

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 30, 2009

Re: Consider adoption of the proposed amendments to the District's California
Environmental Quality Act (CEQA) Thresholds of Significance

RECOMMENDED ACTION:

The Board of Directors will consider adopting the proposed amendments to the CEQA Thresholds of Significance as outlined in Attachment 1.

BACKGROUND

The District's CEQA Guidelines (Guidelines) are developed to assist local jurisdictions and other lead agencies in identifying proposed local land use plans and development projects that may have a significant adverse effect on air quality and public health. Staff began a comprehensive update to the District's recommended thresholds of significance in October 2008. The proposed revisions to the existing thresholds of significance include thresholds for construction, project operation, and plan-level emissions of criteria air pollutants, ozone precursors, greenhouse gases, toxic air contaminants, and odors. The Guidelines also provide technical information on impact assessment methodology and mitigation strategies.

DISCUSSION

The first Board of Directors hearing on the proposed CEQA thresholds of significance was held on November 18, 2009. At that hearing the Board highlighted about 15 issues and concerns raised during deliberations and public testimony. Staff presented responses to those concerns and addressed requests of Board members at the December 2, 2009 Board meeting. The Board then closed the public hearing and continued Board deliberations to January 6, 2010. The Board also directed staff to bring back for their consideration additional options for local risks and hazards significance thresholds, including the tiered threshold approach for sources in impacted communities. Attachment 2 includes three risks and hazards thresholds options: 1) existing staff proposal; 2) staff proposal with tiered approach for new sources in impacted communities; and 3) staff proposal without the community risk reduction plan. In response to this direction, staff also prepared the December 7, 2009 Proposed Thresholds of Significance Report (see Attachment 3) to reflect these options.

At the December 2, 2009 Board of Directors meeting, the Board directed staff to meet specifically with local planning directors and public health officers to discuss the proposed CEQA Guidelines and respond to their concerns. Staff invited and met with local planning directors and health officers on December 15 for a CEQA workshop. The workshop was attended by 23 local agency staff representing 16 Bay Area cities and counties. At the workshop, staff discussed the thresholds of significance, the issues regarding infill development, the availability and development of analytical tools, future workshops the District will hold on implementation of the thresholds, and also responded to specific concerns expressed by the attendees.

Staff has also provided additional responses to public comments received subsequent to November 1, 2009 (Attachment 4) and not included in previous Board packages.

BUDGET CONSIDERATION/FINANCIAL IMPACTS:

The update to the District's CEQA Guidelines was included in the FYE 2010 budget. Assisting local agencies in implementing the CEQA Guidelines will require an on-going commitment of staff resources.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Greg Tholen
Reviewed by: Jean Roggenkamp

Attachment 1

Staff 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 Climate Action Plan 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*	<u>All Areas: Siting a New Source or Receptor</u> Compliance with Qualified 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 fence line of source or receptor	
Risks and Hazards (Cumulative Thresholds)	Same as Operational Thresholds*	<u>All Areas: Siting a New Source or Receptor</u> Compliance with Qualified Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 1.0 Hazard Index (from all local sources) (Chronic or Acute) PM _{2.5} : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant	

Staff Proposed Air Quality CEQA Thresholds of Significance

Pollutant	Construction-Related	Operational-Related
Odors	None	Screening Level Distances and Complaint History
Plan-Level		
Criteria Air Pollutants and Precursors (Regional and Local)	None	<ol style="list-style-type: none"> 1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
GHGs	None	Compliance with Qualified Climate Action Plan (or similar criteria included in a General Plan) OR 6.6 MT CO ₂ e/ SP/yr (residents + employees)
Risks and Hazards/Odors	None	<ol style="list-style-type: none"> 1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and odors 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Accidental Release of Acutely Hazardous Air Pollutants	None	None

Notes: CO = carbon monoxide; CO₂e = 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; SP = service population; tpy = tons per year; yr = year.

* 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.

Attachment 2

Proposed Risks and Hazards Threshold Options

Per direction from the Air District Board of Directors, staff has provided two options for a risk and hazards significance threshold in addition to the staff's proposal for the Board's consideration.

Pollutant	Construction-Related	Operational-Related
Project-Level		
Risks and Hazards (Individual Project) <u>Staff Proposal</u>	Same as Operational Thresholds*	<u>All Areas: Siting a New Source or Receptor</u> Compliance with Qualified 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 fence line of source or receptor
Risks and Hazards (Individual Project) <u>Board Option 1: Tiered Thresholds</u>	Same as Operational Thresholds*	<u>Same as Staff Proposal EXCEPT More Stringent for New Sources in Impacted Communities</u> <u>Impacted Communities: Siting a New Source</u> Compliance with Qualified Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase: > 0.2 µg/m ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
Risks and Hazards (Individual Project) <u>Board Option 2: Quantitative Thresholds</u>	Same as Operational Thresholds*	<u>Same as Staff Proposal EXCEPT Without CRRP Option</u>
Cumulative – Applies to staff proposed and Board options thresholds.		
Risks and Hazards (Cumulative Thresholds)	Same as Operational Thresholds*	<u>All Areas: Siting a New Source or Receptor</u> Compliance with Qualified Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 1.0 Hazard Index (from all local sources) (Chronic or Acute) PM _{2.5} : > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor

Notes: PM_{2.5}= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less.

*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.

Attachment 3



**California Environmental Quality Act
Guidelines Update**

Proposed Thresholds of Significance

December 7, 2009

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Bay Area Air Quality Management District

Proposed Air Quality CEQA Thresholds of Significance

1 INTRODUCTION

Bay Area Air Quality Management District (BAAQMD or Air District) staff analyzed various options for California Environmental Quality Act (CEQA) air quality thresholds of significance for use within BAAQMD's jurisdiction. The analysis and evaluation undertaken by Air District staff is documented in the *Revised Draft Options and Justification Report – California Environmental Quality Act Thresholds of Significance* (Draft Options Report) (BAAQMD October 2009).

Air District staff hosted public workshops in February, April, September and October 2009 at several locations around the Bay Area. In addition, Air District staff met with regional stakeholder groups to discuss and receive input on the threshold options being evaluated. Throughout the course of the public workshops and stakeholder meetings Air District staff received many comments on the various options under consideration. Based on comments received and additional staff analysis, the threshold options and staff-recommended thresholds were further refined. The culmination of this year-long effort was presented in the Proposed Thresholds of Significance Report published on November 2, 2009 as the Air District staff's proposed air quality thresholds of significance.

The Air District Board of Directors (Board) held public hearings on November 18 and December 2, 2009, to receive comments on staff's Proposed Thresholds of Significance (November 2009). After public testimony and Board deliberations, the Board requested staff to present additional options for risk and hazard thresholds for Board consideration. This Report includes risks and hazards threshold options, as requested by the Board, in addition to staff's previously recommended thresholds of significance. The proposed thresholds presented herein, upon adoption by the Air District Board of Directors, are intended to replace all of the Air District's currently recommended thresholds. The proposed air quality thresholds of significance, and Board-requested risk and hazard threshold options, are provided in Table 1 at the end of this introduction.

1.1 BAAQMD/CEQA REGULATORY AUTHORITY

The BAAQMD has direct and indirect regulatory authority over sources of air pollution in the San Francisco Bay Area Air Basin (SFBAAB). CEQA requires that public agencies consider the potential adverse environmental impacts of any project that a public agency proposes to carry out, fund or approve. CEQA requires that a lead agency prepare an Environmental Impact Report (EIR) whenever it can be fairly argued (the "fair argument" standard), based on substantial evidence,¹ that a project may have a significant effect² on

¹ "Substantial evidence" includes facts, reasonable assumptions predicated upon facts, or expert opinions supported by facts, but does not include argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or

the environment, even if there is substantial evidence to the contrary (CEQA Guidelines §15064). CEQA requires that the lead agency review not only a project's direct effects on the environment, but also the cumulative impacts of a project and other projects causing related impacts. When the incremental effect of a project is cumulatively considerable, the lead agency must discuss the cumulative impacts in an EIR. (CEQA Guidelines §15064).

The "fair argument" standard refers to whether a fair argument can be made that a project may have a significant effect on the environment (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84). The fair argument standard is generally considered a low threshold requirement for preparation of an EIR. The legal standards reflect a preference for requiring preparation of an EIR and for "resolving doubts in favor of environmental review." *Meija v. City of Los Angeles* (2005) 130 Cal. App. 4th 322, 332. "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data." (CEQA Guidelines §15064(b)).

In determining whether a project may have a significant effect on the environment, CEQA Guidelines Section 15064.7 provides that lead agencies may adopt and/or apply "thresholds of significance." A threshold of significance is "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant" (CEQA Guidelines §15064.7).

While thresholds of significance give rise to a presumption of insignificance, thresholds are not conclusive, and do not excuse a public agency of the duty to consider evidence that a significant effect may occur under the fair argument standard. *Meija*, 130 Cal. App. 4th at 342. "A public agency cannot apply a threshold of significance or regulatory standard 'in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.'" *Id.* This means that if a public agency is presented with factual information or other substantial evidence establishing a fair argument that a project may have a significant effect on the environment, the agency must prepare an EIR to study those impacts even if the project's impacts fall below the applicable threshold of significance.

Thresholds of significance must be supported by substantial evidence. This Report provides the substantial evidence in support of the thresholds of significance developed by the BAAQMD. If adopted by the BAAQMD Board of Directors, the Air District will recommend that lead agencies within the nine counties of the BAAQMD's jurisdiction

economic impacts that do not contribute to, or are not caused by, physical impacts on the environment. Cal. Pub. Res. C. §21080(c); *see also* CEQA Guidelines §15384.

² A "significant effect" on the environment is defined as a "substantial, or potentially substantial, adverse change in the environment." Cal. Pub. Res. C. §21068; *see also* CEQA Guidelines §15382.

use the thresholds of significance in this Report when considering the air quality impacts of projects under their consideration.

1.2 JUSTIFICATION FOR UPDATING CEQA THRESHOLDS

Any analysis of environmental impacts under CEQA includes an assessment of the nature and extent of each impact expected to result from the project to determine whether the impact will be treated as significant or less than significant. CEQA gives lead agencies discretion whether to classify a particular environmental impact as significant. Ultimately, formulation of a standard of significance requires the lead agency to make a policy judgment about where the line should be drawn distinguishing adverse impacts it considers significant from those that are not deemed significant. This judgment must, however, be based on scientific information and other factual data to the extent possible (CEQA Guidelines §15064(b)).

In the sense that advances in science provide new or refined factual data, combined with advances in technology and the gradual improvement or degradation of an environmental resource, the point where an environmental effect is considered significant is fluid over time. Other factors influencing this fluidity include new or revised regulations and standards, and emerging, new areas of concern.

In the ten years since BAAQMD last reviewed its recommended CEQA thresholds of significance for air quality, there have been tremendous changes that affect the quality and management of the air resources in the Bay Area. Traditional criteria air pollutant ambient air quality standards, at both the state and federal levels, have become increasingly more stringent. A new criteria air pollutant standard for fine particulate matter less than 2.5 microns in diameter (PM_{2.5}) has been added to federal and state ambient air quality standards. We have found, through technical advances in impact assessment, that toxic air contaminants are not only worse than previously thought from a health perspective, but that certain communities experience high levels of toxic air contaminants, giving rise to new regulations and programs to reduce the significantly elevated levels of ambient toxic air contaminant concentrations in the Bay Area.

In response to the elevated levels of toxic air contaminants in some Bay Area communities, the Air District created the Community Air Risk Evaluation (CARE) Program. Phase 1 of the BAAQMD's CARE program compiled and analyzed a regional emissions inventory of toxic air contaminants (TACs), including emissions from stationary sources, area sources, and on-road and off-road mobile sources. Phase 2 of the CARE Program conducted regional computer modeling of selected TAC species, species which collectively posed the greatest risk to Bay Area residents. In both Phases 1 and 2, demographic data were combined with estimates of TAC emissions or concentrations to identify communities that are disproportionately impacted from high concentrations of TACs. Bay Area Public Health Officers, in discussions with Air District staff and in comments to the Air District's Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality and Public Health), have recommended that PM_{2.5}, in addition to TACs, be considered in assessments of community-scale impacts of air pollution.

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance
December 7, 2009

Another significant issue that affects the quality of life for Bay Area residents is the growing concern with global climate change. In just the past few years, estimates of the global atmospheric temperature and greenhouse gas concentration limits needed to stabilize climate change have been adjusted downward and the impacts of greenhouse gas emissions considered more dire. Previous scientific assessments assumed that limiting global temperature rise to 2-3°C above pre-industrial levels would stabilize greenhouse gas concentrations in the range of 450-550 parts per million (ppm) of carbon dioxide-equivalent (CO₂e). Now the science indicates that a temperature rise of 2°C would not prevent dangerous interference with the climate system. Recent scientific assessments suggest that global temperature rise should be kept below 2°C by stabilizing greenhouse gas concentrations below 350 ppm CO₂e, a significant reduction from the current level of 385 ppm CO₂e.

For the reasons stated above, and to further the goals of other District programs such as encouraging transit-oriented and infill development, BAAQMD has undertaken an effort to review all of its currently-recommended CEQA thresholds, revise them as appropriate, and develop new thresholds where appropriate. The overall goal of this effort is to develop CEQA significance criteria that ensure new development implements appropriate and feasible emission reduction measures to mitigate significant air quality impacts. The Air District's recommended CEQA significance thresholds have been vetted through a public review process and will be presented to the BAAQMD Board of Directors for adoption.

Table 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 Climate Action Plan OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr (residents + employees)	

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance
December 7, 2009

Table 1 – Proposed Air Quality CEQA Thresholds of Significance		
Pollutant	Construction-Related	Operational-Related
GHGs Stationary Sources	None	10,000 MT/yr
Risks and Hazards (Individual Project) <u>Staff Proposal</u>	Same as Operational Thresholds*	<p style="text-align: center;"><u>All Areas: Siting a New Source or Receptor</u></p> <p style="text-align: center;">Compliance with Qualified 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/m³ annual average</p> <p style="text-align: center;"><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
Risks and Hazards (Individual Project) <u>Board Option 1</u> Tiered Thresholds	Same as Operational Thresholds*	<p style="text-align: center;"><u>Impacted Communities: Siting a New Source</u></p> <p style="text-align: center;">Compliance with Qualified Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM_{2.5} increase: > 0.2 µg/m³ annual average</p> <p style="text-align: center;"><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p> <hr style="border-top: 1px dashed black;"/> <p style="text-align: center;"><u>Impacted Communities: Siting a New Receptor</u> <u>All Other Areas: Siting a New Source or Receptor</u></p> <p style="text-align: center;">Compliance with Qualified 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/m³ annual average</p> <p style="text-align: center;"><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
Risks and Hazards (Individual Project) <u>Board Option 2</u> Quantitative Thresholds	Same as Operational Thresholds*	<p style="text-align: center;"><u>All Areas: Siting a New Source or Receptor</u></p> <p style="text-align: center;">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/m³ annual average</p> <p style="text-align: center;"><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance
December 7, 2009

Table 1 – Proposed Air Quality CEQA Thresholds of Significance		
Pollutant	Construction-Related	Operational-Related
Risks and Hazards (Cumulative Thresholds)	Same as Operational Thresholds*	<p>All Areas: <u>Siting a New Source or Receptor</u></p> <p>Compliance with Qualified Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 1.0 Hazard Index (from all local sources) (Chronic or Acute) PM_{2.5}: > 0.8 µg/m³ annual average (from all local sources)</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Odors	None	Screening Level Distances and Complaint History
Plan-Level		
Criteria Air Pollutants and Precursors (Regional and Local)	None	<ol style="list-style-type: none"> 1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
GHGs	None	<p>Compliance with Qualified Climate Action Plan (or similar criteria included in a General Plan) OR 6.6 MT CO₂e/ SP/yr (residents + employees)</p>
Risks and Hazards/Odors	None	<ol style="list-style-type: none"> 1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and odors 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Accidental Release of Acutely Hazardous Air Pollutants	None	None
<p>Notes: CO = carbon monoxide; CO₂e = 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.</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 GREENHOUSE GAS THRESHOLDS

BAAQMD does not currently have an adopted threshold of significance for GHG emissions. BAAQMD currently recommends that lead agencies quantify GHG emissions resulting from new development and apply all feasible mitigation measures to lessen the potentially adverse impacts. One of the primary objectives in updating the current CEQA Guidelines is to identify a GHG significance threshold, analytical methodologies, and mitigation measures to ensure new land use development meets its fair share of the emission reductions needed to address the cumulative environmental impact from GHG emissions. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. As reviewed herein, climate change impacts include an increase in extreme heat days, higher ambient 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 land use 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.

2.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Project Type	Proposed Thresholds
Projects other than Stationary Sources	Compliance with Qualified Climate Action Plan OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr* (residents + employees)
Stationary Sources	10,000 MT of CO ₂ e/yr
Plans	Compliance with Qualified Climate Action Plan (or similar criteria included in a General Plan) OR 6.6 MT CO ₂ e/SP/yr (residents + employees)

* Staff notes that the efficiency-based thresholds should be applied to individual projects with caution. As explained herein, lead agencies may determine that the efficiency-based GHG thresholds for individual land use projects may not be appropriate for very large projects. If there is a fair argument that the project's emissions on a mass level will have a cumulatively considerable impact on the region's GHG emissions, the insignificance presumption afforded to a project that meets an efficiency-based GHG threshold would be overcome.

2.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

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.

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. If mitigation can be applied to lessen the emissions such that the project meets its share of emission reductions needed to address the cumulative impact, the project would normally be considered less than significant.

As explained in the District's *Revised Draft Options and Justifications Report* (BAAQMD 2009), there are several types of thresholds that may be supported by substantial evidence and be consistent with existing California legislation and policy to reduce statewide GHG emissions. In determining which thresholds to recommend, Staff studied numerous options, relying on reasonable, environmentally conservative assumptions on growth in the land use sector, predicted emissions reductions from statewide regulatory measures and resulting emissions inventories, and the efficacies of GHG mitigation measures. The thresholds recommended herein were chosen based on the substantial evidence that such thresholds represent quantitative and/or qualitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the state's ability to meet its goals of reduced statewide GHG emissions. Staff notes that it does not believe there is only one threshold for GHG emissions that can be supported by substantial evidence.

GHG CEQA significance thresholds recommended herein are intended to serve as interim levels during the implementation of the AB 32 Scoping Plan and SB 375, which will occur over time. Until AB 32 has been fully implemented in terms of adopted regulations, incentives, and programs and until SB 375 required plans have been fully adopted, or the California Air Resources Board (ARB) adopts a recommended threshold, the BAAQMD recommends that local agencies in the Bay Area apply the GHG thresholds recommended herein.

If left unchecked, GHG emissions from new land use development in California will result in a cumulatively considerable amount of GHG emissions and a substantial conflict with the State's ability to meet the goals within AB 32. Thus, BAAQMD proposes to adopt interim GHG thresholds for CEQA analysis, which can be used by lead agencies within the Bay Area. This would help lead agencies navigate this dynamic regulatory and technological environment where the field of analysis has remained wide open and inconsistent. BAAQMD's framework for developing a GHG threshold for land development projects that is based on policy and substantial evidence follows.

2.3.1 SCIENTIFIC AND REGULATORY JUSTIFICATION

Climate Science Overview

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, chlorofluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a

trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is *extremely unlikely* that global climate change of the past 50 years can be explained without the contribution from human activities (IPCC 2007a).

According to Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC), "Avoiding Dangerous Climate Change" means: "*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.*" Dangerous climate change defined in the UNFCCC is based on several key indicators including the potential for severe degradation of coral reef systems, disintegration of the West Antarctic Ice Sheet, and shut down of the large-scale, salinity- and thermally-driven circulation of the oceans. (UNFCCC 2009). The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm to 379 ppm in 2005 (IPCC 2007a). "Avoiding dangerous climate change" is generally understood to be achieved by stabilizing global average temperatures between 2 and 2.4°C above pre-industrial levels. In order to limit temperature increases to this level, ambient global CO₂ concentrations must stabilize between 350 and 400 ppm (IPCC 2007b).

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill 32, the California Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas emissions reduction goal into law. AB 32 finds and declares that "Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020, and establishes regulatory, reporting, voluntary, and market mechanisms to achieve quantifiable reductions in GHG emissions to meet the statewide goal.

In December of 2008, ARB adopted its *Climate Change Scoping Plan (Scoping Plan)*, which is the State's plan to achieve GHG reductions in California, as required by AB 32 (ARB 2008). The Scoping Plan contains strategies California will implement to achieve a reduction of 169 MMT CO₂e emissions, or approximately 28 percent from the state's projected 2020 emission level of 596 MMT of CO₂e under a business-as-usual scenario (this is a reduction of 42 MMT of CO₂e, or almost 10 percent, from 2002-2004 average emissions), so that the state can return to 1990 emission levels, as required by AB 32.

While the Scoping Plan establishes the policy intent to control numerous GHG sources through regulatory, incentive, and market means, given the early phase of implementation and the level of control that local CEQA lead agencies have over numerous GHG sources, CEQA is an important and supporting tool in achieving GHG reductions overall in compliance with AB 32. In this spirit, BAAQMD is considering the adoption of thresholds of significance for GHG emissions for stationary source and land use development projects.

Senate Bill 375

Senate Bill (SB) 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emission technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for State funding programmed after January 1, 2012. New provisions of CEQA would incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

While SB 375 is considered in the development of these thresholds, given that the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) development of the SCS for the Bay Area is in its early stages and the ARB GHG reduction target for light duty and passenger vehicles in the Bay Area has not yet been proposed, it is not appropriate from a CEQA perspective to expect SB 375 to completely address the emission reductions needed from this transportation sector in meeting AB 32 goals. In the future, as SB 375 implementation progresses, BAAQMD may need to revisit GHG thresholds.

2.3.2 PROJECT-LEVEL GHG THRESHOLDS

Staff recommends setting GHG significance thresholds based on AB 32 GHG emission reduction goals while taking into consideration emission reduction strategies outlined in ARB's Scoping Plan. Staff proposes two quantitative thresholds for land use projects: a bright line threshold based on a "gap" analysis and an efficiency threshold based on emission levels required to be met in order to achieve AB 32 goals.

