating its adverse air quality impacts below the corresponding thresholds, air quality impacts may be considered less than significant. If a project still exceeds the thresholds, the Air District strongly encourages the lead agency to consider project alternatives that could lessen any identified significant impact, including a no project alternative in accordance with CEQA Guidelines section 15126.6(e).

1.2.2. Early Consultation

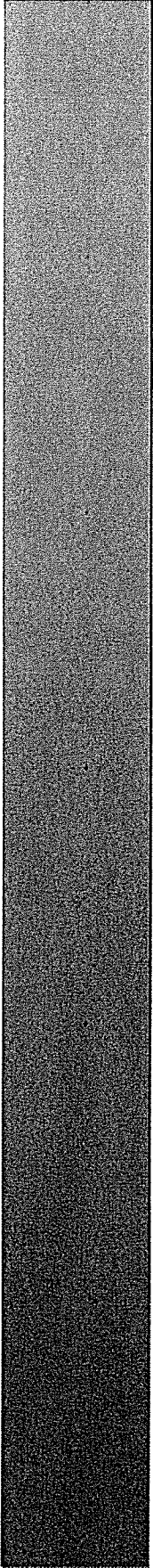
The District encourages local jurisdictions and project applicants to address air quality issues as early as possible in the project planning stage. Addressing land use and site design issues while a proposed project is still in the conceptual stage increases opportunities to incorporate project design features to minimize land use compatibility issues and air quality impacts. By the time a project enters the CEQA process, it is usually more costly and time-consuming to redesign the project to incorporate mitigation measures. Early consultation may be achieved by including a formal step in the jurisdiction's development review procedures or simply by discussing air quality concerns at the planning counter when a project proponent makes an initial contact regarding a proposed development. Regardless of the specific procedures a local jurisdiction employs, the objective should be to incorporate features into a project that minimize air quality impacts before significant resources (public and private) have been devoted to the project.

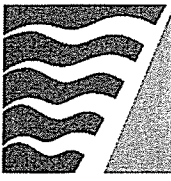
The following air quality considerations warrant particular attention during early consultation between Lead Agencies and project proponents:

1. land use and design measures to encourage alternatives to the automobile, conserve energy and reduce project emissions;
2. land use conflicts and exposure of sensitive receptors to odors, toxics and criteria pollutants; and,
3. applicable District rules, regulations and permit requirements.



[This Page Intentionally Left Blank]





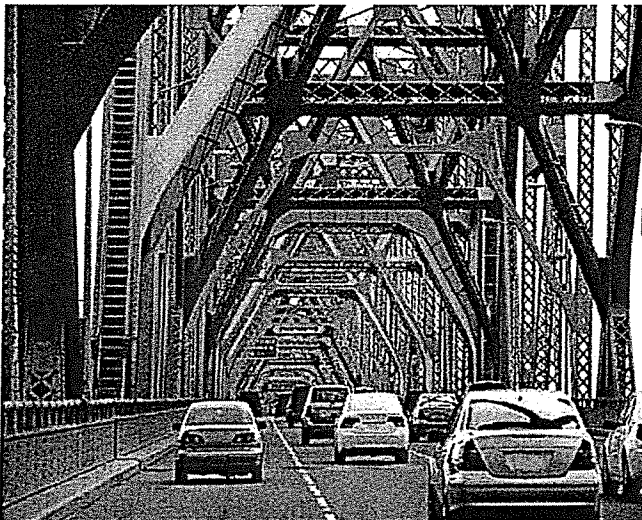
PART I: THRESHOLDS OF SIGNIFICANCE & PROJECT SCREENING

2. THRESHOLDS OF SIGNIFICANCE

The SFBAAB is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. SFBAAB's nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The analysis to assess project-level air quality impacts should be as comprehensive and rigorous as possible.

Similar to regulated air pollutants, GHG emissions and global climate change also represent cumulative impacts. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. Climate change impacts may include an increase in extreme heat days, higher concentrations of air pollutants, sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts.