Staff also proposes one qualitative threshold for land use projects: if a project complies with a Qualified Climate Action Plan (as defined in Section 2.3.4 below) that addresses the project it would be considered less than significant. As explained in detail in Section 2.3.4 below, compliance with a Qualified Climate Action Plan (or similar adopted policies, ordinances and programs), would provide the evidentiary basis for making

CEQA findings that development consistent with the plan would result in feasible, measurable, and verifiable GHG reductions consistent with broad state goals such that projects approved under qualified Climate Action Plans or equivalent demonstrations would achieve their fair share of GHG emission reductions.

2.3.2.1 LAND USE PROJECTS “GAP-BASED” THRESHOLD

Staff took eight steps in developing this threshold approach, which are summarized here and detailed in the sections that follow. It should be noted that the “gap-based approach” used for threshold development is a conservative approach that focuses on a limited set of state mandates that appear to have the greatest potential to reduce land use development-related GHG emissions at the time of this writing. It is also important to note that over time, as the effectiveness of the State’s implementation of AB 32 (and SB 375) progresses, BAAQMD will need to reconsider the extent of GHG reductions needed over and above those from the implementation thereof for the discretionary approval of land use development projects. Although there is an inherent amount of uncertainty in the estimated capture rates (i.e., frequency at which project-generated emissions would exceed a threshold and would be subject to mitigation under CEQA) and the aggregate emission reductions used in the gap analysis, they are based on BAAQMD’s expertise, the best available data, and use conservative assumptions for the amount of emission reductions from legislation in derivation of the gap (e.g., only adopted legislation was relied upon). This approach is intended to attribute an appropriate share of GHG emission reductions necessary to reach AB 32 goals to new land use development projects in BAAQMD’s jurisdiction that are evaluated pursuant to CEQA.

Step 1 Estimate from ARB’s statewide GHG emissions inventory the growth in emissions between 1990 and 2020 attributable to “land use-driven” sectors of the emission inventory as defined by OPR’s guidance document (*CEQA and Climate Change*). Land use-driven emission sectors include Transportation (On-Road Passenger Vehicles; On-Road Heavy Duty), Electric Power (Electricity; Cogeneration), Commercial and Residential (Residential Fuel Use; Commercial Fuel Use) and Recycling and Waste (Domestic Waste Water Treatment).

Result: 1990 GHG emissions were 295.53 MMT CO₂e/yr and projected 2020 business-as-usual GHG emissions would be 400.22 MMT CO₂e/yr; thus a 26.2 percent reduction from statewide land use-driven GHG emissions would be necessary to meet the AB 32 goal of returning to 1990 emission levels by 2020. (See Table 2)

Step 2 Estimate the anticipated GHG emission reductions affecting the same land use-driven emissions inventory sectors associated with adopted statewide regulations identified in the AB 32 Scoping Plan.

Result: Estimated a 23.9 percent reduction can be expected in the land use-driven GHG emissions inventory from adopted Scoping Plan regulations, including AB 1493 (Pavley), LCFS, Heavy/Medium Duty Efficiency, Passenger Vehicle Efficiency, Energy-Efficiency

Measures, Renewable Portfolio Standard, and Solar Roofs. (See Table 3)

Step 3 Determine any short fall or “gap” between the 2020 statewide emission inventory estimates and the anticipated emission reductions from adopted Scoping Plan regulations. This “gap” represents additional GHG emission reductions needed statewide from the land use-driven emissions inventory sectors, which represents new land use development’s share of the emission reductions needed to meet statewide GHG emission reduction goals.

Result: With the 23.9 percent reductions from AB 32 Scoping Measures, there is a “gap” of 2.3 percent in necessary additional GHG emissions reductions to meet AB 32 goals of a 26.2 percent reduction from statewide land use-driven GHG emissions to return to 1990 levels in 2020. (See Table 2)

Step 4 Determine the percent reduction this “gap” represents in the “land use-driven” emissions inventory sectors from BAAQMD’s 2020 GHG emissions inventory. Identify the mass of emission reductions needed in the SFBAAB from land use-driven emissions inventory sectors.

Result: Estimated that a 2.3 percent reduction in BAAQMD’s projected 2020 emissions projections requires emissions reductions of 1.6 MMT CO₂e/yr from the land use-driven sectors. (See Table 4)

Step 5 Assess BAAQMD’s historical CEQA database (2001-2008) to determine the frequency distribution trend of project sizes and types that have been subject to CEQA over the past several years.

Result: Determined historical patterns of residential, commercial and industrial development by ranges of average sizes of each development type. Results were used in Step 6 below to distribute anticipated Bay Area growth among different future project types and sizes.

Step 6 Forecast new land use development for the Bay Area using DOF/EDD population and employment projections and distribute the anticipated growth into appropriate land use types and sizes needed to accommodate the anticipated growth (based on the trend analysis in Step 5 above). Translate the land use development projections into land use categories consistent with those contained in the Urban Emissions Model (URBEMIS).

Result: Based on population and employment projections and the trend analysis from Step 5 above, forecasted approximately 4,000 new development projects, averaging about 400 projects per year through 2020 in the Bay Area.

Step 7 Estimate the amount of GHG emissions from each land use development project type and size using URBEMIS and post-model manual calculation methods (for emissions not included in URBEMIS). Determine the amount of GHG emissions that can reasonably and feasibly be reduced through currently available mitigation measures (“mitigation effectiveness”) for future land use development projects subject to CEQA (based on land use development projections and frequency distribution from Step 6 above).

Result: Based on the information available and on sample URBEMIS calculations, found that mitigation effectiveness of between 25 and 30 percent is feasible.

Step 8 Conduct a sensitivity analysis of the numeric GHG mass emissions threshold needed to achieve the desired emissions reduction (i.e., “gap”) determined in Step 4. This mass emission GHG threshold is that which would be needed to achieve the emission reductions necessary by 2020 to meet the Bay Area’s share of the statewide “gap” needed from the land use-driven emissions inventory sectors.

Result: The results of the sensitivity analysis conducted in Step 8 found that reductions between about 125,000 MT/yr (an aggregate of 1.3 MMT in 2020) and over 200,000 MT/yr (an aggregate of over 2.0 MMT in 2020) were achievable and feasible. A mass emissions threshold of 1,100 MT of CO₂e/yr would result in approximately 59 percent of all projects being above the significance threshold (e.g., this is approximately the operational GHG emissions that would be associated with a 60 residential unit subdivision) and must implement feasible mitigation measures to meet CEQA requirements. With an estimated 26 percent mitigation effectiveness, the 1,100 MT threshold would achieve 1.6 MMT CO₂e/yr in GHG emissions reductions.

2.3.2.2 DETAILED BASIS AND ANALYSIS

Derivation of Greenhouse Gas Reduction Goal

To meet the target emissions limit established in AB 32 (equivalent to levels in 1990), total GHG emissions would need to be reduced by approximately 28 percent from projected 2020 forecasts (ARB 2009a). The AB 32 Scoping Plan is ARB’s plan for meeting this mandate (ARB 2008). While the Scoping Plan does not specifically identify GHG emission reductions from the CEQA process for meeting AB 32 derived emission limits, the scoping plan acknowledges that “other strategies to mitigate climate change . . . should also be explored.” The Scoping Plan also acknowledges that “Some of the measures in the plan may deliver more emission reductions than we expect; others less . . . and new ideas and strategies will emerge.” In addition, climate change is considered a significant environmental issue and, therefore, warrants consideration under CEQA. SB 97 represents the State Legislature’s confirmation of this fact, and it directed the Governor’s Office of Planning and Research (OPR) to develop CEQA Guidelines for

evaluation of GHG emissions impacts and recommend mitigation strategies. In response, OPR released the *Technical Advisory: CEQA and Climate Change* (OPR 2008), and has released proposed CEQA guidelines (April 14, 2009) for consideration of GHG emissions. It is known that new land use development must also do its fair share toward achieving AB 32 goals (or, at a minimum, should not hinder the State's progress toward the mandated emission reductions).

Foreseeable Scoping Plan Measures Emission Reductions and Remaining "Gap"

Step 1 of the Gap Analysis entailed estimating from ARB's statewide GHG inventory the growth in emissions between 1990 and 2020 attributable to land use driven sectors of the emissions inventory. As stated above, to meet the requirements set forth in AB 32 (i.e., achieve California's 1990-equivalent GHG emissions levels by 2020) California would need to achieve an approximate 28 percent reduction in emissions across all sectors of the GHG emissions inventory compared with 2020 projections. However, to meet the AB 32 reduction goals in the emissions sectors that are related to land use development (e.g., on-road passenger and heavy-duty motor vehicles, commercial and residential area sources [i.e., natural gas], electricity generation/consumption, wastewater treatment, and water distribution/consumption), staff determined that California would need to achieve an approximate 26 percent reduction in GHG emissions from these land use-driven sectors (ARB 2009a) by 2020 to return to 1990 land use emission levels.

Next, in Step 2 of the Gap Analysis, Staff determined the GHG emission reductions within the land use-driven sectors that are anticipated to occur from implementation of the Scoping Plan measures statewide, which are summarized in Table 2 and described below. Since the GHG emission reductions anticipated with the Scoping Plan were not accounted for in ARB's or BAAQMD's 2020 GHG emissions inventory forecasts (i.e., business as usual), an adjustment was made to include (i.e., give credit for) GHG emission reductions associated with key Scoping Plans measures, such as the Renewable Portfolio Standard, improvements in energy efficiency through periodic updates to Title 24, AB 1493 (Pavley) (which recently received a federal waiver to allow it to be enacted in law), the Low Carbon Fuel Standard (LCFS), and other measures. With reductions from these State regulations (Scoping Plan measures) taken into consideration and accounting for an estimated 23.9 percent reduction in GHG emissions, in Step 3 of the Gap Analysis Staff determined that the Bay Area would still need to achieve an additional 2.3 percent reduction from projected 2020 GHG emissions to meet the 1990 GHG emissions goal from the land-use driven sectors. This necessary 2.3 percent reduction in projected GHG emissions from the land use sector is the "gap" the Bay Area needs to fill to do its share to meet the AB 32 goals. Refer to the following explanation and Tables 2 through 4 for data used in this analysis.

Because the transportation sector is the largest emissions sector of the state's GHG emissions inventory, it is aggressively targeted in early actions and other priority actions in the Scoping Plan including measures concerning gas mileage (Pavley), fuel carbon intensity (LCFS) and vehicle efficiency measures.

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Table 2 – California 1990, 2002-2004, and 2020 Land Use Sector GHG¹ (MMT CO ₂ e/yr)				
Sector	1990 Emissions	2002-2004 Average	2020 BAU Emissions Projections	% of 2020 Total
Transportation	137.98	168.66	209.06	52%
On-Road Passenger Vehicles	108.95	133.95	160.78	40%
On-Road Heavy Duty	29.03	34.69	48.28	12%
Electric Power	110.63	110.04	140.24	35%
Electricity	95.39	88.97	107.40	27%
Cogeneration ²	15.24	21.07	32.84	8%
Commercial and Residential	44.09	40.96	46.79	12%
Residential Fuel Use	29.66	28.52	32.10	8%
Commercial Fuel Use	14.43	12.45	14.63	4%
Recycling and Waste¹	2.83	3.39	4.19	1%
Domestic Wastewater Treatment	2.83	3.39	4.19	1%
TOTAL GROSS EMISSIONS	295.53	323.05	400.22	
% Reduction Goal from Statewide land use driven sectors (from 2020 levels to reach 1990 levels in these emission inventory sectors)			26.2%	
% Reduction from AB32 Scoping Plan measures applied to land use sectors (see Table 3)			-23.9%	
% Reduction needed statewide beyond Scoping Plan measures (Gap)			2.3%	
Notes: MMT CO ₂ e /yr = million metric tons of carbon dioxide equivalent emissions per year.				
¹ Landfills not included. See text.				
² Cogeneration included due to many different applications for electricity, in some cases provides substantial power for grid use, and because electricity use served by cogeneration is often amenable to efficiency requirements of local land use authorities.				
Sources: Data compiled by EDAW and ICF Jones & Stokes from ARB data.				

Pavley Regulations. The AB 32 Scoping Plan assigns an approximate 20 percent reduction in emissions from passenger vehicles associated with the implementation of AB 1493. The AB 32 Scoping Plan also notes that “AB 32 specifically states that if the Pavley regulations do not remain in effect, ARB shall implement alternative regulations to control mobile sources to achieve equivalent or greater reductions of greenhouse gas emissions (HSC §38590).” Thus, it is reasonable to assume full implementation of AB 1493 standards, or equivalent programs that would be implemented by ARB. While the Obama administration has proposed national CAFE standards that may be equivalent to or even surpass AB 1493, the timing for implementation of the proposed federal standards is uncertain such that development of thresholds based on currently unadopted federal standards would be premature. BAAQMD may need to revisit this methodology as the federal standards come on line, particularly if such standards are more aggressive than that forecast under state law.

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Table 3 – 2020 Land Use Sector GHG Emission Reductions from State Regulations and AB 32 Measures				
Affected Emissions Source	California Legislation	% Reduction from 2020 GHG inventory	End Use Sector (% of Bay Area LU Inventory)	Scaled % Emissions Reduction (credit)
Mobile	AB 1493 (Pavley)	19.7%	On road passenger/light truck transportation (45%)	8.9%
	LCFS	7.2%	On road passenger/light truck transportation (45%)	3.2%
	LCFS	7.2%	On road Heavy/Medium Duty Transportation (5%)	0.4%
	Heavy/Medium Duty Efficiency	2.9%	On road Heavy/Medium Duty Transportation (5%)	0.2%
	Passenger Vehicle Efficiency	2.8%	On road passenger/light truck transportation (45%)	1.3%
Area	Energy-Efficiency Measures	9.5%	Natural gas (Residential, 10%)	1.0%
			Natural gas (Non-residential, 13%)	1.2%
Indirect	Renewable Portfolio Standard	21.0%	Electricity (excluding cogen) (17%)	3.5%
	Energy-Efficiency Measures	15.7%	Electricity (26%)	4.0%
	Solar Roofs	1.5%	Electricity (excluding cogen) (17%)	0.2%
Total credits given to land use-driven emission inventory sectors from Scoping Plan measures				23.9%
Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; SB = Senate Bill; RPS = Renewable Portfolio Standard Please refer to Appendix D for detailed calculations. Sources: Data compiled by ICF Jones & Stokes.				

LCFS. According to the adopted LCFS rule (CARB, April 2009), the LCFS is expected to result in approximately 10 percent reduction in the carbon intensity of transportation fuels. However, a portion of the emission reductions required from the LCFS would be achieved over the life cycle of transportation fuel production rather than from mobile-source emission factors. Based on CARB’s estimate of nearly 16 MMT reductions in on-road emissions from implementation of the LCFS and comparison to the statewide on-road emissions sector, the LCFS is assumed to result in a 7.2 percent reduction compared to 2020 BAU conditions (CARB 2009e).

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Table 4 – SFBAAB 1990, 2007, and 2020 Land Use Sector GHG Emissions Inventories and Projections (MMT CO₂e/yr)				
Sector	1990 Emissions	2007 Emissions	2020 Emissions Projections	% of 2020 Total ²
Transportation	26.1	30.8	35.7	50%
On-Road Passenger Vehicles	23.0	27.5	32.0	
On-Road Heavy Duty	3.1	3.3	3.7	
Electric Power	25.1	15.2	18.2	26%
Electricity	16.5	9.9	11.8	
Cogeneration	8.6	5.3	6.4	
Commercial and Residential	8.9	15.0	16.8	24%
Residential Fuel Use	5.8	7.0	7.5	
Commercial Fuel Use	3.1	8.0	9.3	
Recycling and Waste¹	0.2	0.4	0.4	1%
Domestic Waste Water Treatment	0.2	0.4	0.4	
TOTAL GROSS EMISSIONS	60.3	61.4	71.1	
SFBAAB's "Fair Share" % Reduction (from 2020 levels to reach 1990 levels) with AB-32 Reductions (from Table 3)			2.3%	
SFBAAB's Equivalent Mass Emissions Land Use Reduction Target at 2020 (MMT CO ₂ e/yr)			1.6	
Notes: MMT CO ₂ e /yr = million metric tons of carbon dioxide equivalent emissions per year; SFBAAB = San Francisco Bay Area Air Basin.				
¹ Landfills not included.				
² Percentages do not sum exactly to 100% in table due to rounding.				
Please refer to Appendix D for detailed calculations.				
Sources: Data compiled by EDAW 2009, ICF Jones & Stokes 2009, BAAQMD 2008.				

Renewable Portfolio Standard, Energy Efficiency and Solar Roofs. Energy efficiency and renewable energy measures from the Scoping Plan were also included in the gap analysis. The Renewable Portfolio Standard (rules) will require the renewable energy portion of the retail electricity portfolio to be 33 percent in 2020. For PG&E, the dominant electricity provider in the Basin, approximately 12 percent of their current portfolio qualifies under the RPS rules and thus the gain by 2020 would be approximately 21 percent. The Scoping Plan also estimates that energy efficiency gains with periodic improvement in building and appliance energy standards and incentives will reach 10 to 15 percent for natural gas and electricity respectively. The final state measure included in this gap analysis is the solar roof initiative, which is estimated to result in reduction of the overall electricity inventory of 1.5 percent.

Landfill emissions are excluded from this analysis. While land use development does generate waste related to both construction and operations, the California Integrated Waste Management Board (CIWMB) has mandatory diversion requirements that will, in all probability, increase over time to promote waste reductions, reuse, and recycle. The Bay Area has relatively high levels of waste diversion and extensive recycling efforts. Further, ARB has established and proposes to increase methane capture requirements for all major landfills. Thus, at this time, landfill emissions associated with land use

development waste generation is not included in the land use sector inventory used to develop this threshold approach.

Industrial stationary sources thresholds were developed separately from the land use threshold development using a market capture approach as described below. However, mobile source and area source emissions, as well as indirect electricity emissions that derive from industrial use are included in the land use inventory above as these particular activities fall within the influence of local land use authorities in terms of the affect on trip generation and energy efficiency.

AB 32 mandates reduction to 1990-equivalent GHG levels by 2020, with foreseeable emission reductions from State regulations and key Scoping Plan measures taken into account, were applied to the land use-driven emission sectors within the SFBAAB (i.e., those that are included in the quantification of emissions from a land use project pursuant to a CEQA analysis [on-road passenger vehicles, commercial and residential natural gas, commercial and residential electricity consumption, and domestic waste water treatment], as directed by OPR in the Technical Advisory: *Climate Change and CEQA* [OPR 2008]). This translates to a 2.3 percent gap in necessary GHG emission reductions by 2020 from these sectors.

2.3.2.3 LAND USE PROJECTS BRIGHT LINE THRESHOLD

In Steps 4 and 5 of the gap analysis, Staff determined that applying a 2.3 percent reduction to these land use emissions sectors in the SFBAAB's GHG emissions inventory would result in an equivalent fair share of 1.6 million metric tons per year (MMT/yr) reductions in GHG emissions from new land use development. As additional regulations and legislation aimed at reducing GHG emissions from land use-related sectors become available in the future, the 1.6 MMT GHG emissions reduction goal may be revisited and recalculated by BAAQMD.

In order to derive the 1.6 MMT "gap," a projected development inventory for the next ten years in the SFBAAB was calculated. (See Table 4 and *Revised Draft Options and Justifications Report* (BAAQMD 2009).) CO₂e emissions were modeled for projected development in the SFBAAB and compiled to estimate the associated GHG emissions inventory. The GHG (i.e., CO₂e) CEQA threshold level was adjusted for projected land use development that would occur within BAAQMD's jurisdiction over the period from 2010 through 2020.

Projects with emissions greater than the threshold would be required to mitigate to the threshold level or reduce project emissions by a percentage (mitigation effectiveness) deemed feasible by the Lead Agency under CEQA compared to a base year condition. The base year condition is defined by an equivalent size and character of project with annual emissions using the defaults in URBEMIS and the California Climate Action Registry's General Reporting Protocol for 2008. By this method, land use project mitigation subject to CEQA would help close the "gap" remaining after application of the key regulations and measures noted above supporting overall AB 32 goals.

This threshold takes into account Steps 1-8 of the gap analysis described above to arrive at a numerical mass emissions threshold. Various mass emissions significance threshold levels (i.e., bright lines) could be chosen based on the mitigation effectiveness and performance anticipated to be achieved per project to meet the aggregate emission reductions of 1.6 MMT needed in the SFBAAB by 2020. (See Table 5 and *Revised Draft Options and Justifications Report* (BAAQMD 2009).) Staff recommends a 1,100 MT CO₂e per year threshold. Choosing a 1,100 MT mass emissions significance threshold level (equivalent to approximately 60 single-family units), would result in about 59 percent of all projects being above the significance threshold and having to implement feasible mitigation measures to meet their CEQA obligations. These projects account for approximately 92 percent of all GHG emissions anticipated to occur between now and 2020 from new land use development in the SFBAAB.

Project applicants and lead agencies could use readily available computer models to estimate a project's GHG emissions, based on project specific attributes, to determine if they are above or below the bright line numeric threshold. With this threshold, projects that are above the threshold level, after consideration of emission-reducing characteristics of the project as proposed, would have to reduce their emissions to below the threshold to be considered less than significant.

Establishing a "bright line" to determine the significance of a project's GHG emissions impact provides a level of certainty to lead agencies in determining if a project needs to reduce its GHG emissions through mitigation measures and when an EIR is required.

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Table 5 – Operational GHG Threshold Sensitivity Analysis								
Option	Mitigation Effectiveness Assumptions		Mass Emission Threshold Level (MT CO₂e/yr)	% of Projects Captured (>threshold)	% of Emissions Captured (> threshold)	Emissions Reduction per year (MT/yr)	Aggregate Emissions Reduction (MMT) at 2020	Threshold Project Size Equivalent (single family dwelling units)
	Performance Standards Applied to All Projects with Emissions < Threshold Level	Mitigation Effectiveness Applied to Emissions > Threshold Level						
1A	N/A	30%	975	60%	93%	201,664	2.0	53
1A	N/A	25%	110	96%	100%	200,108	2.0	66
1A	N/A	30%	1,225	21%	67%	159,276	1.6	67
1A	N/A	26%	1,100	59%	92%	159,877	1.6	60
1A	N/A	30%	2,000	14%	61%	143,418	1.4	109
1A	N/A	25%	1,200	58%	92%	136,907	1.4	66
1A	N/A	30%	3,000	10%	56%	127,427	1.3	164
1A	N/A	25%	1,500	20%	67%	127,303	1.3	82
1B	26%	N/A	N/A	100%	100%	208,594	2.1	N/A ¹
1C	5%	30%	1,900	15%	62%	160,073	1.6	104
1C	10%	25%	1,250	21%	67%	159,555	1.6	68
1C	5%	30%	3,000	10%	56%	145,261	1.5	164
1C	10%	25%	2,000	4%	61%	151,410	1.5	109
1C	10%	30%	10,000	2%	33%	125,271	1.3	547

Notes: MMT = million metric tons per year; MT CO₂e/yr = metric tons of carbon dioxide equivalent emissions per year; MT/yr = metric tons per year; N/A = not applicable.
¹ Any project subject to CEQA would trigger this threshold.
Please refer to Appendix E for detailed calculations.
Source: Data modeled by ICF Jones & Stokes.

2.3.2.4 LAND USE PROJECTS EFFICIENCY-BASED THRESHOLD

GHG efficiency metrics can also be utilized as thresholds to assess the GHG efficiency of a project on a per capita basis (residential only projects) or on a “service population” basis (the sum of the number of jobs and the number of residents provided by a project) such that the project will allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal (allowable emissions), by the estimated 2020 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32. Staff believes it is more appropriate to base the land use efficiency threshold on the service population metric for the land use-driven emission inventory. This approach is appropriate because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use) and uses only the land use emissions inventory that is comprised of all land use projects. Staff will provide the methodology to calculate a project’s GHG emissions in the revised CEQA Guidelines, such as allowing infill projects up to a 50 percent or more reduction in daily vehicle trips if the reduction can be supported by close proximity to transit and support services, or a traffic study prepared for the project.

Table 6 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - Land Use Inventory Sectors	
Land Use Sectors Greenhouse Gas Emissions Target	295,530,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO ₂ e)/SP ¹	4.6
Notes: AB = Assembly Bill; CO ₂ e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.	
¹ Greenhouse gas efficiency levels were calculated using only the “land use-related” sectors of ARB’s emissions inventory.	
Please refer to Appendix D for detailed calculations.	
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.	

Staff proposes a project-level efficiency threshold of 4.6 MT CO₂e/SP, the derivation of which is shown Table 6. This efficiency-based threshold reflects very GHG-efficient projects. As stated previously and below, staff anticipates that significance thresholds (rebuttable presumptions of significance at the project level) will function on an interim basis only until adequate programmatic approaches are in place at the city, county, and regional level that will allow the CEQA streamlining of individual projects. (See Draft CEQA Guidelines, proposed section 15183.5 ["Tiering and Streamlining the Analysis of Greenhouse Gas Emissions"]). In advance of such programmatic approaches, local agencies may wish to apply this efficiency-based recommended threshold with some discretion, taking into account not only the project's efficiency, but also its total GHG emissions. Even where a project is relatively GHG-efficient as compared to other projects, in approving the project, the lead agency is committing to use what is essentially

its GHG "budget" in a given way. Expending this "budget" on the proposed project may affect other development opportunities and associated obligations to mitigate or conflict with other actions that the community may wish to take to reduce its overall GHG emissions after it has conducted its programmatic analysis.

Accordingly, in applying the efficiency-based threshold of 4.6 MT CO₂e/SP, the lead agency might also wish to consider the project's total emissions. Where a project meets the efficiency threshold but would still have very large GHG emissions, the lead agency may wish to consider whether the project's contributions to climate change might still be cumulatively considerable and whether additional changes to the project or mitigation should be required. Staff notes that even where the project may be significant as it relates to climate change, the lead agency may find that the project should nonetheless be approved in light of its benefits; in that case, the lead agency may wish to note the project's efficiency and any innovative design features in the Statement of Overriding Considerations.

2.3.3 PLAN-LEVEL GHG THRESHOLDS

Staff proposes using a two step process for determining the significance of proposed plans and plan amendments for GHG. As a first step in assessing plan-level impacts, Staff is proposing that agencies that have adopted a qualified climate action plan (or have incorporated similar criteria in their General Plan) and the General Plan or Transportation Plan are consistent with the climate action plan, the General Plan or Transportation Plan would be considered less than significant. In addition, as discussed above for project-level GHG impacts, Staff is proposing an efficiency threshold to assess plan-level impacts. Staff believes a programmatic approach to limiting GHG emissions is appropriate at the plan-level. Thus, as projects consistent with the climate action plan are proposed, they may be able to tier off the plan and its environmental analysis.

2.3.3.1 GHG EFFICIENCY METRICS FOR PLANS

For local land use plans, a GHG-efficiency metric (e.g., GHG emissions per unit) would enable comparison of a proposed general plan to its alternatives and to determine if the proposed general plan meets AB 32 emission reduction goals.

AB 32 identifies local governments as essential partners in achieving California's goal to reduce GHG emissions. Local governments have primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth and the changing needs of their jurisdiction. ARB has developed the Local Government Operations Protocol and is developing a protocol to estimate community-wide GHG emissions. ARB encourages local governments to use these protocols to track progress in reducing GHG emissions. ARB encourages local governments to institutionalize the community's strategy for reducing its carbon footprint in its general plan. SB 375 creates a process for regional integration of land development patterns and transportation infrastructure planning with the primary goal of reducing GHG emissions from the largest sector of the GHG emission inventory, light duty vehicles.

If the statewide AB 32 GHG emissions reduction context is established, GHG efficiency can be viewed independently from the jurisdiction in which the plan is located. Expressing projected 2020 mass of emissions from land use-related emissions sectors by comparison to a demographic unit (e.g., population and employment) provides evaluation of the GHG efficiency of a project in terms of what emissions are allowable while meeting AB 32 targets.

Two approaches were considered for efficiency metrics. The “service population” (SP) approach would consider efficiency in terms of the GHG emissions compared to the sum of the number of jobs and the number of residents at a point in time. The per capita option would consider efficiency in terms of GHG emissions per resident only. Staff recommends that the efficiency threshold for plans be based on all emission inventory sectors because, unlike land use projects, community-wide or regional plans comprise more than just land use related emissions (e.g. industrial). Further, Staff recommends that plan threshold be based on the service population metric as community-wide plans or regional plans include a mix of residents and employees. The Service Population metric would allow decision makers to compare GHG efficiency of general plan alternatives that vary residential and non-residential development totals, encouraging GHG efficiency through improving jobs/housing balance. This approach would not give preference to communities that accommodate more residential (population-driven) land uses than non-residential (employment driven) land uses which could occur with the per capita approach.

A SP-based GHG efficiency metric (see Table 7) was derived from the emission rates at the State level that would accommodate projected population and employment growth under trend forecast conditions, and the emission rates needed to accommodate growth while allowing for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020).

Table 7 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - All Inventory Sectors	
All Inventory Sectors Greenhouse Gas Emissions Target	426,500,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO ₂ e)/SP ¹	6.6
Notes: AB = Assembly Bill; CO ₂ e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.	
¹ Greenhouse gas efficiency levels were calculated using only the “land use-related” sectors of ARB’s emissions inventory.	
Please refer to Appendix D for detailed calculations.	
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.	

If a general plan demonstrates, through dividing the emissions inventory projections (MT CO₂e) by the amount of growth that would be accommodated in 2020, that it could meet the GHG efficiency metrics proposed in this section (6.6 MT CO₂e/SP from all emission

sectors, as noted in Table 7), then the amount of GHG emissions associated with the general plan would be considered less than significant, regardless of its size (and magnitude of GHG emissions). In other words, the general plan would accommodate growth in a manner that would not hinder the State's ability to achieve AB 32 goals, and thus, would be less than significant for GHG emissions and their contribution to climate change. The efficiency metric would not penalize well-planned communities that propose a large amount of development. Instead, the SP-based GHG efficiency metric acts to encourage the types of development that BAAQMD and OPR support (i.e., infill and transit-oriented development) because it tends to reduce GHG and other air pollutant emissions overall, rather than discourage large developments for being accompanied by a large mass of GHG emissions. Plans that are more GHG efficient would have no or limited mitigation requirements to help them complete the CEQA process more readily than plans that promote GHG inefficiencies, which will require detailed design of mitigation during the CEQA process and could subject a plan to potential challenge as to whether all feasible mitigation was identified and adopted. This type of threshold can shed light on a well-planned general plan that accommodates a large amount of growth in a GHG-efficient way.

When analyzing long-range plans, such as general plans, it is important to note that the planning horizon will often surpass the 2020 timeframe for implementation of AB 32. Executive Order S-3-05 establishes a more aggressive emissions reduction goal for the year 2050 of 80 percent below 1990 emissions levels. The year 2020 should be viewed as a milestone year, and the general plan should not preclude the community from a trajectory toward the 2050 goal. However, the 2020 timeframe is examined in this threshold evaluation because doing so for the 2050 timeframe (with respect to population, employment, and GHG emissions projections) would be too speculative. Advances in technology and policy decisions at the state level will be needed to meet the aggressive 2050 goals. It is beyond the scope of the analysis tools available at this time to examine reasonable emissions reductions that can be achieved through CEQA analysis in the year 2050. As the 2020 timeframe draws nearer, BAAQMD will need to reevaluate the threshold to better represent progress toward 2050 goals.

2.3.4 CLIMATE ACTION PLANS

Finally, many local agencies have already undergone or plan to undergo efforts to create general or other plans that are consistent with AB 32 goals. The Air District encourages such planning efforts and recognizes that careful upfront planning by local agencies is invaluable to achieving the state's GHG reduction goals. If a project is consistent with an adopted Qualified Climate Action Plan that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent with CEQA Guidelines Section 15064(h)(3), which provides that a "lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem."

A qualified Climate Action Plan (or similar adopted policies, ordinances and programs) is one that is consistent with all of the AB 32 Scoping Plan measures and goals. The Climate Action Plan should identify a land use design, transportation network, goals, policies and implementation measures that would achieve AB 32 goals. Plans with horizon years beyond 2020 should consider continuing the downward reduction path set by AB 32 and move toward climate stabilization goals established in Executive Order S-3-05.

Qualified Climate Action Plans

A qualified Climate Action Plan adopted by a local jurisdiction should include the following. The District's revised CEQA Guidelines will provide the methodology to determine if a Climate Action Plan meets these requirements.

- ▶ GHG Inventory for Current Year and Forecast for 2020 (and for 1990 if the reduction goal is based on 1990 emission levels).
- ▶ An adopted GHG Reduction Goal for 2020 for the jurisdiction from all sources (existing and future) which is at least one of the following: 1990 GHG emission levels, 15 percent below 2008 emission levels, or 28 percent below BAU Forecasts for 2020 (if including non-land use sector emissions in the local inventory; otherwise can use 26.2 percent if only including land use sector emissions).
- ▶ Identification of feasible reduction measures to reduce GHG emissions for 2020 to the identified target.
- ▶ Application of relevant reduction measures included in the AB 32 Scoping Plan that are within the jurisdiction of the local land use authority (such as building energy efficiency, etc.).
- ▶ Quantification of the reduction effectiveness of each of the feasible measures identified including disclosure of calculation method and assumptions.
- ▶ Identification of implementation steps and financing mechanisms to achieve the identified goal by 2020.
- ▶ Procedures for monitoring and updating the GHG inventory and reduction measures at least twice before 2020 or at least every five years.
- ▶ Identification of responsible parties for Implementation.
- ▶ Schedule of implementation.
- ▶ Certified CEQA document, or equivalent process (see below).

Local Climate Action Policies, Ordinances and Programs

Air District staff recognizes that many communities in the Bay Area have been proactive in planning for climate change but have not yet developed a stand-alone Climate Action

Plan that meets the above criteria. Many cities and counties have adopted climate action policies, ordinances and program that may in fact achieve the goals of a qualified climate action plan. Staff recommends that if a local jurisdiction can demonstrate that its collective set of climate action policies, ordinances and other programs is consistent with AB 32, includes requirements or feasible measures to reduce GHG emissions and achieves one of the following GHG emission reduction goals,³ the AB 32 consistency demonstration should be considered equivalent to a qualified climate action plan:

- ▶ 1990 GHG emission levels,
- ▶ 15 percent below 2008 emission levels, or
- ▶ 28 percent below BAU Forecasts for 2020 (if including non-land use sector emissions in the local inventory; otherwise can use 26.2 percent if only including land use sector emissions).

Qualified Climate Action Plans that are tied to the AB 32 reduction goals would promote reductions on a plan level without impeding the implementation of GHG-efficient development, and would recognize the initiative of many Bay Area communities who have already developed or are in the process of developing a GHG reduction plan. The details required above for a qualified Climate Action Plan (or similar adopted policies, ordinances and programs) would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measureable, and verifiable GHG reductions consistent with broad state goals such that projects approved under qualified Climate Action Plans or equivalent demonstrations would achieve their fair share of GHG emission reductions.

2.3.5 STATIONARY SOURCE GHG THRESHOLD

Staff's recommended threshold for stationary source GHG emissions is based on estimating the GHG emissions from combustion sources for all permit applications submitted to the Air District in 2005, 2006 and 2007. The analysis is based only on CO₂ emissions from stationary sources, as that would cover the vast majority of the GHG emissions due to stationary combustion sources in the SFBAAB. The estimated CO₂ emissions were calculated for the maximum permitted amount, i.e. emissions that would be emitted if the sources applying for a permit application operate at maximum permitted load and for the total permitted hours. All fuel types are included in the estimates. For boilers burning natural gas, diesel fuel is excluded since it is backup fuel and is used only if natural gas is not available. Emission values are estimated before any offsets (i.e., Emission Reduction Credits) are applied. GHG emissions from mobile sources, electricity use and water delivery associated with the operation of the permitted sources are not included in the estimates.

³ Lead agencies using consistency with their jurisdiction's climate action policies, ordinances and programs as a measure of significance under CEQA Guidelines section 15064(h)(3) should ensure that the policies, ordinances and programs satisfy all of the requirements of that subsection before relying on them in a CEQA analysis.

It is projected that a threshold level of 10,000 metric tons of CO₂e per year would capture approximately 95 percent of all GHG emissions from new permit applications from stationary sources in the SFBAAB. That threshold level was calculated as an average of the combined CO₂ emissions from all stationary source permit applications submitted to the Air District during the three year analysis period.

Staff recommends this 10,000 MT of CO₂/yr as it would address a broad range of combustion sources and thus provide for a greater amount of GHG reductions to be captured and mitigated through the CEQA process. As documented in the Scoping Plan, in order to achieve statewide reduction targets, emissions reductions need to be obtained through a broad range of sources throughout the California economy and this threshold would achieve this purpose. While this threshold would capture 95 percent of the GHG emissions from new permit applications, the threshold would do so by capturing only the large, significant projects. Permit applications with emissions above the 10,000 MT of CO₂/yr threshold account for less than 10 percent of stationary source permit applications which represent 95 percent of GHG emissions from new permits analyzed during the three year analysis period.

This threshold would be considered an interim threshold and Air District staff will reevaluate the threshold as AB 32 Scoping Plan measures such as cap and trade are more fully developed and implemented at the state level.

2.3.6 SUMMARY OF JUSTIFICATION FOR GHG THRESHOLDS

The bright-line numeric threshold of 1,100 MT CO₂e/yr is a numeric emissions level below which a project's contribution to global climate change would be less than "cumulatively considerable." This emissions rate is equivalent to a project size of approximately 60 single-family dwelling units, and approximately 59 percent of all future projects and 92 percent of all emissions from future projects would exceed this level. For projects that are above this bright-line cutoff level, emissions from these projects would still be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 MT CO₂e per service population or better for mixed-use projects. Projects with emissions above 1,100 MT CO₂e/yr would therefore still be less than significant if they achieved project efficiencies below these levels. If projects as proposed exceed these levels, they would be required to implement mitigation measures to bring them back below the 1,100 MT CO₂e/yr bright-line cutoff or within the 4.6 MT CO₂e Service Population efficiency threshold. If mitigation did not bring a project back within the threshold requirements, the project would be cumulatively significant and could be approved only with a Statement of Overriding Considerations and a showing that all feasible mitigation measures have been implemented. Projects' GHG emissions would also be less than significant if they comply with a Qualified Climate Action Plan.

As explained in the preceding analyses of these thresholds, the greenhouse gas emissions from land use projects expected between now and 2020 built in compliance with these thresholds would be approximately 26 percent below BAU 2020 conditions and thus would be consistent with achieving an AB 32 equivalent reduction. The 26 percent

reduction from BAU 2020 from new projects built in conformance with these proposed thresholds would achieve an aggregate reduction of approximately 1.6 MMT CO₂e/yr, which is the level of emission reductions from new Bay Area land use sources needed to meet the AB 32 goals, per ARB's Scoping Plan as discussed above.

Projects with greenhouse gas emissions in conformance with these proposed thresholds would therefore not be considered significant for purposes of CEQA. Although the emissions from such projects would add an incremental amount to the overall greenhouse gas emissions that cause global climate change impacts, emissions from projects consistent with these thresholds would not be a "cumulatively considerable" contribution under CEQA. Such projects would not be "cumulatively considerable" because they would be helping to solve the cumulative problem as a part of the AB 32 process.

California's response to the problem of global climate change is to reduce greenhouse gas emissions to 1990 levels by 2020 under AB 32 as a near-term measure and ultimately to 80 percent below 1990 levels by 2050 as the long-term solution to stabilizing greenhouse gas concentrations in the atmosphere at a level that will not cause unacceptable climate change impacts. To implement this solution, the Air Resources Board has adopted a Scoping Plan and budgeted emissions reductions that will be needed from all sectors of society in order to reach the interim 2020 target.

The land-use sector in the Bay Area needs to achieve aggregate emission reductions of approximately 1.6 MMT CO₂e/yr from new projects between now and 2020 to achieve this goal, as noted above, and each individual new project will need to achieve its own respective portion of this amount in order for the Bay Area land use sector as a whole to achieve its allocated emissions target. Building all of the new projects expected in the Bay Area between now and 2020 in accordance with the thresholds that District staff are proposing will achieve the overall appropriate share for the land use sector, and building each individual project in accordance with the proposed thresholds will achieve that individual project's respective portion of the emission reductions needed to implement the AB 32 solution. For these reasons, projects built in conformance with the proposed thresholds will be part of the solution to the cumulative problem, and not part of the continuing problem. They will allow the Bay Area's land use sector to achieve the emission reductions necessary from that sector for California to implement its solution to the cumulative problem of global climate change. As such, even though such projects will add an incremental amount of greenhouse gas emissions, their incremental contribution will be less than "cumulatively considerable" because they are helping to achieve the cumulative solution, not hindering it. Such projects will therefore not be "significant" for purposes of CEQA. (*See* CEQA Guidelines §15064(h)(1).)

The conclusion that land use projects that comply with these proposed thresholds is also supported by CEQA Guidelines Section 15030(a)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." In the case of greenhouse gas emissions associated with land use projects, achieving the amount of emission reductions below BAU that will be required to achieve the AB 32 goals is the project's "fair share" of the

overall emission reductions needed under ARB's scoping plan to reach the overall statewide AB 32 emissions levels for 2020. If a project is designed to implement greenhouse gas mitigation measures that achieve a level of reductions consistent with what is required from all new land use projects to achieve the land use sector "budget" – *i.e.*, keeping overall project emissions below 1,100 MT CO₂e/yr or ensuring that project efficiency is better than 4.6 MT CO₂e/service population – then it will be implementing its share of the mitigation measures necessary to alleviate the cumulative impact, as shown in the analyses set forth above.

It is also worth noting that this "fair share" approach is flexible and will allow a project's significance to be determined by how well it is designed from a greenhouse-gas efficiency standpoint, and not just by the project's size. For example, a large high-density infill project located in an urban core nearby to public transit and other alternative transportation options, and built using state-of-the-art energy efficiency methods and improvements such as solar panels, as well as all other feasible mitigation measures, would not become significant for greenhouse gas purposes (and thus require a Statement of Overriding Considerations in order to be approved) simply because it happened to be a large project. Projects such as this hypothetical development with low greenhouse-gas emissions per service population are what California will need in the future in order to do its part in achieving a solution to the problem of global climate change. The determination of significance under CEQA should therefore take these factors into account, and staff's proposed significance thresholds would achieve this important policy goal. In all, land use sector projects that comply with the GHG thresholds would not be "cumulatively considerable" because they would be helping to solve the cumulative problem as a part of the AB 32 process.

Likewise, new Air District permit applications for stationary sources that comply with the quantitative threshold of 10,000 MT CO₂e/yr would not be "cumulatively considerable" because they also would not hinder the state's ability to solve the cumulative greenhouse gas emissions problem pursuant to AB 32. Unlike the land use sector, the AB 32 Scoping Plan measures, including the cap-and-trade program, provide for necessary emissions reductions from the stationary source sector to achieve AB 32 2020 goals.

While stationary source projects will need to comply with the cap-and-trade program once it is enacted and reduce their emissions accordingly, the program will be phased in over time starting in 2012 and at first will only apply to the very largest sources of GHG emissions. In the mean time, certain stationary source projects, particularly those with large GHG emissions, still will have a cumulatively considerable impact on climate change. The 10,000 MT CO₂e/yr threshold will capture 95 percent of the stationary source sector GHG emissions in the Bay Area. The five percent of emissions that are from stationary source projects below the 10,000 MT CO₂e/yr threshold account for a small portion of the Bay Area's total GHG emissions from stationary sources and these emissions come from very small projects. Such small stationary source projects will not significantly add to the global problem of climate change, and they will not hinder the Bay Area's ability to reach the AB 32 goal in any significant way, even when considered cumulatively. In Air District's staff's judgment, the potential environmental benefits from

requiring EIRs and mitigation for these projects would be insignificant. In all, based on staff's expertise, stationary source projects with emissions below 10,000 MT CO₂e/yr will not provide a cumulatively considerable contribution to the cumulative impact of climate change.

3 COMMUNITY RISK AND HAZARD THRESHOLDS

To address community risk from air toxics, the Air District initiated the Community Air Risk Evaluation (CARE) program in 2004 to identify locations with high levels of risk from ambient toxic air contaminants (TAC) co-located with sensitive populations and use the information to help focus mitigation measures. Through the CARE program, the Air District developed an inventory of TAC emissions for 2005 and compiled demographic and health indicator data. According to the findings of the CARE Program, diesel PM—mostly from on and off-road mobile sources—accounts for over 80 percent of the inhalation cancer risk from TACs in the Bay Area (BAAQMD 2006).