© 2009 Jupiterimages Corporation

BAAQMD's approach to developing a *Threshold of Significance* for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. Refer to Table 2-1 for a summary of Air Quality CEQA Thresholds and to Appendix D for *Thresholds of Significance* documentation.

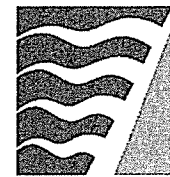


Table 2-1 Proposed Air Quality CEQA Thresholds of Significance			
Pollutant	Construction-Related	Operational-Related	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust)	82	82	15
PM _{2.5} (exhaust)	54	54	10
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs – Projects other than Stationary Sources	None	Compliance with Qualified GHG Reduction Strategy OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr (residents+employees)	
GHGs –Stationary Sources	None	10,000 MT/yr	
Risks and Hazards (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.3 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor	
Risks and Hazards (Cumulative Threshold)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM _{2.5} : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor	
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or new receptors locating near stored or used acutely hazardous materials considered significant	
Odors	None	5 confirmed complaints per year averaged over three years	
Plan-Level			
Criteria Air Pollutants and Precursors	None	1. Consistency with Current Air Quality Plan control measures, and 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase	
GHGs	None	Compliance with Qualified GHG Reduction Strategy OR 6.6 MT CO ₂ e/SP/yr (residents + employees)	

Table 2-1 Proposed Air Quality CEQA Thresholds of Significance		
Pollutant	Construction-Related	Operational-Related
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and 2. Overlay zones of at least 500 feet from all freeways and high volume roadways
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Odors	None	Identify the location, and include policies to reduce the impacts, of existing or planned sources of odors
Regional Plans (Transportation and Air Quality Plans)		
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions
<p>Notes: CEQA = California Environmental Quality Act; CO = carbon monoxide; CO_{2e} = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO₂ = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr = year; TBD: to be determined.</p> <p>*Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.</p>		

2.1. CRITERIA AIR POLLUTANTS AND PRECURSORS – PROJECT LEVEL

Table 2-2 presents the *Thresholds of Significance* for operational-related criteria air pollutant and precursor emissions. These represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If daily average or annual emissions of operational-related criteria air pollutants or precursors would exceed any applicable *Threshold of Significance* listed in Table 2-2, the proposed project would result in a cumulatively significant impact.

Pollutant/Precursor	Maximum Annual Emissions (tpy)	Average Daily Emissions (lb/day)
ROG	10	54
NO _x	10	54
PM ₁₀	15	82
PM _{2.5}	10	54

Notes: tpy = tons per year; lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; tpy = tons per year.
Refer to Appendix D for support documentation.

2.2. GREENHOUSE GASES – PROJECT LEVEL

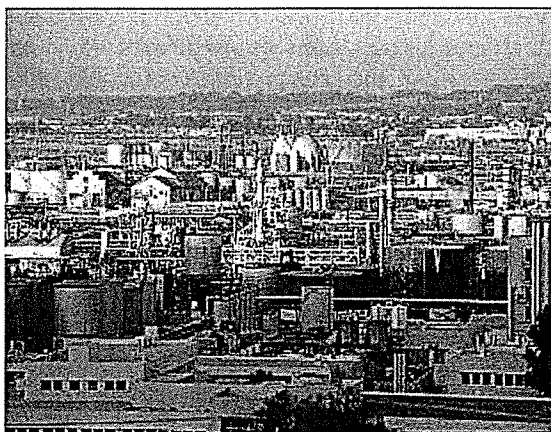
The *Thresholds of Significance* for operational-related GHG emissions are:

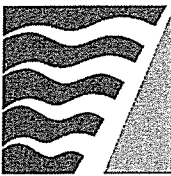
- For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per year (MT/yr) of CO₂e; or 4.6 MT CO₂e/SP/yr (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.
- For stationary-source projects, the threshold is 10,000 metric tons per year (MT/yr) of CO₂e. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate.

If annual emissions of operational-related GHGs exceed these levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change.