The Air District applied a regional air quality model using the 2005 emission inventory data to estimate excess cancer risk from ambient concentrations of important TAC species, including diesel PM, 1,3-butadiene, benzene, formaldehyde and acetaldehyde. The highest cancer risk levels from ambient TAC in the Bay Area tend to occur in the core urban areas, along major roadways and adjacent to freeways and port activity. Cancer risks in areas along these major freeways are estimated to range from 200 to over 500 excess cases in a million for a lifetime of exposure. Priority communities within the Bay Area – defined as having higher emitting sources, highest air concentrations, and nearby low income and sensitive populations – include the urban core areas of Concord, eastern San Francisco, western Alameda County, Redwood City/East Palo Alto, Richmond/San Pablo, and San Jose.

Fifty percent of BAAQMD's population was estimated to have an ambient background inhalation cancer risk of less than 500 cases in one million, based on emission levels in 2005. Table 8 presents a summary of percentages of the population exposed to varying levels of cancer risk from ambient TACs. Approximately two percent of the SFBAAB population is exposed to background risk levels of less than 200 excess cases in one million. This is in contrast to the upper percentile ranges where eight percent of the SFBAAB population is exposed to background risk levels of greater than 1,000 excess cases per one million. To identify and reduce risks from TAC, this chapter presents thresholds of significance for both cancer risk and non-cancer health hazards.

Percentage of Population (Percent below level of ambient risk)	Ambient Cancer Risk (inhalation cancer cases in one million)
92	1,000
90	900
83	800
77	700
63	600
50	500
32	400
13	300
2	200
<1	100

Source: Data compiled by EDAW 2009.

Many scientific studies have linked fine particulate matter and traffic-related air pollution to respiratory illness (Hiltermann et al. 1997, Schikowski et al 2005, Vineis et al. 2007) and premature mortality (Dockery 1993, Pope et al. 1995, Jerrett et al. 2005). Traffic-related air pollution is a complex mix of chemical compounds (Schauer et al. 2006), often spatially correlated with other stressors, such as noise and poverty (Wheeler and Ben-Shlomo 2005). While such correlations can be difficult to disentangle, strong evidence for adverse health effects of fine particulate matter (PM_{2.5}) has been developed for regulatory applications in a recent consensus-based study by the California Air Resources Board. This study found that a 10 percent increase in PM_{2.5} concentrations increased the non-injury death rate by 10 percent (ARB 2008).

Public Health Officers for four counties in the San Francisco Bay Area in 2009 provided testimony to the Air District’s Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality and Public Health). Among the recommendations made, was that PM_{2.5}, in addition to TACs, be considered in assessments of community-scale impacts of air pollution. In consideration of the scientific studies and recommendations by the Bay Area Health Directors, it is apparent that, in addition to the significance thresholds for local-scale TAC, thresholds of significance are required for near-source, local-scale concentrations of PM_{2.5}.

3.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Proposed thresholds of significance and Board-requested options are presented in this section:

- The **Staff Proposal** includes thresholds for cancer risk, non-cancer health hazards, and fine particulate matter.

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- **Board Option 1** includes tiered thresholds for new sources in impacted communities. Thresholds for receptors and cumulative impacts are the same as the Staff Proposal.
- **Board Option 2** removes the option for a qualified Community Risk Reduction Plan from the Staff Proposal.

Proposal/Option	Construction-Related	Operational-Related
Project-Level – Individual Project		
<p>Risks and Hazards (Individual Project)</p> <p><u>Staff Proposal</u></p>	<p>Same as Operational Thresholds*</p>	<p><u>All Areas: Siting a New Source or Receptor</u></p> <p>Compliance with Qualified 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/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p>Risks and Hazards (Individual Project)</p> <p><u>Board Option 1</u></p> <p>Tiered Thresholds</p>	<p>Same as Operational Thresholds*</p> <hr style="border-top: 1px dashed black;"/> <p>Same as Operational Thresholds*</p>	<p><u>Impacted Communities: Siting a New Source</u></p> <p>Compliance with Qualified Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM_{2.5} increase: > 0.2 µg/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p> <hr style="border-top: 1px dashed black;"/> <p><u>Impacted Communities: Siting a New Receptor</u> <u>All Other Areas: Siting a New Source or Receptor</u></p> <p>Compliance with Qualified 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/m³ annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>

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Proposal/Option	Construction-Related	Operational-Related
Risks and Hazards (Individual Project) <u>Board Option 2</u> Quantitative Thresholds	Same as Operational Thresholds*	<u>All Areas: Siting a New Source or Receptor</u> 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 fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Project-Level – Cumulative		
Risks and Hazards (Cumulative Thresholds)	Same as Operational Thresholds*	<u>All Areas: Siting a New Source or Receptor</u> Compliance with Qualified Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 1.0 Hazard Index (from all local sources) (Chronic or Acute) <u>PM_{2.5}:</u> > 0.8 µg/m ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
Plan-Level		
Plans	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and odors. 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways.
Accidental Release of Acutely Hazardous Air Pollutants	None	None

* 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.

3.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

The goal of the proposed thresholds is to ensure that no source creates, or receptor endures, a significant adverse impact from any individual project, and that the total of all nearby directly emitted risk and hazard emissions is also not significantly adverse. The thresholds for local risks and hazards from TAC and PM_{2.5} are intended to apply to all sources of emissions, including both permitted stationary sources and on- and off-road mobile sources, such as sources related to construction, busy roadways, or freight movement.

Thresholds for an individual new source are designed to ensure that the source does not contribute a cumulatively significant impact. Cumulative thresholds for sources recognize that some areas are already near or at levels of significant impact. If within such an area there are receptors, or it can reasonably be foreseen that there will be receptors, then a cumulative significance threshold sets a level beyond which any additional risk is significant.

For new receptors – sensitive populations or the general public – thresholds of significance are designed to identify levels of contributed risk or hazards from existing local sources that pose a significant risk to the receptors. Single-source thresholds for receptors are provided to recognize that within the area defined there can be variations in risk levels that may be significant. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the area defined by the selected radius. Cumulative thresholds for receptors are designed to account for the effects of all sources within the defined area.

Cumulative thresholds, for both sources and receptors, must consider the size of the source area, defined by a radius from the proposed project. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the modeled risk and, until the radius approaches a regional length scale, the greater the expected modeled risk increment. If the area of impact considered were grown to the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

3.3.1 SCIENTIFIC AND REGULATORY JUSTIFICATION

Regulatory Framework for TACs

Prior to 1990, the Clean Air Act required EPA to list air toxics it deemed hazardous and to establish control standards which would restrict concentrations of hazardous air pollutants (HAP) to a level that would prevent any adverse effects “with an ample margin of safety.” By 1990, EPA had regulated only seven such pollutants and it was widely acknowledged by that time that the original Clean Air Act had failed to address toxic air emissions in any meaningful way. As a result, Congress changed the focus of regulation in 1990 from a risk-based approach to technology-based standards. Title III, Section 112(b) of the 1990 Clean Air Act Amendment established this new regulatory approach.

Under this framework, prescribed pollution control technologies based upon maximum achievable control technology (MACT) were installed without the a priori estimation of the health or environmental risk associated with each individual source. The law listed 188 HAPs that would be subject to the MACT standards. EPA issued 53 standards for 89 different types of major industrial sources of air toxics and eight categories of smaller sources such as dry cleaners. These requirements took effect between 1996 and 2002. Under the federal Title V Air Operating Permit Program, a facility with the potential to emit 10 tons of any toxic air pollutant, or 25 tons per year of any combination of toxic air pollutants, is defined as a major source HAPs. Title V permits include requirements for these facilities to limit toxic air pollutant emissions.

Several state and local agencies adopted programs to address gaps in EPA's program prior to the overhaul of the national program in 1990. California's program to reduce exposure to air toxics was established in 1983 by the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) and the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987). Under AB 1807, ARB and the Office of Environmental Health Hazard Assessment (OEHHA) determines if a substance should be formally identified as a toxic air contaminant (TAC) in California. OEHHA also establishes associated risk factors and safe concentrations of exposure.

AB 1807 was amended in 1993 by AB 2728, which required ARB to identify the 189 federal hazardous air pollutants as TACs. AB 2588 (Connelly, 1987) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Cancer Risk

Cancer risk from TACs is typically expressed in numbers of excess cancer cases per million persons exposed over a defined period of exposure, for example, over an assumed 70 year lifetime. The Air District is not aware of any agency that has established an acceptable level of cancer risk for TACs. However, a range of what constitutes a significant increment of cancer risk from any compound has been established by the U.S. EPA. EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility- and community-scale level considers a range of acceptable cancer risks from one in a million to one in ten thousand (100 in a million). The guidance considers an acceptable range of cancer risk increments to be from one in a million to one in ten thousand. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from HAPs by limiting additional risk to a level no higher than the one in ten thousand estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years. This goal is described in the preamble to the benzene National Emissions Standards for Hazardous Air Pollutants (NESHAP) rulemaking (54 Federal Register 38044, September 14, 1989) and is incorporated by Congress for EPA's residual risk program under Clean Air Act section 112(f).

Regulation 2, Rule 5 of the Air District specifies permit requirements for new and modified stationary sources of TAC. The Project Risk Requirement (2-5-302.1) states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project cancer risk exceeds 10.0 in one million.

Hazard Index for Non-cancer Health Effects

Non-cancer health hazards for chronic and acute diseases are expressed in terms of a hazard index (HI), a ratio of TAC concentration to a reference exposure level (REL), below which no adverse health effects are expected, even for sensitive individuals. As such, OEHHA has defined acceptable concentration levels, and also significant concentration increments, for compounds that pose non-cancer health hazards. If the HI for a compound is less than one, non-cancer chronic and acute health impacts have been determined to be less than significant.

State and Federal Ambient Air Quality Standards for PM_{2.5}

The Children's Environmental Health Protection Act (Senate Bill 25), passed by the California state legislature in 1999, requires ARB, in consultation with OEHHA, to "review all existing health-based ambient air quality standards to determine whether, based on public health, scientific literature and exposure pattern data, these standards adequately protect the public, including infants and children, with an adequate margin of safety." As a result of the review requirement, in 2002 ARB adopted an annual average California Ambient Air Quality Standard (CAAQS) for PM_{2.5} of 12 ug/m³ that is not to be exceeded (California Code of Regulations, Title 17 § 70200, Table of Standards.) The National Ambient Air Quality Standard (NAAQS) established an annual standard for PM_{2.5} (15 ug/m³) that is less stringent than the CAAQS, but also set a 24-hour average standard (35 ug/m³), which is not included in the CAAQS (Code of Federal Regulations, Title 40, Part 50.7).

Significant Impact Levels for PM_{2.5}

EPA recently proposed and documented alternative options for PM_{2.5} Significant Impact Levels (SILs) (Federal Register 40 CFR Parts 51 and 52, September 21, 2007). The EPA is proposing to facilitate implementation of a PM_{2.5} Prevention of Significant Deterioration (PSD) program in areas attaining the PM_{2.5} NAAQS by developing PM_{2.5} increments, or SILs. These "increments" are maximum increases in ambient PM_{2.5} concentrations (PM_{2.5} increments) allowed in an area above the baseline concentration.

The SIL is a threshold that would be applied to individual facilities that apply for a permit to emit a regulated pollutant in an area that meets the NAAQS. The State and EPA must determine if emissions from that facility will cause the air quality to worsen. If an individual facility projects an increase in emissions that result in ambient impacts greater than the established SIL, the permit applicant would be required to perform additional analyses to determine if those impacts will be more than the amount of the PSD increment. This analysis would combine the impact of the proposed facility when added to all other sources in the area.

The EPA is proposing such values for PM_{2.5} that will be used as screening tools by a major source subject to PSD to determine the subsequent level of analysis and data gathering required for a PSD permit application for emissions of PM_{2.5}. The SIL is one element of the EPA program to prevent deterioration in regional air quality and is utilized in the new source review (NSR) process. New source review is required under Section 165 of the Clean Air Act, whereby a permit applicant must demonstrate that emissions from the proposed construction and operation of a facility “will not cause, or contribute to, air pollution in excess of any maximum allowable increase or maximum allowable concentration for any pollutant.” The purpose of the SIL is to provide a screening level that triggers further analysis in the permit application process.

For the purpose of NSR, SILs are set for three types of areas: Class I areas where especially clean air is most desirable, including national parks and wilderness areas; Class II areas where there is not expected to be substantial industrial growth; and Class III areas where the highest relative level of industrial development is expected. In Class II and Class III areas, a PM_{2.5} concentration of 0.3, 0.8, and 1 µg/m³ has been proposed as a SIL. To arrive at the SIL PM_{2.5} option of 0.8 µg/m³, EPA scaled an established PM₁₀ SILs of 1.0 µg/m³ by the ratio of emissions of PM_{2.5} to PM₁₀ using the EPA’s 1999 National Emissions Inventory. To arrive at the SIL option of 0.3 µg/m³, EPA scaled the PM₁₀ SIL of 1.0 µg/m³ by the ratio of the current Federal ambient air quality standards for PM_{2.5} and PM₁₀ (15/50). These options represent what EPA currently considers as a range of appropriate SIL values.

EPA interprets the SIL to be the level of PM_{2.5} increment that represents a “significant contribution” to regional non-attainment. While SIL options were not designed to be thresholds for assessing community risk and hazards, they are being considered to protect public health at a regional level by helping an area maintain the NAAQS. Furthermore, since it is the goal of the Air District to achieve and maintain the NAAQS and CAAQS at both regional and local scales, the SILs may be reasonably be considered as thresholds of significance under CEQA for local-scale increments of PM_{2.5}.

Roadway Proximity Health Studies

Several medical research studies have linked near-road pollution exposure to a variety of adverse health outcomes impacting children and adults. Kleinman et al. (2007) studied the potential of roadway particles to aggravate allergic and immune responses in mice. Using mice that were not inherently susceptible, the researchers placed these mice at various distances downwind of State Road 60 and Interstate 5 freeways in Los Angeles to test the effect these roadway particles have on their immune system. They found that within five meters of the roadway, there was a significant allergic response and elevated production of specific antibodies. At 150 meters (492 feet) and 500 meters (1,640 feet) downwind of the roadway, these effects were not statistically significant.

Another significant study (Ven Hee et al. 2009) conducted a survey involving 3,827 participants that aimed to determine the effect of residential traffic exposure on two preclinical indicators of heart failure; left ventricular mass index (LVMI), measured by the cardiac magnetic resonance imaging (MRI), and ejection fraction. The studies

classified participants based on the distance between their residence and the nearest interstate highway, state or local highway, or major arterial road. Four distance groups were defined: less than 50 meters (165 feet), 50-100 meters, 101-150 meters, and greater than 150 meters. After adjusting for demographics, behavioral, and clinical covariates, the study found that living within 50 meters of a major roadway was associated with a 1.4 g/m² higher LVMI than living more than 150 meters from one. This suggests an association between traffic-related air pollution and increased prevalence of a preclinical predictor of heart failure among people living near roadways.

To quantify the roadway concentrations of PM_{2.5} that contributed to the health impacts reported by Kleinman et al (2007), the Air District modeled the emissions and associated particulate matter concentrations for the roadways studied. To perform the modeling, emissions were estimated for Los Angeles using the EMFAC model and annual average vehicle traffic data taken from Caltrans was used in the roadway model (CAL3QHCR) to estimate the downwind PM_{2.5} concentrations at 50 meters and 150 meters. Additionally, emissions were assumed to occur from 10:00 a.m. to 2:00 p.m. corresponding to the time in which the mice were exposed during the study. The results of the modeling indicate that at 150 meters, where no significant health effects were found, the downwind concentration of PM_{2.5} was 0.78 µg/m³, consistent with the proposed EPA SIL option of 0.8 µg/m³.

Concentration-Response Function for PM_{2.5}

In a recent report, ARB reevaluated the relative risk of premature death associated with PM_{2.5} exposure based on a review of all relevant scientific literature available, and a new relative risk factor was developed (ARB 2008). This consensus-based review found that a 10 µg/m³ increase in PM_{2.5} concentrations increased the risk of premature death by 10 percent (uncertainty interval: 3 percent to 20 percent) and provides a basis for determining the risk increment from an increase in PM_{2.5} concentration. Twelve experts participated in the study to review the literature and develop the concentration response function. The experts were selected through a two-part peer nomination process, designed to obtain a balanced set of views and included experts in epidemiology, toxicology, and medicine.

The methodologies and results presented in this report were endorsed by scientific advisors from Harvard University, OEHHA, and Brigham Young University. The report underwent an external peer review by experts selected through an independent process involving the University of California at Berkeley, Institute of the Environment. The results of the peer review process were incorporated into the report. Subsequent to the peer review, Schwartz et al. (2008) examined the linearity of the concentration-response function of PM_{2.5}-mortality and showed that the response function is in agreement with Laden et al. (2006) and, moreover, found that this response function was linear down to background levels.

San Francisco Ordinance on Roadway Proximity Health Effects

In 2008, the City and County of San Francisco adopted an ordinance (San Francisco Health Code, Article 38 - Air Quality Assessment and Ventilation Requirement for Urban

Infill Residential Development, Ord. 281-08, File No. 080934, December 5, 2008) requiring that public agencies in San Francisco take regulatory action to prevent future air quality health impacts from new sensitive uses proposed near busy roadways (SFDPH 2008). The regulation requires that developers screen sensitive use projects for proximity to traffic and calculate the concentration of PM_{2.5} from traffic sources where traffic volumes suggest a potential hazard. If modeled levels of traffic-attributable PM_{2.5} at a project site exceed an action level (currently set at 0.2 µg/m³) developers would be required to incorporate ventilation systems to remove 80 percent of PM_{2.5} from outdoor air. The regulation does not place any requirements on proposed sensitive uses if modeled air pollutant levels fall below the action threshold. This ordinance only considers impacts from on-road motor vehicles, not impacts related to construction equipment or stationary sources.

A report with supporting documentation for the ordinance (SFPHD 2008) provided a threshold to trigger action or mitigation of 0.2 µg/m³ of PM_{2.5} annual average exposure from roadway vehicles within a 150 meter (492 feet) maximum radius of a sensitive receptor. The report applied the concentration-response function from Jerrett et al. (2005) that attributed 14 percent increase in mortality to a 10 µg/m³ increase in PM_{2.5} to estimate an increase in non-injury mortality in San Francisco of about 21 excess deaths per year from a 0.2 µg/m³ increment of annual average PM_{2.5}.

Distance for Significant Impact

The distance used for the radius around the project boundary should reflect the zone or area over which sources may have a significant influence. For cumulative thresholds, for both sources and receptors, this distance also determines the size of the source area, defined. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the risk and the greater the expected modeled risk increment. If the area of impact considered were grown to approach the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

A summary of research findings in ARB's Land Use Compatibility Handbook (ARB 2005) indicates that traffic-related pollutants were higher than regional levels within approximately 1,000 feet downwind and that differences in health-related effects (such as asthma, bronchitis, reduced lung function, and increased medical visits) could be attributed in part to the proximity to heavy vehicle and truck traffic within 300 to 1,000 feet of receptors. In the same summary report, ARB recommended avoiding siting sensitive land uses within 1,000 feet of a distribution center and major rail yard, which supports the use of a 1,000 feet evaluation distance in case such sources may be relevant to a particular project setting. A 1,000 foot zone of influence is also supported by Health & Safety Code §42301.6 (Notice for Possible Source Near School).

Some studies have shown that the concentrations of particulate matter tend to be reduced substantially or can even be indistinguishable from upwind background concentrations at a distance 1,000 feet downwind from sources such as freeways or large distribution centers. Zhu et al. (2002) conducted a systematic ultrafine particle study near Interstate

710, one of the busiest freeways in the Los Angeles Basin. Particle number concentration and size distribution were measured as a function of distances upwind and downwind of the I-710 freeway. Approximately 25 percent of the 12,180 vehicles per hour are heavy duty diesel trucks based on video counts conducted as part of the research. Measurements were taken at 13 feet, 23 feet, 55 feet, 252 feet, 449 feet, and 941 feet downwind and 613 feet upwind from the edge of the freeway. The particle number and supporting measurements of carbon monoxide and black carbon decreased exponentially and all constituents simultaneously tracked with each other as one moves away from the freeway. Ultrafine particle size distribution changed markedly and its number concentrations dropped dramatically with increasing distance. The study found that ultrafine particle concentrations measured 941 feet downwind of I-710 were indistinguishable from the upwind background concentration.

Impacted Communities

Starting in 2006, the Air District's CARE program developed gridded TAC emissions inventories and compiled demographic information that were used to identify communities that were particularly impacted by toxic air pollution for the purposes of distributing grant and incentive funding. In 2009, the District completed regional modeling of TAC on a one kilometer by one kilometer grid system. This modeling was used to estimate cancer risk and TAC population exposures for the entire District. The information derived from the modeling was then used to update and refine the identification of impacted communities. One kilometer modeling yielded estimates of annual concentrations of five key compounds – diesel particulate matter, benzene, 1,3-butadiene, formaldehyde, and acetaldehyde – for year 2005. These concentrations were multiplied by their respective unit cancer risk factors, as established by OEHHA, to estimate the expected excess cancer risk per million people from these compounds.

Sensitive populations from the 2000 U.S. Census database were identified as youth (under 18) and seniors (over 64) and mapped to the same one kilometer grid used for the toxics modeling. Excess cancers from TAC exposure were determined by multiplying these sensitive populations by the model-estimated excess risk to establish a data set representing sensitive populations with high TAC exposures. TAC emissions (year 2005) were mapped to the one kilometer grid and also scaled by their unit cancer risk factor to provide a data set representing source regions for TAC emissions. Block-group level household income data from the U.S. Census database were used to identify block groups with family incomes where more than 40 percent of the population was below 185 percent of the federal poverty level (FPL). Poverty-level polygons that intersect high (top 50 percent) exposure cells and are within one grid cell of a high emissions cell (top 25 percent) were used to identify impacted areas. Boundaries were constructed along major roads or highways that encompass nearby high emission cells and low income areas. This method identified the following six areas as priority communities: (1) portions of the City of Concord; (2) Western Contra Costa County (including portions of the Cities of Richmond and San Pablo); (3) Western Alameda County along the Interstate-880 corridor (including portions of the Cities of Berkeley, Oakland, San Leandro, San Lorenzo, Hayward; (4) Portions of the City of San Jose. (5) Eastern San Mateo County

(including portions of the Cities of Redwood City and East Palo Alto); and (6) Eastern portions of the City of San Francisco.

3.3.2 CONSTRUCTION, LAND USE AND STATIONARY SOURCE RISK AND HAZARD THRESHOLDS

The proposed options for local risk and hazards thresholds of significance are based on U.S. EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. The thresholds consider reviews of recent health effects studies that link increased concentrations of fine particulate matter to increased mortality. The proposed thresholds would apply to both siting new sources and siting new receptors.