2.3. LOCAL COMMUNITY RISK AND HAZARD IMPACTS – PROJECT LEVEL

The *Thresholds of Significance* for local community risk and hazard impacts are identified below, which apply to both the siting of a new source and to the siting of a new receptor. Local community risk and hazard impacts are associated with TACs and PM_{2.5} because emissions of these pollutants can have significant health impacts at the local level. If emissions of TACs or fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less (PM_{2.5}) exceed any of the *Thresholds of Significance* listed below, the proposed project would result in a significant impact.





- Non-compliance with a qualified risk reduction plan; or,
- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be a cumulatively considerable contribution;
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) annual average $\text{PM}_{2.5}$ would be a cumulatively considerable contribution.

Cumulative Impacts

A project would have a cumulative considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000 foot radius from the fence line of a source, or from the location of a receptor, plus the contribution from the project, exceeds the following:

- Non-compliance with a qualified risk reduction plan; or,
- An excess cancer risk levels of more than 100 in one million or a chronic non-cancer hazard index (from all local sources) greater than 10.0; or
- 0.8 $\mu\text{g}/\text{m}^3$ annual average $\text{PM}_{2.5}$.

A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

2.4. LOCAL CARBON MONOXIDE IMPACTS – PROJECT LEVEL

Table 2-3 presents the *Thresholds of Significance* for local CO emissions, the 1- and 8-hour California Ambient Air Quality Standards (CAAQS) of 20.0 parts per million (ppm) and 9.0 ppm, respectively. By definition, these represent levels that are protective of public health. If a project would cause local emissions of CO to exceed any of the *Thresholds of Significance* listed below, the proposed project would result in a significant impact to air quality.

Table 2-3 Thresholds of Significance for Local Carbon Monoxide Emissions	
CAAQS Averaging Time	Concentration (ppm)
1-Hour	20.0
8-Hour	9.0
Refer to Appendix D for support documentation.	

2.5. ODOR IMPACTS – PROJECT LEVEL

The *Thresholds of Significance* for odor impacts are qualitative in nature. A project that would result in the siting of a new source or the exposure of a new receptor to existing or planned odor sources should consider the screening level distances and the complaint history of the odor sources:

- Projects that would site a new odor source or a new receptor farther than the applicable screening distance shown in Table 3-3 from an existing receptor or odor source, respectively, would not likely result in a significant odor impact.

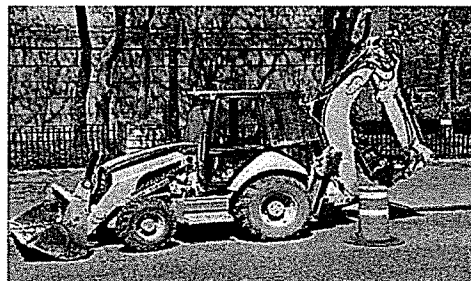
- An odor source with five (5) or more confirmed complaints per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3.

Facilities that are regulated by the CalRecycle agency (e.g. landfill, composting, etc) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency's discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CalRecycle regulated facilities with an adopted OIMP. Refer to *Chapter 7 Assessing and Mitigating Odor Impacts* for further discussion of odor analysis.

2.6. CONSTRUCTION-RELATED IMPACTS – PROJECT LEVEL

2.6.1. Criteria Air Pollutants and Precursors

Table 2-4 presents the *Thresholds of Significance* for construction-related criteria air pollutant and precursor emissions. If daily average emissions of construction-related criteria air pollutants or precursors would exceed any applicable *Threshold of Significance* listed in Table 2-4, the project would result in a significant cumulative impact.



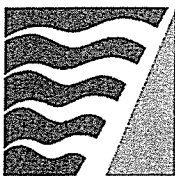
© 2009 Jupiterimages Corporation

Pollutant/Precursor	Daily Average Emissions (lb/day)
ROG	54
NO _x	54
PM ₁₀	82*
PM _{2.5}	54*

* Applies to construction exhaust emissions only.
 Notes: CO = carbon monoxide; lb/day = pounds per day; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; SO₂ = sulfur dioxide.
 Refer to Appendix D for support documentation.

2.6.2. Greenhouse Gases

The District does not have an adopted *Threshold of Significance* for construction-related GHG emissions. However, the Lead Agency should quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. The Lead Agency is encouraged to incorporate best management practices to reduce GHG emissions during construction, as feasible and applicable.



2.6.3. Local Community Risk and Hazards

The *Threshold of Significance* for construction-related local community risk and hazard impacts is the same as that for project operations. Construction-related TAC and PM impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site receptors, as applicable. The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

2.7. THRESHOLDS OF SIGNIFICANCE FOR PLAN-LEVEL IMPACTS

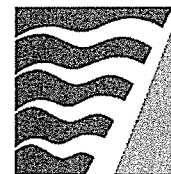
The *Thresholds of Significance* for plans (e.g., general plans, community plans, specific plans, regional plans, congestion management plans, etc.) within the SFBAAB are summarized in Table 2-5 and discussed separately below.

Table 2-5 Thresholds of Significance for Plans	
Criteria Air Pollutants and Precursors	Construction: none Operational: Consistency with Current AQP and projected VMT or vehicle trip increase is less than or equal to projected population increase.
GHGs	Construction: none Operational: 6.6 MT CO ₂ e/SP/yr (residents & employees) or a Qualified GHG Reduction Strategy. The efficiency threshold should only be applied to general plans. Other plans, e.g. specific plans, congestion management plans, etc., should use the project-level threshold of 4.6 CO ₂ e/SP/yr.
Local Community Risk and Hazards	Land use diagram identifies special overlay zones around existing and planned sources of TACs and PM _{2.5} , including special overlay zones of at least 500 feet (or Air District-approved modeled distance) on each side of all freeways and high-volume roadways, and plan identifies goals, policies, and objectives to minimize potentially adverse impacts.
Odors	Identify locations of odor sources in plan; identify goals, policies, and objectives to minimize potentially adverse impacts.
Regional Plans (transportation and air quality plans)	No net increase in emissions of GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants. Threshold only applies to regional transportation and air quality plans.
Notes: AQP = Air Quality Plan; CO ₂ e = carbon dioxide equivalent; GHGs = greenhouse gases; MT = metric tons; SP = service population; TACs = toxic air contaminants; yr = year; PM _{2.5} = fine particulate matter Refer to Appendix D for support documentation.	

2.7.1. Criteria Air Pollutants and Precursor Emissions

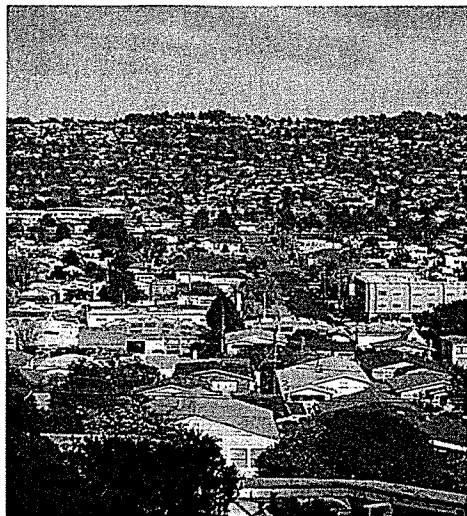
Proposed plans (except regional plans) must show the following over the planning period of the plan to result in a less than significant impact:

- Consistency with current air quality plan control measures.
- A proposed plan's projected VMT or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase.



2.7.2. Greenhouse Gases

The *Thresholds of Significance* for operational-related GHG impacts of plans employs either a GHG efficiency-based metric (per Service Population [SP]), or a GHG Reduction Strategy option, described in Section 4.3.