For new sources of TACs, thresholds of significance for a single source are designed to ensure that emissions do not raise the risk of cancer or non-cancer health impacts to cumulatively significant levels. For new sources of PM_{2.5}, thresholds are designed to ensure that PM_{2.5} concentrations are maintained below state and federal standards in all areas where sensitive receptors or members of the general public live or may foreseeably live, even if at the local- or community-scale where sources of TACs and PM may be nearby.

Project Radius for Assessing Impacts

For a project proposing a new source or receptor it is recommended to assess impacts within 1,000 feet, taking into account both its individual and nearby cumulative sources (i.e. proposed project plus existing and foreseeable future projects). Cumulative sources are the combined total risk values of each individual source within the 1,000-foot evaluation zone. 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.

The 1,000 foot radius is consistent with findings in ARB's Land Use Compatibility Handbook (ARB 2005), the Health & Safety Code §42301.6 (Notice for Possible Source Near School), and studies such as that of Zhu et al (2002) which found that concentrations of particulate matter tend to be reduced substantially at a distance 1,000 feet downwind from sources such as freeways or large distribution centers.

Qualified Community Risk Reduction Plan

Within the framework of these thresholds, proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk. Board Option 2 does not include the CCRP as a significance threshold.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in excess of the thresholds below from any source would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Increased Cancer Risk to Maximally Exposed Individual (MEI)

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 10.0 in one million, assuming a 70 year lifetime exposure. Under Board Option 1, within Impacted Communities as defined through the CARE program, the significance level for cancer would be reduced to 5.0 in one million for new sources.

The 10.0 in one million cancer risk threshold for a single source is supported by EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. It is also the level set by the Project Risk Requirement in the Air District's Regulation 2, Rule 5 new and modified stationary sources of TAC, which states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project risk exceeds a cancer risk of 10.0 in one million.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Board Option 1 threshold of 5.0 in one million for new sources in an impacted community is that in these areas the cancer risk burden is higher than in other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the cumulative thresholds: specifically, if an area has many existing TAC sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer TAC sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

Increased Non-Cancer Risk to MEI

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic or acute Hazard Index (HI) from any source greater than 1.0. This threshold is unchanged under Board Option 1.

A HI less than 1.0 represents a TAC concentration, as determined by OEHHA that is at a health protective level. While some TACs pose non-carcinogenic, chronic and acute health hazards, if the TAC concentrations result in a HI less than one, those concentrations have been determined to be less than significant.

Increased Ambient Concentration of PM_{2.5}

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of PM_{2.5} from any source would result in an average annual increase greater than 0.3 µg/m³. Under Board Option 1, within Impacted Communities as defined through the CARE program, the significance level for a PM_{2.5} increment is 0.2 µg/m³.

If one applies the concentration-response function from the ARB consensus review (ARB 2008) and attribute a 10 percent increase in mortality to a 10 µg/m³ increase in PM_{2.5}, one finds an increase in non-injury mortality in the Bay Area of about 20 excess deaths per year from a 0.3 µg/m³ increment of PM_{2.5}. This is consistent with the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to estimate the increase in mortality from a 0.2 µg/m³ PM_{2.5} increment.

The SFDPH recommended a lower threshold of significance for multiple sources but only considered roadway emissions within a 492 foot radius. This recommendation applies to a single source but considers all types of emissions within 1,000 feet. On balance, the Air District estimates that the SFDPH threshold and this proposed one, in combination with the cumulative threshold for PM_{2.5}, will afford similar levels of health protection.

The proposed PM_{2.5} threshold represents the lower range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a “significant contribution” to regional non-attainment. While this threshold was not designed to be a threshold for assessing community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Board Option 1 threshold of 0.2 µg/m³ for new sources in an impacted community is that these areas have higher levels of diesel particulate matter than do other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the

cumulative thresholds: specifically, if an area has many existing PM_{2.5} sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer PM_{2.5} sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

3.3.2.1 ACCIDENTAL RELEASE OF ACUTELY HAZARDOUS AIR EMISSIONS

The BAAQMD currently recommends, at a minimum, that the lead agency, in consultation with the administering agency of the Risk Management Prevention Program (RMPP), find that any project resulting in receptors being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for a facility has a significant air quality impact. ERPG exposure level 2 is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action."

Staff proposes continuing with the current threshold for the accidental release of hazardous air pollutants. Staff recommends that agencies consult with the California Emergency Management Agency for the most recent guidelines and regulations for the storage of hazardous materials. Staff proposes that projects using or storing acutely hazardous materials locating near existing receptors, and projects resulting in receptors locating near facilities using or storing acutely hazardous materials be considered significant.

The current Accidental Release/Hazardous Air Emissions threshold of significance could affect all projects, regardless of size, and require mitigation for Accidental Release/Hazardous Air Emissions impacts.

3.3.3 CUMULATIVE RISK AND HAZARD THRESHOLDS

Qualified Community Risk Reduction Plan

Proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk. Board Option 2 does not include the CRRP as a significance threshold.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in

excess of the following thresholds from the aggregate of cumulative sources would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Increased Cancer Risk to Maximally Exposed Individual (MEI)

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 100.0 in one million.

The significance threshold of 100 in a million increased excess cancer risk would be applied to the cumulative emissions. The 100 in a million threshold is based on EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from hazardous air pollutants (HAPs) by limiting risk to a level no higher than the one in ten thousand (100 in a million) estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years (NESHAP 54 Federal Register 38044, September 14, 1989; CAA section 112(f)). One hundred in a million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on the District's recent regional modeling analysis.

Increased Non-Cancer Risk to MEI

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic or acute Hazard Index from any source greater than 1.0.

OEHHA has defined acceptable concentration levels for compounds that pose non-cancer health hazards. If the HI for a compound is less than one, non-cancer chronic and acute health impacts have been determined to be less than significant.

Increased Ambient Concentration of PM_{2.5}

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of PM_{2.5} from any source would result in an average annual increase greater than 0.8 µg/m³.

If one applies the concentration-response function from the ARB consensus review (ARB 2008) and attributes a 10 percent increase in mortality to a 10 µg/m³ increase in PM_{2.5}, one finds an increase in non-injury mortality in the Bay Area of about 50 excess deaths per year from a 0.8 µg/m³ increment of PM_{2.5}. This is greater the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to

estimate the increase in mortality from a $0.2 \mu\text{g}/\text{m}^3$ $\text{PM}_{2.5}$ increment (SFDPH reported 21 excess deaths per year). However, SFDPH only considered roadway emissions within a 492 foot radius. This proposed threshold applies to all types of emissions within 1,000 feet. In modeling applications for proposed projects, a larger radius results in a greater number of sources considered and higher modeled concentrations. On balance, the Air District estimates that the SFDPH threshold and this proposed one, in combination with the individual source threshold for $\text{PM}_{2.5}$, will afford similar levels of health protection.

The proposed cumulative $\text{PM}_{2.5}$ threshold represents the middle range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a “significant contribution” to regional non-attainment. While this threshold was not designed to be a threshold for assessing community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison. Furthermore, the $0.8 \mu\text{g}/\text{m}^3$ threshold is consistent with studies (Kleinman et al 2007) that examined the potential health impacts of roadway particles.

3.3.4 PLAN-LEVEL RISK AND HAZARD THRESHOLDS

Staff proposes plan-level thresholds that will encourage a programmatic approach to addressing the overall adverse conditions resulting from risks and hazards that many Bay Area communities experience. By designating overlay zones in land use plans, local land use jurisdictions can take preemptive action before project-level review to reduce the potential for significant exposures to risk and hazard emissions. While this will require more up-front work at the general plan level, in the long-run this approach is a more feasible approach consistent with Air District and CARB guidance about siting sources and sensitive receptors that is more effective than project by project consideration of effects that often has more limited mitigation opportunities. This approach would also promote more robust cumulative consideration of effects of both existing and future development for the plan-level CEQA analysis as well as subsequent project-level analysis.

For local plans to have a less-than-significant impact with respect to potential risks and hazards, overlay zones would have to be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid risk impacts should be reflected in local plan policies, land use map(s), and implementing ordinances (e.g., zoning ordinance). The overlay zones around existing and future risk sources would be delineated using the quantitative approaches described above for project-level review and the resultant risk buffers would be included in the General Plan (or the EIR for the General Plan) to assist in site planning. BAAQMD will provide guidance as to the methods used to establish the TAC buffers and what standards to be applied for acceptable exposure level in the updated CEQA Guidelines document. Special overlay zones of at least 500 feet (or an appropriate distance determined by modeling and approved by the Air District) on each side of all freeways and high volume roadways would be included in this proposed threshold.

The threshold of significance for plan impacts could affect all plan adoptions and amendments and require mitigation for a plan's air quality impacts. Where sensitive receptors would be exposed above the acceptable exposure level, the plan impacts would be considered significant and mitigation would be required to be imposed either at the plan level (through policy) or at the project level (through project level requirements).

3.3.5 COMMUNITY RISK REDUCTION PLANS

The goal of a Community Risk Reduction Plan would be to bring TAC and PM_{2.5} concentrations for the entire community covered by the Plan down to acceptable levels as identified by the local jurisdiction and approved by the Air District. This approach provides local agencies a proactive alternative to addressing communities with high levels of risk on a project-by-project approach. This approach is supported by CEQA Guidelines Section 15030(a)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." This approach is also further supported by CEQA Guidelines Section 15064(h)(3), which provides that a project's contribution to a cumulative effect is not considerable "if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem."

Qualified Community Risk Reduction Plans

A qualified Community Risk Reduction Plan adopted by a local jurisdiction should:

- ▶ Include a defined CRRP planning area.
- ▶ Include base year and future year emissions inventories of TACs and PM_{2.5}.
- ▶ Establish risk and exposure reduction targets for the community.
- ▶ Identify measures to reduce emissions and exposures.
- ▶ Include Air District–approved risk modeling.
- ▶ Include procedures for monitoring and updating the TAC inventory, modeling and reduction measures, in coordination with Air District staff.
- ▶ Include public participation processes to facilitate community input into goals and strategies.

4 CRITERIA POLLUTANT THRESHOLDS

4.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Project Construction	
Pollutant	Average Daily (pounds/day)
ROG (reactive organic gases)	54
NO _x (nitrogen oxides)	54
PM ₁₀ (exhaust) (particulate matter-10 microns)	82
PM _{2.5} (exhaust) (particulate matter-2.5 microns)	54
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices
Local CO (carbon monoxide)	None

Project Operations		
Pollutant	Average Daily (pounds/day)	Maximum Annual (tons/year)
ROG	54	10
NO _x	54	10
PM ₁₀	82	15
PM _{2.5}	54	10
Local CO	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

Plans
<ol style="list-style-type: none"> 1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase

4.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

4.3.1 PROJECT CONSTRUCTION CRITERIA POLLUTANT THRESHOLDS

Staff proposes criteria pollutant construction thresholds that add significance criteria for exhaust emissions to the existing fugitive dust criteria employed by the Air District. While our current Guidelines considered construction exhaust emissions controlled by the overall air quality plan, the implementation of new and more stringent state and federal standards over the past ten years now warrants additional control of this source of emissions.

The average daily criteria air pollutant and precursor emission levels shown above are recommended as the thresholds of significance for construction activity for exhaust emissions. These thresholds represent the levels above which a project's individual

emissions would result in a considerable contribution (i.e., significant) to the SFBAAB's existing non-attainment air quality conditions and thus establish a nexus to regional air quality impacts that satisfies CEQA requirements for evidence-based determinations of significant impacts.

For fugitive dust emissions, staff recommends following the current best management practices approach which has been a pragmatic and effective approach to the control of fugitive dust emissions. Studies have demonstrated (Western Regional Air Partnership, U.S.EPA) that the application of best management practices at construction sites have significantly controlled fugitive dust emissions. Individual measures have been shown to reduce fugitive dust by anywhere from 30 percent to more than 90 percent. In the aggregate best management practices will substantially reduce fugitive dust emissions from construction sites. These studies support staff's recommendation that projects implementing construction best management practices will reduce fugitive dust emissions to a less than significant level.

4.3.2 PROJECT OPERATION CRITERIA POLLUTANT THRESHOLDS

The proposed thresholds for project operations are the average daily and maximum annual criteria air pollutant and precursor levels shown above. These thresholds are based on the federal BAAQMD Offset Requirements to ozone precursors for which the SFBAAB is designated as a non-attainment area which is an appropriate approach to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevention of a regionally cumulative significant impact (e.g. worsened status of non-attainment). Despite non-attainment area for state PM₁₀ and pending nonattainment for federal PM_{2.5}, the federal NSR Significant Emission Rate annual limits of 15 and 10 tons per year, respectively, are proposed thresholds as BAAQMD has not established an Offset Requirement limit for PM_{2.5} and the existing limit of 100 tons per year is much less stringent and would not be appropriate in light of our pending nonattainment designation for the federal 24-hour PM_{2.5} standard. These thresholds represent the emission levels above which a project's individual emissions would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. The thresholds would be an evaluation of the incremental contribution of a project to a significant cumulative impact. These threshold levels are well-established in terms of existing regulations as promoting review of emissions sources to prevent cumulative deterioration of air quality. Using existing environmental standards in this way to establish CEQA thresholds of significance under Guidelines section 15067.4 is an appropriate and effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other areas of environmental regulation. (*See Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal. App. 4th 98, 111.⁴)

⁴ The Court of Appeal in the *Communities for a Better Environment* case held that existing regulatory standards could not be used as a definitive determination of whether a project would be significant under CEQA where there is substantial evidence to the contrary. Staff's proposed thresholds would not do that. The thresholds are levels at which a project's emissions would normally be significant, but would not be binding on a lead agency if there is contrary evidence in the record.

4.3.3 LOCAL CARBON MONOXIDE THRESHOLDS

The proposed carbon monoxide thresholds are based solely on ambient concentration limits set by the California Clean Air Act for Carbon Monoxide and Appendix G of the State of California CEQA Guidelines.

Since the ambient air quality standards are health-based (i.e., protective of public health), there is substantial evidence (i.e., health studies that the standards are based on) in support of their use as CEQA significance thresholds. The use of the ambient standard would relate directly to the CEQA checklist question. By not using a proxy standard, there would be a definitive bright line about what is or is not a significant impact and that line would be set using a health-based level.

The CAAQS of 20.0 ppm and 9 ppm for 1-hour and 8-hour CO, respectively, would be used as the thresholds of significance for localized concentrations of CO. Carbon monoxide is a directly emitted pollutant with primarily localized adverse effects when concentrations exceed the health based standards established by the California Air Resources Board (ARB).

In addition, Appendix G of the State of California CEQA Guidelines includes the checklist question: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? Answering yes to this question would indicate that the project would result in a significant impact under CEQA. The use of the ambient standard would relate directly to this checklist question.

4.3.4 PLAN-LEVEL CRITERIA POLLUTANT THRESHOLDS

This proposed threshold achieves the same goals as the Air District's current approach while alleviating the existing analytical difficulties and the inconsistency of comparing a plan update with AQP growth projections that may be up to several years old. Eliminating the analytical inconsistency provides better nexus and proportionality for evaluating air quality impacts for plans.

Over the years staff has received comments on the difficulties inherent in the current approach regarding the consistency tests for population and VMT growth. First, the population growth estimates used in the most recent AQP can be up to several years older than growth estimates used in a recent plan update, creating an inconsistency in this analysis. Staff recommends that this test of consistency be eliminated because the Air District and local jurisdictions all use regional population growth estimates that are disaggregated to local cities and counties. In addition, the impact to air quality is not necessarily growth but where that growth is located. The second test, rate of increase in vehicle use compared to growth rate, will determine if planned growth will impact air quality. Compact infill development inherently has less vehicle travel and more transit opportunities than suburban sprawl.

Second, the consistency test of comparing the rate of increase in VMT to the rate of increase in population has been problematic at times for practitioners because VMT is not always available with the project analysis. Staff recommends that either the rate of increase in VMT or vehicle trips be compared to the rate of increase in population. Staff also recommends that the growth estimates used in this analysis be for the years covered by the plan. Staff also recommends that the growth estimates be obtained from the Association of Bay Area Governments since the Air District uses ABAG growth estimates for air quality planning purposes.

5 ODOR THRESHOLDS

5.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Project Operations – Source or Receptor	Plans
<ol style="list-style-type: none"> 1. More than one confirmed complaint per year averaged over a three year period; or 2. More than three unconfirmed complaints per year averaged over a three year period 	Identify (Overlay Zones) and include policies to reduce the impacts of existing or planned sources of odors

5.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

Staff proposes continuing the current CEQA significance threshold for odors (based on complaint history). The current approach has proven adaptable to different projects and locations and thus continuation of the current approach with more qualitative guidance is considered an appropriate approach to CEQA evaluation.

Odors are generally considered a nuisance, but can result in a public health concern. Some land uses that are needed to provide services to the population of an area can result in offensive odors, such as filling portable propane tanks or recycling center operations. When a proposed project includes the siting of sensitive receptors in proximity to an existing odor source, or when siting a new source of potential odors, the following qualitative evaluation should be performed.

When determining whether potential for odor impacts exists, it is recommended that Lead Agencies consider the following factors and make a determination based on evidence in each qualitative analysis category:

- ▶ **Distance:** Use the screening-level distances in Table 9.

- ▶ **Wind Direction:** Consider whether sensitive receptors are located upwind or downwind from the source for the most of the year. If odor occurrences associated with the source are seasonal in nature, consider whether sensitive receptors are located downwind during the season in which odor emissions occur.

- ▶ **Complaint History:** Consider whether there is a history of complaints associated with the source. If there is no complaint history associated with a particular source (perhaps because sensitive receptors do not already exist in proximity to the source), consider complaint-history associated with other similar sources in BAAQMD’s jurisdiction with potential to emit the same or similar types of odorous chemicals or compounds, or that accommodate similar types of processes.

- ▶ **Character of Source:** Consider the character of the odor source, for example, the type of odor events according to duration of exposure or averaging time (e.g., continuous release, frequent release events, or infrequent events).

- ▶ **Exposure:** Consider whether the project would result in the exposure of a substantial number of people to odorous emissions.

Table 9 – Screening Distances for Potential Odor Sources	
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
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Coffee Roaster	1 mile

California Integrated Waste Management Board (CIWMB). Facilities that are regulated by the CIWMB (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 CIWMB regulated facilities with an adopted OIMP.

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Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance
December 7, 2009

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Attachment 4



**California Environmental Quality Act
Guidelines Update**

**Public Review
Comments & Responses**

**Volume II
December 2009**

Comment Letters Received After November 1, 2009

Letter #	Date	Contact	Affiliation
00			Master Responses
66	9/29/2009	Howard Levenson	CIWMB
67	11/11/2009	Kent Norton	Association of Environmental Professionals
68	11/15/2009	Diane Baily	NRDC
69	11/17/2009	Catherine Reheis Boyd	WSPA
70	11/18/2009	Coalition Members	BA Clean Air Task Force
71	11/18/2009	Coalition Members	Bay Area Environmental Health Coalition
72	11/20/2009	Andy Katz	Breathe California
73	11/23/2009	Matthew Vespa	Center for Biological Diversity
74	11/23/2009	Rajiv Bhatia	SF Department of Public Health
75	11/23/2009	Eric Angstadt	City of Oakland
76	11/23/2009	Curt Johansen	Triad
77	11/24/2009	Paul Campos	CBIA & HBA
78	11/25/2009	David Schonbrunn	Transdef
79	12/1/2009	Business Coalition	Business Coalition
80	12/2/2009	Adam Montgomery, Michon Coleman	Silicon Valley Realtor Comments
81	12/2/2009	Janill Richards	CA Department of Justice

To view comments and responses received prior to November 1, 2009, see Volume I of the Public Review Comments and Responses (November 2009).

Comment Letter #: 00
Master Responses to Comments

Response to Comments:

MR-1 Desire to balance the potential for unintended consequences of proposed thresholds (e.g., administrative burden, discouraging infill) with scientific basis and disclosure of significant impacts under CEQA.

Several commenters expressed a concern that BAAQMD's proposed thresholds would result in preparation of an Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND) for many projects that would have otherwise been accompanied by an Initial study (IS) or exempt from environmental review. Specifically, commenters were concerned that the proposed screening levels for GHG emissions and TAC impacts would result in the need for a more rigorous level of environmental documentation than has been previously required of Lead Agencies.

These are indeed very important considerations, but above all, the determination to prepare an EIR is based on the potential for significant effects on the environment that cannot be addressed by a MND (CEQA Guidelines Section 15064). Air quality impact significance criteria, in the case of BAAQMD's proposed thresholds, are based on substantial evidence. Evidence includes epidemiologic data and scientific studies linking the impact on public health with air pollutant emissions concentration data, evaluated and analyzed with the BAAQMD's subject matter expertise. See Appendix D of the updated CEQA Guidelines, *Justification for Thresholds*, for detailed descriptions of substantial evidence and threshold development.

BAAQMD acknowledges that preparation of an EIR is typically more costly and takes months or, in some cases, years more to prepare than initial studies, negative declarations, or exemptions. However, the purpose of CEQA is to disclose significant impacts to the public, inform the public that the environment is being protected, inform public agencies on the environmental consequences of their discretionary actions, and hold public agency representatives accountable for their actions. BAAQMD's proposed air quality thresholds are based on substantial evidence. If there is a fair argument that a proposed project would exceed BAAQMD's proposed thresholds (once adopted), and impacts cannot be mitigated to below the thresholds, then an EIR would be required. Administrative convenience is not an appropriate basis for BAAQMD to adopt a less stringent threshold of significance, especially given that substantial evidence supports the connection between the proposed thresholds and a project's significant impact or cumulatively considerable contribution to a cumulative significant impact.

The proper place for Lead Agencies to balance the consequences of their discretionary approvals is in the Findings and Statement of Overriding Considerations. If the Lead Agency believes that a project's benefits outweigh the environmental concerns

associated with implementing the project, then the Agency may still approve the project, and adopt a Statement of Overriding Considerations (CEQA Guidelines Sections 15092, 15096(h)). If BAAQMD were to adopt a threshold based on administrative convenience, rather than substantial evidence, the public may be deprived of the opportunity to be informed about environmental impacts on its community or on public health. If a proposed development project would expose its residents to unhealthy concentrations of air pollutants, then that is pertinent information to which the public and decision makers need access. The proposed thresholds are the basis for determining whether receptors would be exposed to substantial pollutant concentrations as a result of a project. Similarly, if a proposed project would generate emissions greater than either of the proposed GHG thresholds (i.e., 1,100 MT CO₂e/year and 4.6 MT CO₂e/service population/year), the project would result in a cumulatively considerable contribution of GHG emissions to the cumulative impact of climate change, and would impair the state's ability to comply with AB 32 mandates.

MR-2 The proposed GHG threshold would essentially eliminate the CEQA infill exemption. There are two exemptions for infill projects in the CEQA Guidelines. Section 15195 provides a specific exemption for Residential Infill Projects and Section 15332 provides a more general, categorical exemption for infill projects.

Projects that comply with all five criteria outlined in the Residential Infill Exemption, CEQA Guidelines Section 15195, would be exempt from CEQA notwithstanding the proposed GHG thresholds, so long as the project does not fall under any of the exceptions stated in Section 15195(b), including the requirement that there is no "reasonable possibility that the project will have a project-specific, significant effect on the environment due to unusual circumstances." The fact that a project may exceed one or both of the proposed quantitative GHG thresholds would not, on its own, signify that the project will have a project-specific, significant effect on the environment due to unusual circumstances. The proposed GHG thresholds represent the level at which the impacts of a project would be considered cumulatively considerable under CEQA. However, as explained in previous documents, no single project on its own could have GHG emissions so high that such emissions cause a significant impact on global climate change. Thus, in general, the application of the proposed GHG thresholds would have no impact on the applicability of the Residential Infill Exemption. Before applying the exemption, however, as always, the lead agency must consider whether the project would cause another impact which would create a "reasonable possibility that the project will have a project-specific, significant effect on the environment due to unusual circumstances."

In addition, many projects would still be considered for exemption under Section 15332 of the CEQA guidelines, In-Fill Development Projects. This categorical infill exemption is intended to exempt projects from procedural requirements that would not have a significant impact on the environment. According to BAAQMD's analysis of its proposed GHG thresholds, projects that would exceed the 4.6 MT CO₂e/SP/year threshold or the

1,100 tons CO₂e/year threshold would contribute substantially to the cumulative impact of climate change, and would therefore have a significant impact. Thus, it would be appropriate for projects that do not meet BAAQMD's thresholds to either change project attributes, design, etc., to meet the thresholds or disclose potential climate change impacts and mitigate those impacts as feasible, either through preparation of an MND or an EIR (or a focused EIR if climate change were the only impact for which there is a fair argument that the impact may be significant).

MR-3 The proposed approach to GHG analysis in the Guidelines would not promote regional smart growth and does not minimize CEQA process requirements for certain projects that further the region's smart growth goals.

Staff notes that the purpose of the CEQA thresholds is to identify what BAAQMD would consider a significant air quality impact under CEQA, not to promote regional smart growth or other policy objectives of BAAQMD. Staff has developed proposed GHG thresholds or levels of GHG emissions which, based on substantial evidence developed with BAAQMD's expertise, will have a significant impact under CEQA. Nevertheless, Staff believes that application of the proposed GHG thresholds will encourage regional smart growth and infill development because it will be more difficult for Greenfield development to meet the proposed thresholds.

For a cumulative impact to be significant, the project must result in a cumulatively considerable contribution to a significant impact. AB 32 is California's leading legislation which sets the state's near-term goals for reducing GHG emissions, in order to begin to solve the cumulative impact of global climate change. As explained in detail in the *Proposed Thresholds of Significance* Report, Staff has developed proposed GHG thresholds such that projects that comply with the thresholds will comply with AB 32 goals and therefore not be cumulatively considerable because they will be helping to solve the cumulative problem as addressed by AB 32.

Staff believes that its proposed qualitative threshold of compliance with a Qualified Climate Action Plan (or equivalent policies, ordinances and programs) will serve to encourage careful upfront planning for smart, GHG-efficient regional growth. Under the proposed threshold, for lead agency's that have adopted a Qualified Climate Action Plan (or equivalent policies, ordinances and programs), projects that are consistent with such plans will be afforded a presumption of insignificance. Thus, when a lead agency conducts programmatic planning for smart growth within its jurisdiction, consistent with the goals of AB 32, CEQA process requirements for individual projects consistent with such planning will be minimized based on Staff's proposed thresholds.

For lead agencies without Qualified Climate Action Plans (or equivalent policies, ordinances and programs), BAAQMD has proposed two quantitative GHG thresholds that would apply at the project-level: 1,100 MT CO₂e/year and 4.6 MT CO₂e/SP/year, which also encourage smart growth. Thus, if a proposed project would conflict with AB 32 goals by accommodating development in a GHG-inefficient way (i.e., would result in greater than 4.6 MT CO₂e/SP/year) or the emissions are considered substantial (i.e., 1,100 MT CO₂e/year), the project would result in a cumulatively considerable contribution to the cumulative impact of climate change, and the impact would be significant. If a project would generate less than 1,100 MT CO₂e/year, it would result in less-than-cumulatively considerable GHG emissions, and this impact would be less than significant. If the project would generate more than 1,100 MT CO₂e/year, but less than 4.6 MT CO₂e/SP/year, the project's GHG emissions would comport with achieving AB 32 emission reduction goals, and the project's cumulative impact would be less than

considerable and, therefore, less than significant. Thus, a large project can still be considered to have a less-than-significant impact on GHG emissions if it meets the 4.6 MT CO₂e/SP/year threshold, which would only be possible if the project accommodates growth in a very GHG-efficient manner (i.e., the project is well-planned). Similarly, a comparatively small project that exceeds 1,100 MT CO₂e/yr or 4.6 MT CO₂e/SP/year can have a cumulatively considerable, and therefore, significant impact on GHG emissions. The cumulative effect of many projects that would generate individually limited GHG emissions is at the very heart of this cumulative impact issue.

The basis of the 4.6 MT CO₂e/SP/year GHG threshold is closely aligned with the very aggressive emission reduction goals of AB 32. See Appendix D of the *Draft Air Quality Guidelines* for threshold justification and development. Vehicle miles traveled is one of the best indicators of a land use development project's GHG emissions. Thus, if a project increases density, mix of land uses, jobs/housing balance, transit proximity and orientation, connectivity, these are the ways by which the project would promote mode shift away from vehicle travel, and reduce the project's GHG emissions. Implementing energy efficiency measures and water conservation measures would also act to reduce the project's GHG emissions. Increasing density and jobs/housing balance increases the project's service population (denominator in BAAQMD's proposed GHG threshold), which would bring the project closer to meeting the 4.6 MT CO₂e/SP/year threshold. Thus, the proposed GHG thresholds very much promote "smart-growth" in the region.

The approach to application of BAAQMD's proposed thresholds would treat projects equally, prima facie, but project attributes that would reduce GHG emissions would be revealed in the analysis. The approach is location-sensitive because proximity to transit, employment, and amenities would act to reduce vehicle trips and VMT, which would be reflected in the project's estimated GHG emissions.

The proposed GHG efficiency-based service population threshold treats all projects equally, is based on substantial evidence, and sheds light on a project's consistency with the state's AB 32 GHG reduction goals as considerations for significance determination.

Specifically, commenters were concerned that BAAQMD's proposed approach does not minimize CEQA process requirements for certain projects that further the region's smart growth goals. CEQA requires substantial evidence in support of significance thresholds and BAAQMD's thresholds are closely tied to AB 32 GHG reduction goals (substantial evidence), which relates the thresholds themselves to promotion of smart growth principles. Thus, projects that truly incorporate the appropriate level of smart growth principles and design features would not exceed the quantitative thresholds and thereby be eligible for streamlined CEQA process requirements.

MR-4 A quantitative GHG threshold will promote piecemealing of projects.

Commenters shared concerns that BAAQMD's proposed "bright line" threshold of 1,100 MT CO₂e/year will promote piecemealing (i.e., segmentation) of projects in order to be

perceived as resulting in GHG emissions below the threshold and avoiding the subsequent requirement to implement feasible mitigation. This concern is valid, and is a common issue in other resource areas. CEQA Guidelines 15378 broadly defines "Project" as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment..."

As explained in *Citizens Ass'n for Sensible Dev. of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, CEQA mandates "... that environmental considerations do not become submerged by chopping a large project into many little ones--each with a minimal potential impact on the environment--which cumulatively may have disastrous consequences." *Citizens Ass'n for Sensible Dev. of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, 165 citing *Bozung v. Local Agency Formation Comm'n*, (1975) 13 Cal. 3d 263, 283-284; *Rural Land Owners Ass'n. v. Lodi City Council* (1983) 143 Cal. App. 3d 1013, 1024.

Thus, it would be at the peril of an applicant or lead agency to approach development in a piecemeal fashion in order to evade the bright line threshold, as piecemeal review will not withstand legal scrutiny and lead agencies will risk having their CEQA analyses overturned.

Furthermore, under Staff's proposal, lead agencies will also have the option of applying the proposed GHG efficiency-based threshold. Lead agencies may find that GHG efficient well-integrated and well-planned projects can meet 4.6 MT CO₂e/SP/year threshold and thus have the presumption of insignificance, even where those projects would have GHG emissions greater than the bright line threshold.

MR-5 Proposed GHG thresholds will interfere with SB 375 implementation.

Development of regional emission reduction targets, due in 2010, and Sustainable Community Strategies (SCS) pursuant to SB 375, due in 2013, are still years away. BAAQMD's proposed GHG thresholds are intended to serve as interim thresholds, and will be revisited by BAAQMD, as appropriate. Qualifying projects would still enjoy CEQA streamlining benefits offered by SB 375, and BAAQMD's proposed thresholds would not supersede or interfere with SB 375 implementation in any way. It is anticipated that the same type of low carbon development needed to meet the regional GH targets are the same as those meeting the proposed thresholds. Finally, SB 375 does not preempt land use authority reserved for local governments.

MR-6 Limitations of modeling tools.

Many commenters were concerned with the applicability of modeling tools currently available to perform emissions estimates. Particular concerns included the applicability of URBEMIS to the BAAQMD's jurisdiction. However, no commenters offered suggestions for alternative methods or emissions modeling tools. Advantages of URBEMIS are that it is a widely-used program by CEQA practitioners, and offers

consistency in emission factors and standardized calculation methods. BAAQMD acknowledges the limitations of URBEMIS, but in the absence of another publicly available air quality modeling program, recommends use of URBEMIS for evaluation of air quality impacts. BAAQMD's proposed analytical methodology includes steps to attempt to make URBEMIS more project-specific, wherever possible, such as overriding default model assumptions to reflect project design features and location attributes.

It is possible that new emissions modeling tools will become available in the years ahead that will be more sensitive to project attributes, but until that time, the limitations of modeling tools do not excuse the Lead Agency from making a meaningful attempt at evaluating an impact. BAAQMD has offered guidance for doing so in its *CEQA Draft Air Quality Guidelines*. If a Lead Agency has access to a model or method that it believes is more appropriate for evaluation of air quality impacts, the Lead Agency should explain the reasoning within the CEQA document that supports deviation from BAAQMD's guidance. Lead Agencies are also encouraged to consult with BAAQMD on use of alternative approaches to emissions modeling.

MR-7 More detailed guidance is requested on a variety of topics.

Many commenters sought additional detailed guidance, additional screening tables, and prescriptive text on a variety of topics. Several of these requests were addressed in the current version of the *CEQA Draft Air Quality Guidelines*. However, the proposed Guidelines are intended to serve as general guidance and cannot prescribe a methodological approach for every type of project or situation. Basic methodology for common project types and situations is provided. Additional technical resources will be provided and updated on the District website. The Lead Agency still must use its judgment in applying the guidelines to a given situation. BAAQMD strongly encourages Lead Agencies to consult with the District whenever necessary. If an Agency is unsure of how to apply the guidance to a particular situation, the Agency should seek input from District staff.

MR-8 Inadequate public process and outreach for the CEQA Guidelines Update.

The Air District has provided, and invited, a number of opportunities for stakeholder input and public participation during the development process of the CEQA Guidelines update.

Air District Staff hosted the first workshop on the CEQA Guidelines update on February 26, 2009. At that time, Staff introduced the CEQA Guidelines update process, which thresholds are anticipated to be revised and developed, and invited public input on potential concepts for thresholds.

In April 2009, Staff hosted a series of three workshops (on 4/27, 4/29, and 4/30) throughout the Bay Area to present threshold options for criteria pollutants, toxics, odors, and greenhouse gas emissions. Prior to the workshops, staff published a preliminary workshop draft thresholds of significance options report for public comment. The options in the report were identified by stakeholders at the first CEQA workshop and by Air District staff and our consultants.

On September 4, Staff published a *CEQA Draft Air Quality Guidelines* for public comment. The comment due date was scheduled for September 25 and then extended to October 9 and subsequently to October 26, 2009.

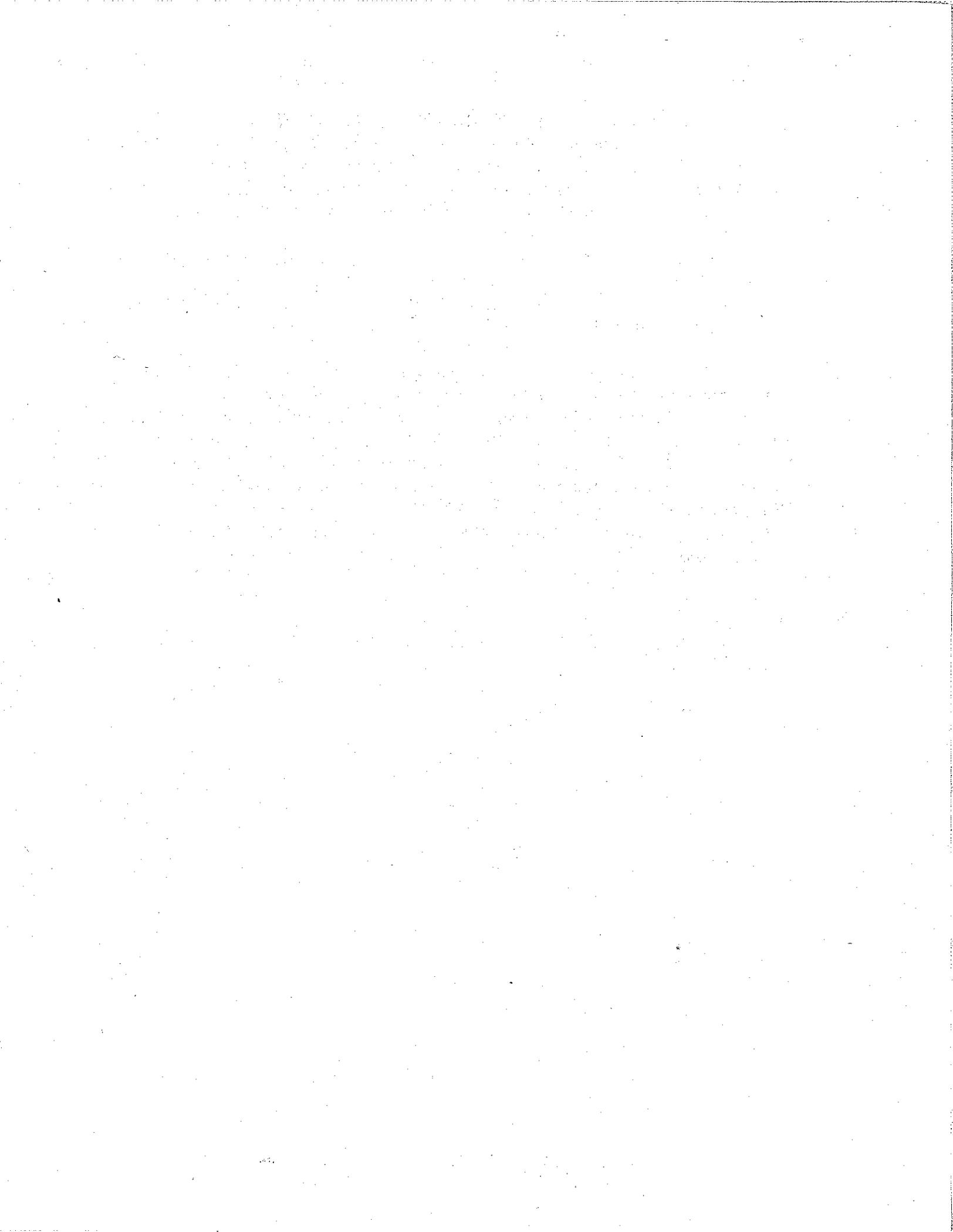
The next round of workshops, four all together, were held in September/October 2009 (on 9/8, 9/9, 9/10, and 10/2). At the workshops, Staff presented the recommended thresholds of significance included in the *CEQA Draft Air Quality Guidelines* and solicited public input.

Staff reviewed the proposed thresholds with the CARE Task Force on September 23, 2009. Staff also held meetings and made presentations during this process with business organizations, local government staff, and other stakeholder groups to receive input on District proposals.

On October 8, the Air District released a *Revised Draft CEQA Thresholds Options and Justification Report* for public comment. The report contained revised thresholds based on stakeholder input received at the September/October workshops. The report provided substantial evidence and justification for the District-recommended thresholds. Comments on the Thresholds Report were due on October 26, 2009.

Staff reported to the Board of Directors on the status of the CEQA Guidelines updated at the Executive Committee meetings on March 16, June 29, and September 24, 2009; at the September 10, 2009 Climate Protection Committee meeting; and is schedule to do so at the November 16, 2009 Stationary Source Committee meeting.

On November 2, Staff published the *Proposed CEQA Thresholds of Significance* report, which contains Staff's revised recommended thresholds, based on stakeholder comments and further BAAQMD Staff review and analysis, and the substantial evidence supporting those thresholds. The Air District will initiate a public hearing to consider testimony for the staff-recommended thresholds detailed in the report. The public hearing will start on Wednesday, November 18, 2009 and will be continued on Wednesday, December 2, 2009, at which time the Board of Directors will consider adoption of the proposed thresholds. Written comments on the staff-recommended thresholds are due November 23.





LINDA S. ADAMS
SECRETARY FOR ENVIRONMENTAL
PROTECTION

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD



ARNOLD SCHWARZENEGGER
GOVERNOR

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66

MARGO REID BROWN
CHAIR
MBROWN@CIWMB.CA.GOV
(916) 341-6051

September 29, 2009

Gregory Tholen
Principal Environmental Planner, Planning and Research
Bay Area Air Quality Management District
939 Ellis St.
San Francisco, CA 94109

SHEILA JAMES KUEHL
SKUEHL@CIWMB.CA.GOV
(916) 341-6039

RE: Draft Air Quality Guidelines - California Environmental Quality Act (CEQA)

Dear Mr. Tholen:

JOHN LAIRD
JLAIRD@CIWMB.CA.GOV
(916) 341-6010

Thank you for the opportunity to comment on the Draft CEQA Air Quality Guidelines, September 2009.

These comments are focused specifically on Section 8.3.2 - Landfill/recycling/composting facilities.

CAROLE MIGDEN
CMIGDEN@CIWMB.CA.GOV
(916) 341-6024

This section states that odors from landfills and compost sites are typically associated with methane production. This is not exactly correct. The anaerobic conditions that could lead to methane production could also produce odors, but methane itself is an odorless gas. Odors are mostly likely associated with emissions of volatile organic compounds.

66-1

ROSALIE MULE
RMULE@CIWMB.CA.GOV
(916) 341-6016

The section also states that landfill operators should implement practices to avoid and minimize the creation of anaerobic conditions. This is both impractical and ill advised. Landfills are essentially anaerobic, designed to prevent waste exposure to air and water.

62-2

We agree that for windrow composting, operators should take steps to avoid anaerobic conditions that could lead to odors. Per California Health and Safety Code Section 41705 (b), odors emanating from compost facilities are within the purview of the Local Enforcement Agency. The Guidelines should recognize this authority and refer to the regulatory structure established in Title 14 California Code of Regulation regarding odor management.

If you have any questions regarding our comments, please contact Mr. Robert Horowitz at (916) 341-6523 or rhorowit@ciwmb.ca.gov.

Sincerely,

Howard Levenson, Ph.D.
Director, Sustainability Program

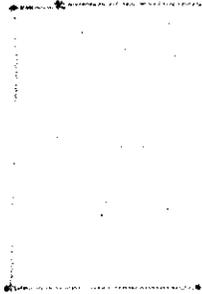
cc: Fernando Berton, California Integrated Waste Management Board
Robert Horowitz, California Integrated Waste Management Board



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5-50



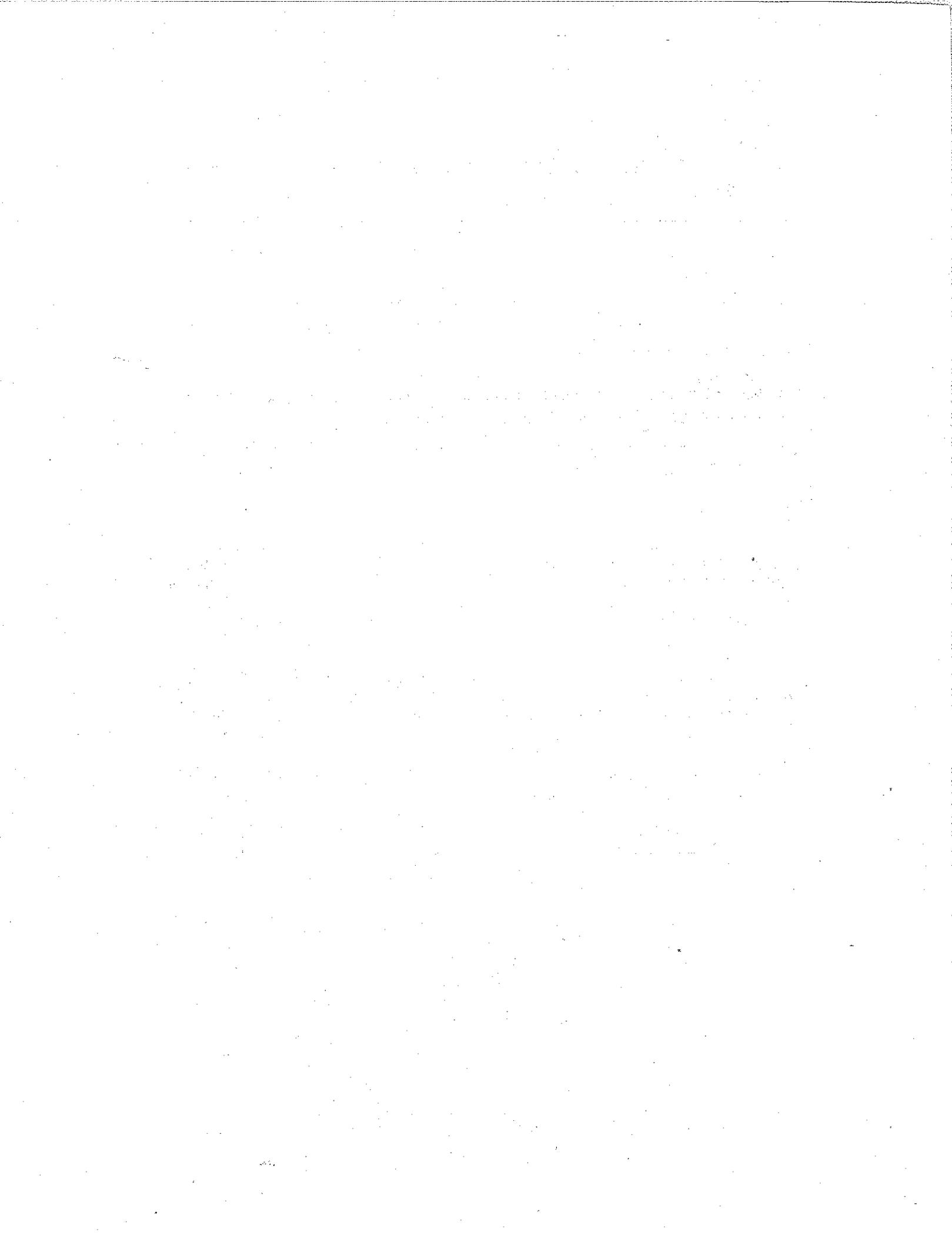
Comment Letter #: 66

Date: September 29, 2009

From: Howard Levenson, Sustainability Program Director, California Integrated Waste Management Board

Response to Comments:

- 66-1 Staff agrees with this comment and will revise the text in section 7.2.2. of the CEQA Guidelines (December 7, 2009) to clarify that potential odors are most likely associated with VOCs and not methane.
- 66-2 Section 7.2.2 in the updated CEQA Guidelines (December 7, 2009) was revised to recognize CIWMB regulations for odor management.