The *Thresholds of Significance* options for plan level GHG emissions are:

- A GHG efficiency metric of 6.6 MT per SP per year of carbon dioxide equivalent (CO₂e). If annual maximum emissions of operational-related GHGs exceed this level, the proposed plan would result in a significant impact to global climate change.
- Consistency with an adopted GHG Reduction Strategy. If a proposed plan is consistent with an adopted GHG Reduction Strategy that meets the standards described in Section 4.3, the plan would be considered to have a less than significant impact. This approach is consistent with the plan elements described in the State CEQA Guidelines, Section 15183.5.

2.7.3. Local Community Risk and Hazards

The *Thresholds of Significance* for plans with regard to community risk and hazard impacts are:

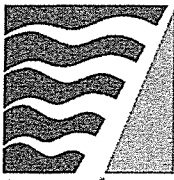
1. The land use diagram must identify:
 - a. Special overlay zones around existing and planned sources of TACs and PM (including adopted risk reduction plan areas); and
 - b. Special overlay zones of at least 500 feet (or Air District-approved modeled distance) on each side of all freeways and high-volume roadways.
2. The plan must also identify goals, policies, and objectives to minimize potential impacts and create overlay zones around sources of TACs, PM, and hazards.

2.7.4. Odors

The *Thresholds of Significance* for plans with regard to odor impacts are to identify locations of odor sources in a plan and the plan must also identify goals, policies, and objectives to minimize potentially adverse impacts.

2.7.5. Regional Plans

The *Thresholds of Significance* for regional plans is to achieve a no net increase in emissions of criteria pollutants and precursors, GHG, and toxic air contaminants. This threshold applies only to regional transportation and air quality plans.



3. SCREENING CRITERIA

The screening criteria identified in this section are **not thresholds of significance**. The Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. In addition, the screening criteria in this section do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, and/or proximate to transit service and local services, emissions would be less than the greenfield type project that these screening criteria are based on.

If a project includes emissions from stationary source engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations, the screening criteria should not be used. The project's stationary source emissions should be analyzed separately from the land use-related indirect mobile- and area-source emissions. Stationary-source emissions are not included in the screening estimates given below and, for criteria pollutants, must be added to the indirect mobile- and area-source emissions generated by the land use development and compared to the appropriate Thresholds of Significance. Greenhouse gas emissions from permitted stationary sources should not be combined with operational emissions, but compared to a separate stationary source greenhouse gas threshold.

3.1. OPERATIONAL-RELATED IMPACTS

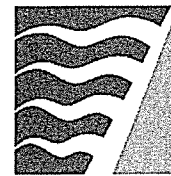
3.1.1. Criteria Air Pollutants and Precursors

The screening criteria developed for criteria pollutants and precursors were derived using the default assumptions used by the Urban Land Use Emissions Model (URBEMIS). If the project has sources of emissions not evaluated in the URBEMIS program the screening criteria should not be used. If the project meets the screening criteria in Table 3-1, the project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* shown in Table 2-2. Operation of the proposed project would therefore result in a less-than-significant cumulative impact to air quality from criteria air pollutant and precursor emissions.

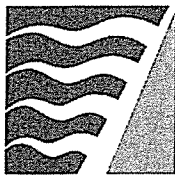
3.1.2. Greenhouse Gases

The screening criteria developed for greenhouse gases were derived using the default emission assumptions in URBEMIS and using off-model GHG estimates for indirect emissions from electrical generation, solid waste and water conveyance. If the project has other significant sources of GHG emissions not accounted for in the methodology described above, then the screening criteria should not be used. Projects below the applicable screening criteria shown in Table 3-1 would not exceed the 1,100 MT of CO₂e/yr GHG threshold of significance for projects other than permitted stationary sources.

If a project, including stationary sources, is located in a community with an adopted qualified GHG Reduction Strategy, the project may be considered less than significant if it is consistent with the GHG Reduction Strategy. A project must demonstrate its consistency by identifying and implementing all applicable feasible measures and policies from the GHG Reduction Strategy into the project.



Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
Single-family	325 du (NOX)	56 du	114 du (ROG)
Apartment, low-rise	451 du (ROG)	78 du	240 du (ROG)
Apartment, mid-rise	494 du (ROG)	87 du	240 du (ROG)
Apartment, high-rise	510 du (ROG)	91 du	249 du (ROG)
Condo/townhouse, general	451 du (ROG)	78 du	240 du (ROG)
Condo/townhouse, high-rise	511 du (ROG)	92 du	252 du (ROG)
Mobile home park	450 du (ROG)	82 du	114 du (ROG)
Retirement community	487 du (ROG)	94 du	114 du (ROG)
Congregate care facility	657 du (ROG)	143 du	240 du (ROG)
Day-care center	53 ksf (NOX)	11 ksf	277 ksf (ROG)
Elementary school	271 ksf (NOX)	44 ksf	277 ksf (ROG)
Elementary school	2747 students (ROG)	-	3904 students (ROG)
Junior high school	285 ksf (NOX)	-	277 ksf (ROG)
Junior high school	2460 students (NOX)	46 ksf	3261 students (ROG)
High school	311 ksf (NOX)	49 ksf	277 ksf (ROG)
High school	2390 students (NOX)	-	3012 students (ROG)
Junior college (2 years)	152 ksf (NOX)	28 ksf	277 ksf (ROG)
Junior college (2 years)	2865 students (ROG)	-	3012 students (ROG)
University/college (4 years)	1760 students (NOX)	320 students	3012 students (ROG)
Library	78 ksf (NOX)	15 ksf	277 ksf (ROG)
Place of worship	439 ksf (NOX)	61 ksf	277 ksf (ROG)
City park	2613 acres (ROG)	600 acres	67 acres (PM10)
Racquet club	291 ksf (NOX)	46 ksf	277 ksf (ROG)
Racquetball/health	128 ksf (NOX)	24 ksf	277 ksf (ROG)
Quality restaurant	47 ksf (NOX)	9 ksf	277 ksf (ROG)
High turnover restaurant	33 ksf (NOX)	7 ksf	277 ksf (ROG)
Fast food rest. w/ drive thru	6 ksf (NOX)	1 ksf	277 ksf (ROG)
Fast food rest. w/o drive thru	8 ksf (NOX)	1 ksf	277 ksf (ROG)
Hotel	489 rooms (NOX)	83 rooms	554 rooms (ROG)
Motel	688 rooms (NOX)	106 rooms	554 rooms (ROG)
Free-standing discount store	76 ksf (NOX)	15 ksf	277 ksf (ROG)
Free-standing discount superstore	87 ksf (NOX)	17 ksf	277 ksf (ROG)
Discount club	102 ksf (NOX)	20 ksf	277 ksf (ROG)
Regional shopping center	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Electronic Superstore	95 ksf (NOX)	18 ksf	277 ksf (ROG)
Home improvement superstore	142 ksf (NOX)	26 ksf	277 ksf (ROG)
Strip mall	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Hardware/paint store	83 ksf (NOX)	16 ksf	277 ksf (ROG)
Supermarket	42 ksf (NOX)	8 ksf	277 ksf (ROG)
Convenience market (24 hour)	5 ksf (NOX)	1 ksf	277 ksf (ROG)
Convenience market with gas pumps	4 ksf (NOX)	1 ksf	277 ksf (ROG)
Bank (with drive-through)	17 ksf (NOX)	3 ksf	277 ksf (ROG)