ASSOCIATION OF ENVIRONMENTAL PROFESSIONALS

November 11, 2009

Bay Area Air Quality Management District
Attention: Gregory Tholen
939 Ellis Street
San Francisco, CA 94109

RE: Bay Area Air Quality Management District's "California Environmental Quality Act Draft Air Quality Guidelines"

Dear Mr. Tholen,

On behalf of the Association of Environmental Professionals (AEP or "Association"), I appreciate this opportunity to provide comments on the Bay Area Air Quality Management District's (District) "California Environmental Quality Act Draft Air Quality Guidelines" dated September 2009 ("CEQA Guide"). As we understand it, the purpose of the CEQA Guide is to assist lead agencies in evaluating air quality impacts in the Bay Area pursuant to CEQA.

AEP is a non-profit organization of environmental professionals founded in 1974 primarily in response to the enactment of CEQA. Today, AEP members are involved in every aspect of CEQA review. AEP members represent a broad cross section of professionals working for public agencies, consulting firms, research institutions, non-governmental organizations, and project applicants. AEP is therefore very appreciative of the District's interest in providing guidance to others for the analysis of air quality impacts in the Bay Area pursuant to CEQA.

AEP respectfully requests the District's careful consideration of the following issues raised by the CEQA Guide.

1. CEQA Guide Is Broader than other Conventional "CEQA Guidelines"

The District's CEQA Guide includes useful information on the interpretation and application of CEQA with regard to air quality impacts. The "CEQA Guide" also includes subject matter beyond CEQA guidance, including design standards (e.g., for siting a "new receptor" in an "impacted community," even though such projects may not be subject to CEQA), urban planning concepts (e.g, the proposal to introduce the concept of "Community Risk Reduction Plans"), and standards for thresholds of significance for greenhouse gas emissions, it would seem incomplete to title the document "CEQA Air Quality Guidelines."

67-1



The District's CEQA Guide, in fact, bares little resemblance to *State CEQA Guidelines*.

AEP appreciates the District's efforts to integrate multiple strategies to protect public health and the environment from air pollution and the effects of climate change. AEP is nevertheless concerned that, by virtue of the title, the public could misconstrue all elements of the CEQA Guide as an extension of the State CEQA Guidelines. AEP believes that the public would be better served if the report were to be reorganized in a manner that more clearly distinguishes between explicit CEQA guidance, District advice concerning project design and siting principles, the concept of Community Risk Reduction Plans, and standards for thresholds of significance. In our view, it would be more accurate to refer to this document as a "handbook for local government consideration of air quality impacts, greenhouse gas emissions, and airborne community health risks reduction."

2. The Concept of Community Risk Reduction Plans Needs Amplification

The concept of a Community Risk Reduction Plan as a means of dealing with toxic air contaminants is an appealing idea that deserves further amplification in the CEQA Guide. It would be helpful if the CEQA Guide included recommendations regarding adoption and certification of such plans, consistency with the District's air quality plans as well as local general plans, enforcement mechanisms, jurisdictional considerations (e.g., when a community at risk extends across more than one local governmental jurisdiction), etc.

67-2

3. Operational Greenhouse Gas Thresholds

Creation of a per-capita threshold to evaluate residential and mixed-use projects is a novel way to approach the significance of greenhouse gases. A per-capita threshold allows projects to evaluate significance regardless of the size of the project. In addition, it allows CEQA practitioners to evaluate impacts with regard to efficiency of the project. However, the threshold only identifies a per-capita threshold for residential and mixed-use projects. Because the screening level threshold of 1,100 metric tons of carbon dioxide equivalents per year is easily triggered, it is recommended that a non-residential per-capita threshold based on service population (i.e., employees) be established for non-residential projects.

67-3

4. Community Risk and Hazard Thresholds

The CEQA Guide discusses the California Air Resources Board Land Use Handbook (Handbook) recommended distances from select pollutant sources to sensitive receptors; however, it does not contain reference to these distances within the threshold summary table(s). We recommend that instruction to use the Handbook screening distances (or subsequent guidance, as available) as a first tier in assessing significance for toxic air contaminants be included within the threshold table(s).

67-4

AEP MANAGEMENT OFFICE



5. Air Quality Plan Consistency

It would be helpful if the CEQA Guide contained recommendations on how projects would address the State CEQA Guidelines Appendix G Checklist question, "Would the project conflict with or obstruct implementation of the applicable air quality plan?" The CEQA Guide contains recommendations for proposed plans but not for individual projects.

The Bay Area is currently in nonattainment for PM₁₀, PM_{2.5}, and ozone. Therefore, if the project's emissions are under the significance thresholds for ozone precursors (volatile organic compounds and nitrogen oxides), PM₁₀, and PM_{2.5}, could it follow that the project would be consistent with the applicable air quality plan? It is infeasible to utilize the methodology recommended for proposed plans for projects as it is not possible to compare the vehicle miles traveled assumed in an air quality plan to the proposed vehicle miles traveled for a project.

67-5

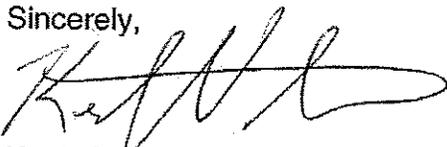
6. Sensitive Receptors

It would be helpful if the CEQA Guide defined "sensitive receptors" and indicates what land uses are covered by this term.

67-6

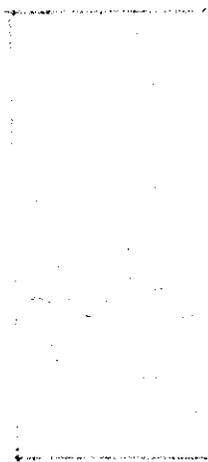
Thank you again for the opportunity to provide comments on the CEQA Guide.

Sincerely,



Kent Norton
President





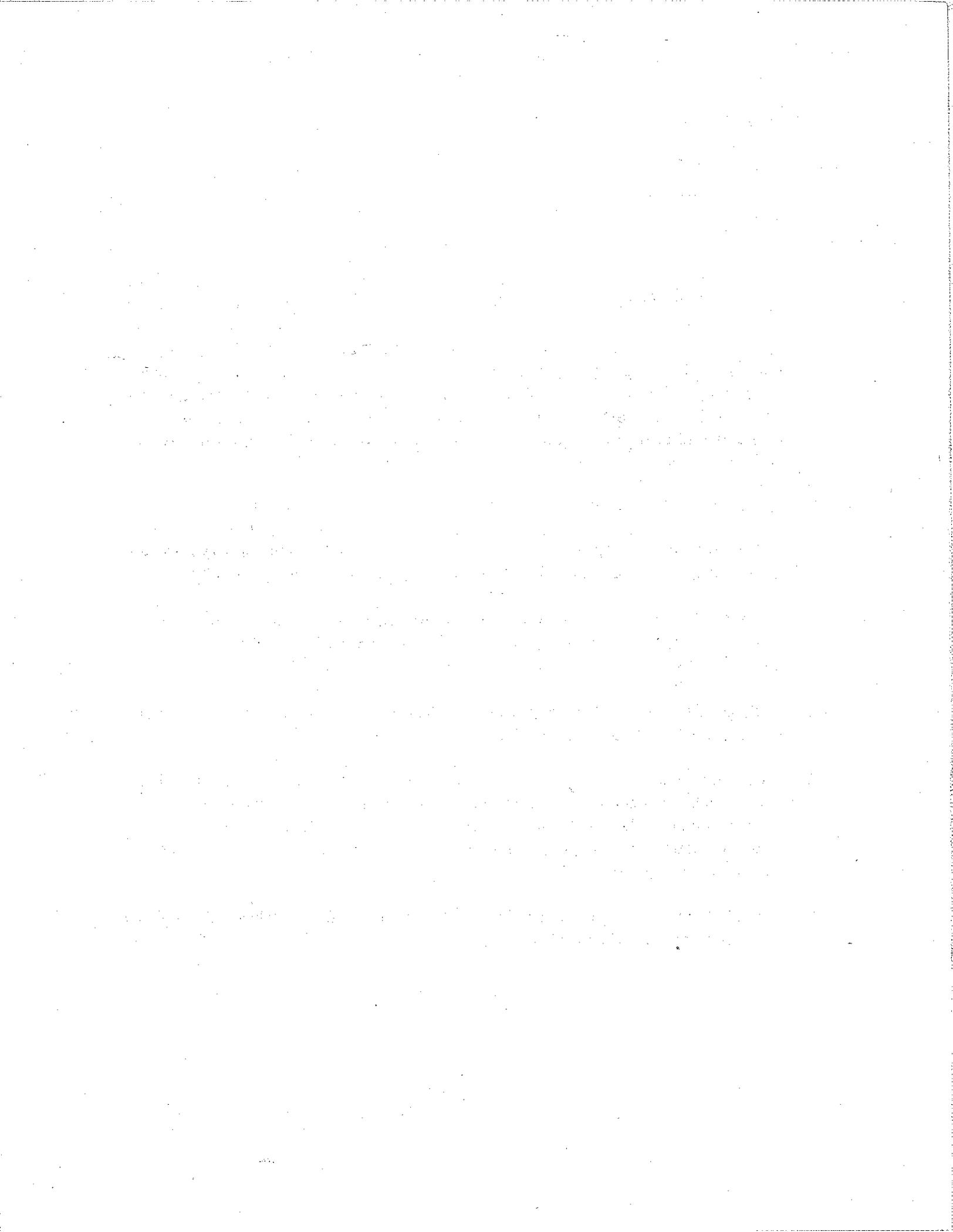
Comment Letter #: 67

Date: November 11, 2009

From: Kent Norton, President, Association of Environmental Professionals

Response to Comments:

- 67-1 Staff disagrees that the title of the CEQA Guidelines should be changed to better reflect the multiple strategies contained in the document. The purpose of the CEQA Guidelines is to assist local governments in analyzing air quality impacts in environmental reviews. In today's environment, significant air quality impacts may be generated from criteria pollutants and ozone precursors, greenhouse gases, and toxic air pollutants. We believe it is appropriate for the CEQA Guidelines to assist local governments on these issues; and in fact, the decision to include greenhouse gas thresholds and stronger community risks and hazards thresholds was in response to local governments' expressed need for additional CEQA guidance in these areas.
- 67-2 The updated CEQA Guidelines (December 7, 2009) contains additional guidance on community risk reduction plans (CRRP). Understanding that no such plans yet exist in the Bay Area, the Air District will initiate a collaborative process with local governments to engage local communities and define criteria for preparing CRRPs.
- 67-3 The GHG efficiency threshold for land use projects is intended to apply to residential, mixed-use, and non-residential projects. Non-residential projects should just count the project's employees for calculating the project's GHG efficiency.
- 67-4 Staff agrees with this recommendation and will include language referring to ARB's Land Use Handbook in Chapter 5 in the CEQA Guidelines.
- 67-5 If a project's emissions are under the recommended air quality significance thresholds than it can be assumed that the proposed project is consistent with the Bay Area's current air quality plan. Staff will consider revising the CEQA Guidelines with recommendations for analyzing whether proposed projects are consistent with the region's air quality plan.
- 67-6 The term "sensitive receptors" is defined in the updated CEQA Guidelines' (December 7, 2009) glossary and in Chapter 5.



From: Bailey, Diane [dbailey@nrdc.org]
Sent: Sunday, November 15, 2009 1:20 PM
To: David Burch; Sigalle Michael
Cc: Andy Katz
Subject: RE: Public Hearing CEQA Documents Posted Online

Hi Dave. I'm out on leave right now and not able to follow this too well, but wanted to send a comment about construction mitigation. Attached to the BACATF comments on the proposed CEQA guidelines were specific recommendations for construction mitigation. I heard that these may not be considered due to some legal questions, possibly related to the circumstances around when they would have to be implemented. The significance thresholds that trigger the need for mitigation from construction emissions seem much too high, but even so, the mitigation that we suggest (new engines or after-treatments) really should be required at a minimum for those projects that go beyond the signif. thresholds. While some may believe this to be unnecessary given the state off-road rule, that rule is continually under threat of rollback and can't be relied on, plus the phase in schedule is pretty slow.

68-1

The modest fleetwide approach of Sacramento was something that we lauded when it was initiated but it's now pretty far out of date and not appropriate for new guidelines.

Thanks for considering these comments,

Diane

Diane Bailey
Health and Environment Program
Natural Resources Defense Council
111 Sutter St, 20th Floor
San Francisco, CA, 94104
Phone 415-875-6100; Fax 415-875-6161
dbailey@nrdc.org; www.nrdc.org

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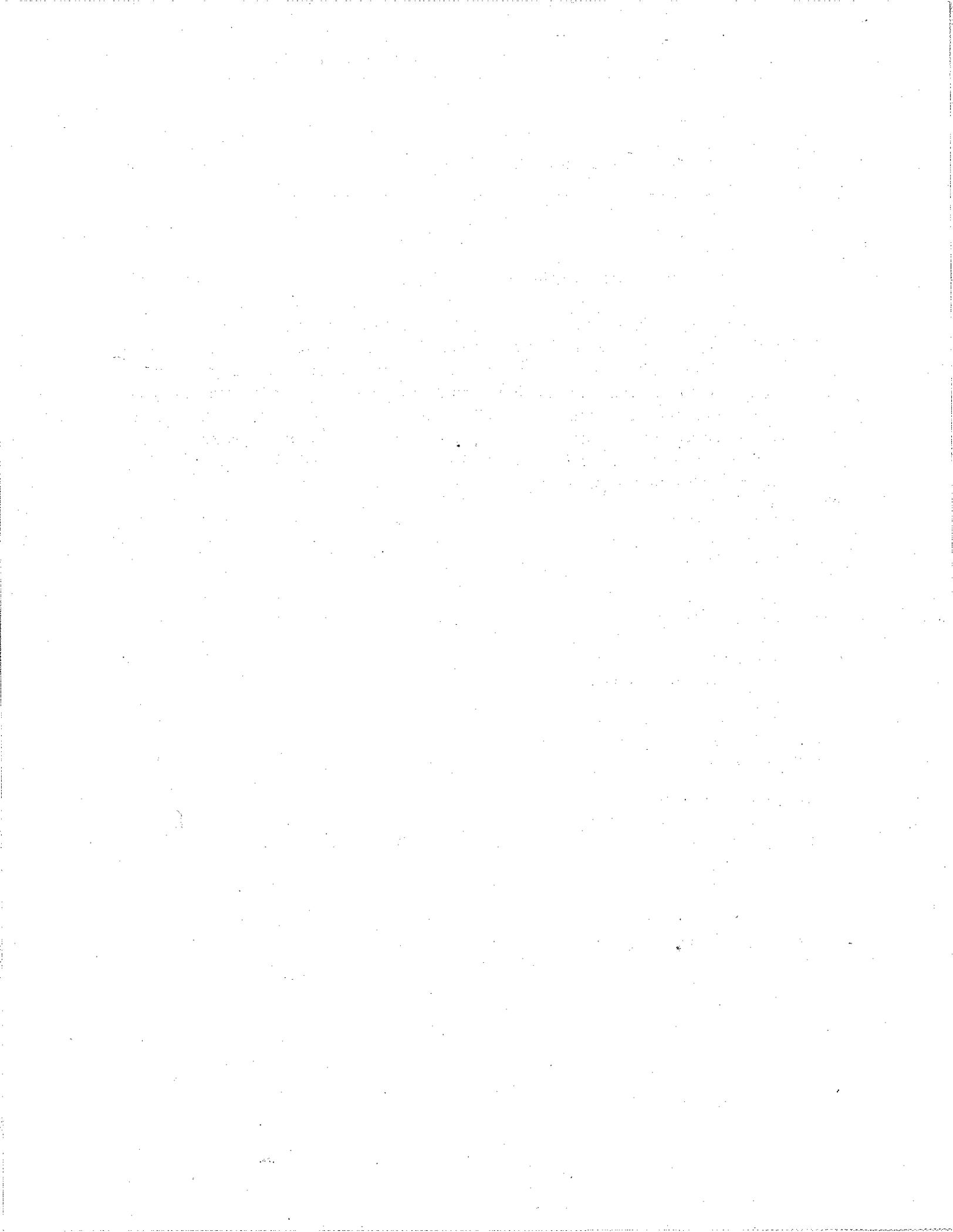
Comment Letter #: 68

Date: November 15, 2009

From: Diane Bailey, Natural Resources Defense Council

Response to Comments:

68-1 Staff considered the specific construction mitigation measures previously recommended by NRDC and included those deemed feasible in the updated CEQA Guidelines (December 7, 2009). In specific, the mitigation measures to comply with ARB diesel engine standards and to install best available control technology were added to table 8-3. In addition, to reduce potential significant air quality impacts from construction emissions, staff recommends that for construction projects that are less than one year in duration, lead agencies should annualize risks and hazards impacts over the scope of actual days that peak impacts are to occur (i.e., assume peak impact days occur daily for a full year) rather than calculate average daily emissions by dividing combined daily impacts by the number of days in a full year.





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69

Catherine H. Reheis-Boyd
Executive Vice-President and Chief Operating Officer

November 17, 2009

The Honorable Pamela Torliatt
Chair, Board of Directors
Bay Area Air Quality Management District Office
939 Ellis Street
San Francisco, CA 94109

Dear Mayor Torliatt:

In September 2009, the Bay Area Air Quality Management District (BAAQMD or District) issued the California Environmental Quality Act (CEQA) Draft Air Quality Guidelines." Subsequently, on October 8, 2009, the District released amendments titled "Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance." This letter provides the comments of the Western States Petroleum Association ("WSPA") on the BAAQMD CEQA Guidelines and Revised Draft Options.

WSPA is a non-profit trade organization representing twenty-seven companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy products in California and five other western states. Our organization is dedicated to working toward ensuring that consumers continue to have reliable access to petroleum and petroleum products through policies that are socially, economically and environmentally responsible.

WSPA has a significant interest in the implementation of California's Global Warming Solutions Act of 2006 ("AB 32"). Our interest, as relevant to the Guidelines, is related to the manner in which the Guidelines attempt to evaluate and mitigate impacts from Greenhouse Gas (GHG) emissions pursuant to CEQA.

Unlike impacts from criteria pollutant emissions, there does not appear to be a scientific basis linking GHG emissions from a particular project to specific physical, localized environmental effects. Impacts from GHG emissions must be evaluated in a significantly larger context than most environmental impacts under CEQA.

This type of evaluation is further re-enforced in the Executive Summary of the Revised Draft Options which states in pertinent part... "BAAQMD publishes these Guidelines to assist local jurisdictions and agencies to comply with the requirements of CEQA regarding potentially adverse impacts to air quality. The primary purpose of the Guidelines is to provide a means to identify proposed local plans and development projects that may have a significant adverse effect on air quality, public health, attainment of state and national ambient air quality standards, and to provide recommendations to mitigate those impacts."

69-1

While the Proposed Amendments as presented generally reflect this unique reality, WSPA contends that to evaluate accurately an individual project's impacts on climate change, the project must be viewed in the context of the statewide reductions targeted under AB 32, as well as statewide GHG emissions.

WSPA believes that any CEQA Guidelines governing GHG emissions should recognize the importance of the AB 32 Scoping Plan adopted by the California Air Resources Board.

The Scoping Plan provides a blueprint for how the state will achieve the GHG reductions needed to meet the AB 32 mandate. Therefore, projects for sources within sectors covered by the GHG measures and reductions referenced in the Scoping Plan should be able to rely on those mandated measures and reductions when determining whether the projects result in a significant environmental impact pursuant to CEQA.

69-1

In its draft proposed amendments for CEQA GHG regulations, the Natural Resources Agency, in section 15093(d), acknowledges that given the unique nature of global climate change, lead agencies should have discretion to consider asserted local effects in the context of region-wide or statewide benefits.

WSPA believes that when evaluating project-specific GHG emissions in such broader context, local agencies must still base any determination of significant effects on substantial evidence. They do not have the discretion to burden individual projects with mitigation measures or conditions designed to achieve reductions greater than those required to mitigate such projects' asserted cumulative contribution to climate change.

69-2

Thus, in the *Proposed Thresholds of Significance Report (November 2, 2009)*, WSPA recommends the report be amended as follows (proposed language underlined).

"A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program. This includes, but is not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions which provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.