**Table 3-1
Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes**

Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
General office building	346 ksf (NOX)	53 ksf	277 ksf (ROG)
Office park	323 ksf (NOX)	50 ksf	277 ksf (ROG)
Government office building	61 ksf (NOX)	12 ksf	277 ksf (ROG)
Government (civic center)	149 ksf (NOX)	27 ksf	277 ksf (ROG)
Pharmacy/drugstore w/ drive through	49 ksf (NOX)	10 ksf	277 ksf (ROG)
Pharmacy/drugstore w/o drive through	48 ksf (NOX)	10 ksf	277 ksf (ROG)
Medical office building	117 ksf (NOX)	22 ksf	277 ksf (ROG)
Hospital	226 ksf (NOX)	39 ksf	277 ksf (ROG)
Hospital	334 beds (NOX)	84 ksf	337 beds (ROG)
Warehouse	864 ksf (NOX)	64 ksf	259 ksf (NOX)
General light industry	541 ksf (NOX)	121 ksf	259 ksf (NOX)
General light industry	72 acres (NOX)	-	11 acres (NOX)
General light industry	1249 employees (NOX)	-	540 employees (NOX)
General heavy industry	1899 ksf (ROG)	-	259 ksf (NOX)
General heavy industry	281 acres (ROG)	-	11 acres (NOX)
Industrial park	553 ksf (NOX)	65 ksf	259 ksf (NOX)
Industrial park	61 acres (NOX)	-	11 acres (NOX)
Industrial park	1154 employees (NOX)	-	577 employees (NOX)
Manufacturing	992 ksf (NOX)	89 ksf	259 ksf (NOX)

Notes: du = dwelling units; ksf = thousand square feet; NO_x = oxides of nitrogen; ROG = reactive organic gases. Screening levels include indirect and area source emissions. Emissions from engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations embedded in the land uses are not included in the screening estimates and must be added to the above land uses.

Refer to Appendix D for support documentation.

Source: Modeled by EDAW 2009.

3.2. COMMUNITY RISK AND HAZARD IMPACTS

Please refer to Chapter 5 for discussion of screening criteria for local community risk and hazard impacts.

3.3. CARBON MONOXIDE IMPACTS

This preliminary screening methodology provides the Lead Agency with a conservative indication of whether the implementation of the proposed project would result in CO emissions that exceed the *Thresholds of Significance* shown in Table 2-3.

The proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria is met:



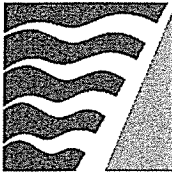
1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

3.4. ODOR IMPACTS

Table 3-3 presents odor screening distances recommended by BAAQMD for a variety of land uses. Projects that would site a new odor source or a new receptor farther than the applicable screening distance shown in Table 3-3 from an existing receptor or odor source, respectively, would not likely result in a significant odor impact. The odor screening distances in Table 3-3 should not be used as absolute screening criteria, rather as information to consider along with the odor parameters and complaint history. Refer to *Chapter 7 Assessing and Mitigating Odor Impacts* for comprehensive guidance on significance determination.

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Metal Smelting Plants	2 miles
Refer to Appendix D for support documentation.	

Facilities that are regulated by CalRecycle (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency's discretion under CEQA to



use established odor detection thresholds as thresholds of significance for CEQA review for CalRecycle regulated facilities with an adopted OIMP.

3.5. CONSTRUCTION-RELATED IMPACTS

3.5.1. Criteria Air Pollutants and Precursors

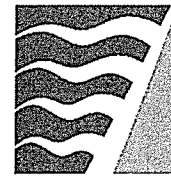
This preliminary screening provides the Lead Agency with a conservative indication of whether the proposed project would result in the generation of construction-related criteria air pollutants and/or precursors that exceed the *Thresholds of Significance* shown in Table 2-4.

If all of the following *Screening Criteria* are met, the construction of the proposed project would result in a less-than-significant impact from criteria air pollutant and precursor emissions.

1. The project is below the applicable screening level size shown in Table 3-1; and
2. All *Basic Construction Mitigation Measures* would be included in the project design and implemented during construction; and
3. Construction-related activities would not include any of the following:
 - a. Demolition;
 - b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
 - c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
 - d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
 - e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

3.5.2. Community Risk and Hazards

Chapter 5, *Assessing and Mitigating Local Community Risk and Hazard Impacts*, contains information on screening criteria for local risk and hazards.



[This Page Intentionally Left Blank]

EXHIBIT D

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Jay Lee, Associate Planner
City of Hayward
777 B Street
Hayward, CA 94541

24 January 2018

RE: 2695 W. Winton Ave Industrial Project

Dear Mr. Lee,

I write to comment on the Initial Study (IS) prepared for the proposed 2695 W. Winton Ave Industrial Project, which I understand is to be an increase in distribution warehousing of 507,500 square feet on 23.4 acres in the City of Hayward (LSA 2017).

My qualifications for preparing expert comments are the following. I earned a Ph.D. degree in Ecology from the University of California at Davis in 1990, where I subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, habitat restoration, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I have authored numerous papers on special-status species issues, including "Using the best scientific data for endangered species conservation," published in *Environmental Management* (Smallwood et al. 1999), and "Suggested standards for science applied to conservation issues" published in the *Transactions of the Western Section of The Wildlife Society* (Smallwood et al. 2001). I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer at California State University, Sacramento. I was also Associate Editor of wildlife biology's premier scientific journal, *The Journal of Wildlife Management*, as well as of *Biological Conservation*, and I was on the Editorial Board of *Environmental Management*.

I have performed wildlife surveys in California for thirty-three years. Over these years, I studied the impacts of human activities and human infrastructure on wildlife, including on golden eagle, Swainson's hawk, burrowing owl, San Joaquin kangaroo rat, mountain lion and other species. I have also performed wildlife surveys at many proposed project sites. I also collaborate with colleagues worldwide on the underlying science and policy issues related to anthropogenic impacts on wildlife. I have performed research on wildlife mortality caused by wind turbines, electric distribution lines, agricultural practices, and road traffic.

My CV is attached.

BIOLOGICAL IMPACTS ASSESSMENT

LSA (2017:4-14) presents a false scientific precision by claiming to have *verified* the biological resources assessment prepared by Rincon (2017). Whereas one could agree with the assessment of Rincon, there is no way to “verify” negative findings unless protocol-level surveys are performed for each species in question. In other words, an inadequate survey effort cannot verify the negative findings of another inadequate survey effort.

No protocol-level surveys were performed for any special-status species, meaning that no surveys were performed according to standardized survey protocols established by species experts for determining absence of a species. According to Rincon (2017:8), a biologist performed a reconnaissance survey on 5 June 2017. According to LSA (2017:4-14), one of its biologists walked the site on 13 October 2017. Neither Rincon nor LSA provided information on time of arrival, duration of stay, survey methods (other than walking), or tools used. Not only were no standardized surveys performed to establish the absence of any species, but insufficient reporting leaves me wondering to what degree the visiting biologists would have had the opportunity to see anything walking or flying or sitting on the project site. Did either of these two visits last longer than an hour? Did either of them take place in the evening when it was most likely to see white-tailed kites foraging? Did either of them look for fossorial mammal burrows or other structures that could be used as nest sites by burrowing owls? The surest way to detect no special-status species is to not look for them.

According to Rincon (2017:17), “*No special status animal species were detected in the BSA during the reconnaissance field surveys,*” and according to LSA (2017:4-16), “*No special-status animal species were observed on the project site during the field surveys by either Rincon or LSA.*” This conclusion can be factual while at the same time can be of no value. Most special-status species are difficult to detect, requiring intense survey effort, special survey times, or specialized survey methods. Only cursory visits were made by two biologists, on one day each, so it seems hollow to state that no special-status species were detected.

LSA (2017:4-16) concludes that only six special-status species have the potential to be affected by the project. Sources for this conclusion included electronic data bases and a look at imagery provided by Google Earth. However, it appears LSA neglected to review eBird (<https://ebird.org/ebird/map>). eBird reveals long lists of avian species having been seen within 1,000 m of the proposed project site. In the following paragraphs, I discuss 30 special-status species of birds that were reported very close to the project site. And these 30 species are only the special-status species of bird; I am not even addressing species of mammal or any other taxa.

Acronyms appearing in brackets next to species names are defined as follows: FE = federal endangered, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, BGEPA = Bald and Golden Eagle Protection Act, CE = California endangered, SSC = California species of special concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range,