69-3

It also includes other state and/or federal mandates, in addition to the Global Warming Solutions Act of 2006, that, when implemented result in a net increase in energy efficiency or decrease in carbon intensity of the underlying economic activity or of the state's overall carbon footprint. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. When relying on a plan or program, the lead agency should explain how the particular requirements in the plan or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable."

This language is consistent with Section 15064(h) (3) of the proposed CEQA Guidelines pertaining to greenhouse gases pending adoption at the California Natural Resources Agency.

The principle for this language is identical to that in the first paragraph of Section 1.2.3.1 which allows lead agencies to consider local "Climate Action Plans" as satisfying any significance threshold. The factors that constitute feasible mitigation for purposes of determining whether a project's GHG emissions should be required to go through the CEQA review process, should be evaluated based on several criteria.

These include the totality of the circumstances related to a particular project's or facility's or the State's overall increase in energy efficiency, or decrease in the carbon intensity of the underlying economic activity, or of the state's overall carbon footprint.

WSPA is very concerned with **Stationary Sources** and the bright-line threshold of 10,000 MT CO₂ e/yr. The discussions that have taken place as part of the District's CEQA GHG Significance Threshold development process highlight a fundamental problem if one tries to define a numeric CEQA GHG significance threshold.

That is, lacking any substantial evidence (i.e., technical or scientific basis) for determining significance, attempts to define CEQA significance result in arbitrary, ill-conceived and untested definitions.

Given the nature of GHG emissions and global warming concerns, determining the "significance" under CEQA of emissions from a single project is an area of uncertainty. Moreover, a rule based solely on a project's overall emissions increase in numeric terms could have the counterproductive effect of driving highly-desirable energy supply projects outside of the Bay Area.

This could create the further unintended consequence of causing global GHG emissions to rise as the distance between energy supply and delivery to consumers increases.

An imbalance between the location of energy supplies and the point of consumption increases GHG emissions due to transmission losses (in the electricity sector) and increased transportation activities (in the fuels sector).

Using a numerical significance threshold as currently proposed by District Staff to determine project significance would chill development of important local/state projects by adding another layer of costly mitigation that may be unnecessary and unjustified.

WSPA recognizes that the District needs to conduct CEQA analyses for proposed projects within its jurisdiction – and to do so in light of the implementation of AB 32. To this end, WSPA believes that, in determining whether a proposed project's GHG emissions may have a significant impact on climate change, the District as a lead agency for a project should consider the following principles:

- Whether the project complies with GHG emissions standards or requirements promulgated by CARB under AB 32 and/or SB 375, the District, or by other state agencies or commissions applicable to the source;
- Determination that a project does **not** have a significant impact on the climate if the project will meet applicable standards promulgated by CARB, Air District, or other state agencies or commissions; if no such standards currently are in effect, then the District may evaluate whether the project will result in a net increase in energy efficiency or decrease in the carbon intensity of the underlying economic activity or the state's overall carbon footprint; and,
- If the project results in a net improvement in energy efficiency or a net decrease in carbon intensity of the underlying economic activity or the state's overall carbon footprint, then the District may determine that the project does not have a significant impact on climate.

WSPA believes strongly that the approach outlined above is the appropriate and supportable approach as compared to the numeric, mass emissions bright-line threshold limit contemplated by District Staff, given the nature of GHG emissions. This is also consistent with WSPA's proposed language as discussed above.

The *Proposed Thresholds of Significance Report (November 2, 2009)* fails to address the issue that plans, such as general plans or plans and programs developed in conformance with other state and/or federal

mandates, in addition to the Global Warming Solutions Act of 2006, when implemented result in a net increase in energy efficiency or decrease in carbon intensity of the underlying economic activity or of the state's overall carbon footprint, be considered less than significant if they either meet specified GHG efficiency criteria or if the jurisdiction has adopted a qualified Climate Action Plan (or similar adopted policies, ordinances and programs) that includes feasible measures to reduce GHG emissions consistent with AB 32 goals and Executive Order S-03-05 targets.

69-6

While the Scoping Plan establishes the policy intent to control numerous GHG sources through regulatory, incentive and market means, given the early phase of implementation and the level of control that local CEQA lead agencies have over numerous GHG sources, CEQA is an important and supporting tool in achieving GHG reductions overall in compliance with AB 32. In this spirit, BAAQMD is considering the adoption of thresholds of significance for GHG emissions for land use development projects. However, as the Scoping Plan is implemented, those activities should be considered in GHG significance evaluations so as to not upset the balance of the AB32 implementation.

69-7

In summary, just as a Community Action Plan acknowledges commitment to emission reduction targets, so do programs to achieve the AB32 Scoping Plan objectives. Sources that are under the jurisdiction of the state should not be subject to duplicative and overlapping local programs, something that is specifically precluded by AB32.

Because there are no "local" or "cumulative" impacts from GHGs that are not addressed in these regulatory strategies being adopted by ARB, there is no "significance" from these sources.

WSPA appreciates the opportunity to comment on the Proposed Amendments. If you have any questions, please contact me at this office or Michaelleen Mason of my staff at (916) 498-7753.

Sincerely,



Catherine Reheis-Boyd
Executive Vice President and Chief Operating Officer

cc: Michaelleen Mason
Dennis Bolt

Comment Letter #: 69

Date: November 17, 2009

From: Catherine Reheis-Boyd, executive Vice President, Western States Petroleum Association

Response to Comments:

69-1 Staff agrees that no single project is likely to generate enough GHG emissions to noticeably change the local or global average temperature. However, GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. 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. When the incremental contribution of a project to this phenomenon is cumulatively considerable, the project will be significant for purposes of CEQA. Thus, as noted in the thresholds report, the thresholds proposed by Staff are all for determining whether a project's GHG emissions are cumulatively considerable and thus significant under CEQA.

Moreover, to the extent that this commenter is suggesting that GHG emissions should not be evaluated under CEQA, Staff strongly disagrees. GHG emissions leading to climate change have clear, significant environmental impacts, and must be evaluated when conducting any CEQA review of a project. The California State Legislature confirmed this fact when it passed SB 97, which directs OPR to develop CEQA guidelines for the evaluation of GHG emissions impacts.

69-2 Staff agrees. Staff's proposed GHG thresholds of significance are based on substantial evidence and the Air District's expertise and represent the level at which a project will have a cumulatively considerable impact on climate change, as is detailed in the Proposed Thresholds of Significance report (December 7, 2009), and documents and evidence cited and relied upon therein. Pursuant to the proposed guidelines and thresholds, if a project's GHG emissions are greater than the proposed threshold, the project would be required to mitigate emissions back down to below the threshold of significance, or else have an unmitigated significant impact. The proposed thresholds do not propose to impose mitigation requirements on projects such that they mitigate more than required to reduce emissions to below the level of significance.

69-3 Air District staff believe that the commenter's initial recommendation and staff's recommendation both define climate actions plans that must be consistent with State CEQA Guidelines Section 15064(h)(3) to allow a project to be considered less than significant. However, Air District staff disagrees with the commenter's second recommendation, that projects that are consistent with AB 32 measures and result in a net increase in energy efficiency or decrease in carbon intensity should be considered less than significant. As explained in the Proposed Thresholds of Significance report (December 7, 2009) and earlier documents, compliance with AB 32 implementation

measures alone will not ensure that land use projects do their share to meet AB 32 goals as there is a GHG emissions reductions “gap” that needs to be filled. Air District staff believes that an undefined net increase in energy efficiency or decrease in carbon intensity is insufficient to ensure that this gap is closed.

- 69-4 Staff recommends the 10,000 MT of CO₂/yr as it would address a broad range of combustion sources and thus provide for a greater amount of GHG reductions to be captured and mitigated through the CEQA process. As documented in the Scoping Plan, in order to achieve statewide reduction targets, emissions reductions need to be obtained through a broad range of sources throughout the California economy and this threshold would achieve this purpose. It is projected that a threshold level of 10,000 metric tons of CO₂e per year would capture approximately 95 percent of all GHG emissions from stationary sources in the SFBAAB. That threshold level was calculated as an average of the combined CO₂ emissions from all stationary source permit applications submitted to the Air District during the three year analysis period. This threshold would be considered an interim threshold and Air District staff will reevaluate the threshold as AB 32 Scoping Plan measures such as Cap and Trade are more fully developed at the state level. Also See Proposed Thresholds of Significance Report (December 7, 2009) at pages 26-30.
- 69-5 The District does not support a “no net increase” approach to limiting greenhouse gas emissions. Significant reductions will be required just to meet the interim 2020 milestone goals established by AB 32. Even greater reductions will be required beyond 2020 as we move toward climate stabilization. Also See Master Response MR-3.
- 69-6 The revised plan-level GHG threshold in the Proposed Thresholds of Significance report (December 7, 2009) reflects the commenter’s suggestion. The revised plan-level GHG threshold recommends that if a proposed project is consistent with an adopted qualified climate action plan, or Sustainable Communities Strategy, it can be presumed that it will not have significant GHG emission impacts. In addition, for local governments that have not yet adopted a qualified climate action plan as defined by the CEQA Guidelines, they have the option to demonstrate that their collective set of climate action policies, ordinances, and other projects are consistent with AB 32.
- 69-7 As stated in the Proposed Thresholds of Significance report (December 7, 2009), the proposed GHG thresholds are interim thresholds and will be revisited when CARB develops a statewide GHG threshold. The Air District’s proposed GHG thresholds are based on AB 32 GHG emission reduction goals and take into consideration emission reduction strategies outline in ARB’s Scoping Plan. The Proposed Thresholds of Significance report provides an explanation on how the Scoping Plan was integrated into the GHG threshold development. See also Master Response MR-3.

BAY AREA CLEAN AIR TASK FORCE

November 18, 2009

Core Members

American Lung Association of California
Greater Bay Area
www.californialung.org

Bayview Hunters Point Community Advocates
bhunterspoint@sbcglobal.net

Breathe California
www.ggbreathes.org

Friends of the Earth
www.foe.org

Natural Resources Defense Council
www.nrdc.org

Our Children's Earth Foundation
www.ocefoundation.org

RAMP: Regional Asthma Management & Prevention
www.rampasthma.org

Sierra Club
www.sierraclub.org

Union of Concerned Scientists
www.ucsusa.org

West Oakland Environmental Indicators Project
www.pacinst.org

Public Health Fact Sheet – BAAQMD CEQA Guidelines

The Bay Area Air Quality Management District is updating its Guidelines for implementing the California Environmental Quality Act (CEQA). This will guide local agencies on how to identify at what levels a new project, such as a new pollution source, will have significant impacts, or when new residents will be exposed to significant pollution levels.

New Greenhouse Gas Thresholds Will Help Meet State Climate Goals

- The proposed GHG Threshold will take an important step forward toward meeting AB 32 Greenhouse Gas Reduction Goals.
- The Threshold is based on reductions needed to achieve AB 32-mandated reductions to 1990 levels by 2020 from local land use.
- The new standard will promote new infill, encourage best practices for clean air transportation choices, and discourage sprawl.

70-1

Need for a 24-Hour Fine Particulate Matter (PM2.5) Threshold

- According to BAAQMD, 29% of the cancer caused by air pollution in the Priority communities comes from construction exhaust.
 - o This is because priority communities are home to much of the new infill and smart growth in the Bay Area.
- Diesel particulate matter can be controlled with clean or retrofitted construction equipment that can reduce these tiny toxic particles by more than 85%.
- The Threshold for annual average levels of particulate matter is appropriate for regular operating levels, but not to recognize construction impacts.
 - o The same US EPA study that BAAQMD staff used to develop the annual average PM 2.5 standards can be used for a 24-hour standard. EPA recommendations translate to a project-level threshold of 1.2 micrograms per cubic meter, and a threshold of 4 micrograms per cubic meter for cumulative pollution.

70-2

Cumulative Impacts "Zone" Excludes Significantly Impacted Areas

- The Zone of Influence of 1,000 feet means that much of West Oakland, Eastern San Francisco, and other priority communities that are more than 1,000 feet of a major freeway or major source will not be protected by the cumulative impacts thresholds for cumulative cancer risk and fine particulate matter.
- Under the staff proposal, pollution beyond 1,000 feet from a proposed source doesn't count toward cumulative levels, but neighborhoods beyond 1,000 feet still suffer from some of the highest cancer and PM levels in the Bay Area.
- Using BAAQMD's model of Highway 101 pollution, an analysis showed impacts above significant levels just from that source as far away as 1800 feet.
- We urge BAAQMD to extend the Zone of influence from 1,000 to at least 2,000 feet; and clarify the threshold to state that lead agencies should extend the zone where there is a major source nearby.

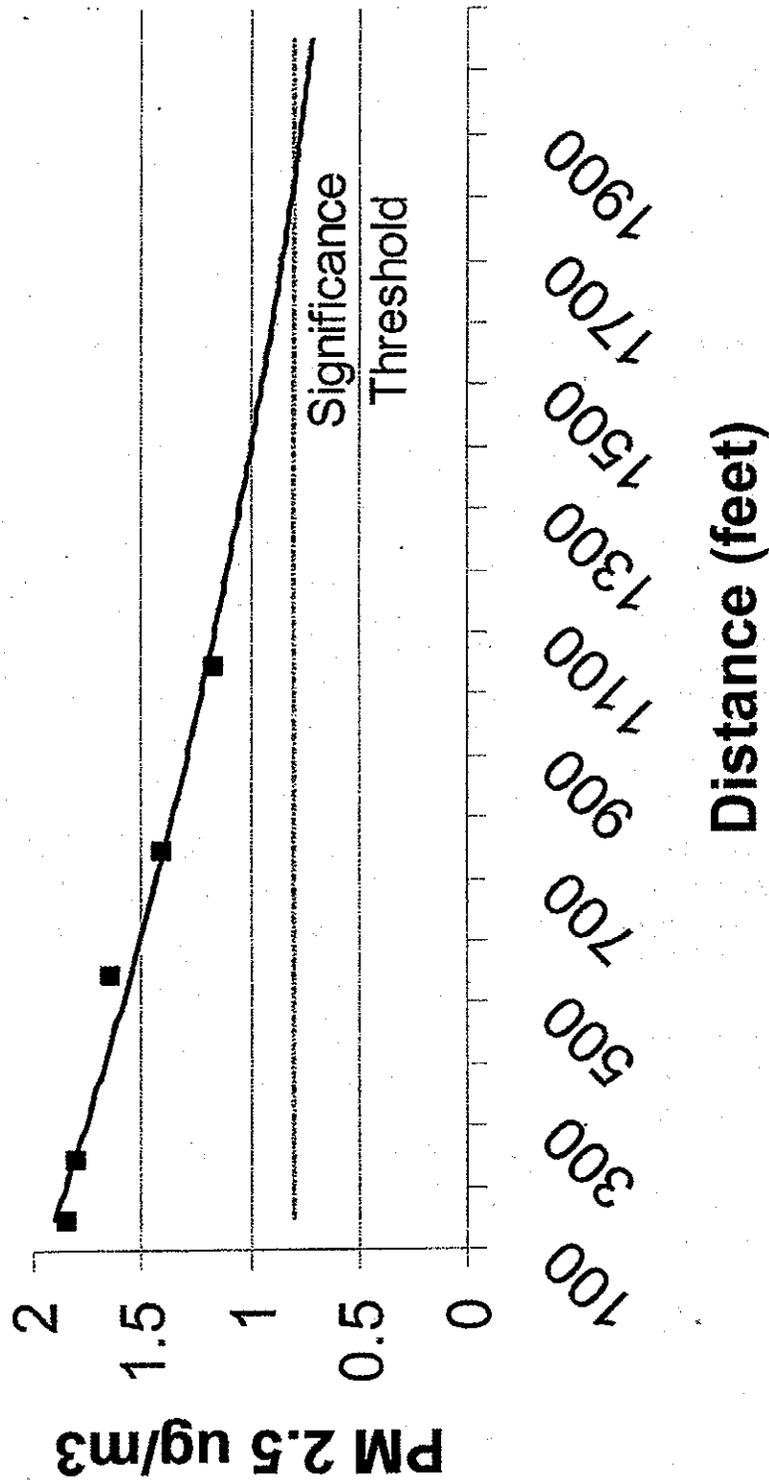
70-3

Tiered Approach to Protect Impacted Communities Deserves Further Consideration

- The Impacted Communities in Eastern San Francisco, West Oakland, Richmond, East Oakland and San Leandro, Redwood City/East Palo Alto, parts of San Jose, and Concord suffer from **two to four** times the cancer caused by air pollution than the rest of the Bay Area.
- New sources in these impacted communities shouldn't be allowed to pollute as much as new sources in other areas.
- We urge the Board to support a tiered approach for new sources to protect impacted communities.
- We urge BAAQMD to continue the discussion with the Cumulative Impacts Working Group.

70-4

Highway 101 (SF) - South or East



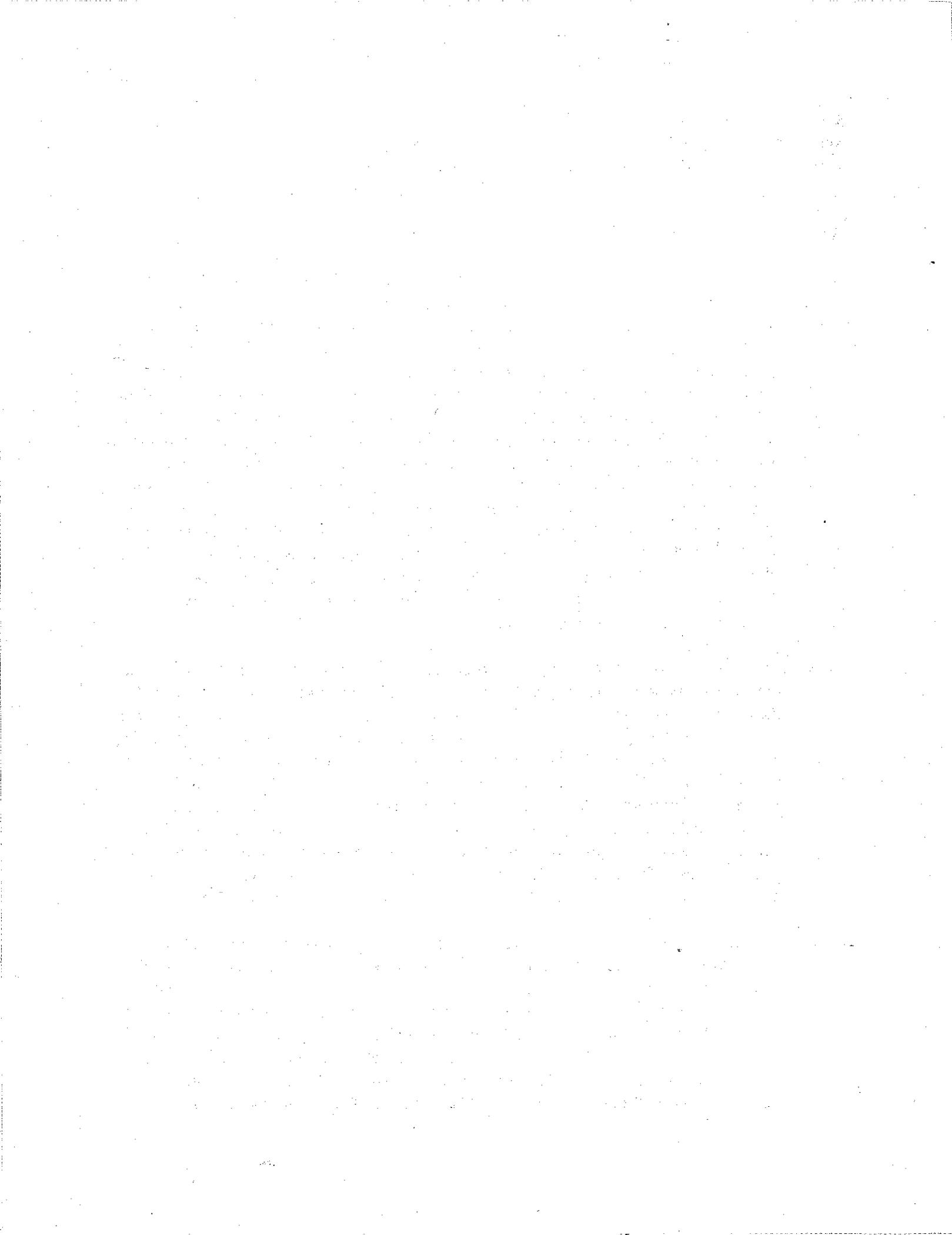
Comment Letter #: 70

Date: November 18, 2009

From: Bay Area Clean Air Task Force

Response to Comments:

- 70-1 Staff appreciates the commenter's support for the recommended GHG threshold.
- 70-2 The commenter recommends that the District consider adoption of a 24-hour PM_{2.5} threshold of significance for sources. The purpose of such a threshold is to address sources, such as those from construction projects or backup generators, that run for periods less than a year and may not be significant on an annual timescale but could be significant for a 24-hour period. To address this concern, the updated CEQA Guidelines (December 7, 2009) recommends that for construction projects that are less than one year in duration, lead agencies should annualize risk and hazards impacts (including PM_{2.5} risk concentrations which are subject to a micrograms of PM_{2.5} per cubic meter-based concentration threshold) over the scope of actual days that peak impacts are to occur (i.e., assume peak impact days occur daily for a full year), rather than calculate average daily emissions by dividing combined daily impacts by the number of days in a full year. While staff does see some merit to a 24-hour threshold, for most cases we think it is unnecessary. Such projects would be required to apply the annual PM_{2.5} threshold to their period of operation.
- 70-3 Staff believes the 1,000 foot zone of influence is justified based on CARB studies of risk impacts near various sources and studies conducted by multiple researchers of health effects at varying distances from freeways and major roadways. The intent of the 1,000 foot zone of influence is to identify sources and receptors in close proximity to projects. For some new large sources, or new receptors near large sources, analyses should be extended beyond 1,000 feet when maximum risks extend beyond this zone. Staff agrees that in some cases where large sources of risk are beyond 1,000 of a project, they should be included in the analysis. The updated CEQA Guidelines (December 7, 2009) contains language recommending that lead agencies should use their best judgment to decide to include large sources (e.g. rail yards, ports and refineries) located beyond 1,000 feet from a proposed sensitive receptor (revisions made in Chapter 2 and 5).
- 70-4 In response to the comments received requesting that the tiered risks and hazards threshold be reconsidered, the Air District's Board directed staff to include the tiered approach for adoption consideration. Staff included three options for the risks and hazards threshold for Board consideration, including the tiered approach, in The Proposed Thresholds of Significance Report (December 7, 2009): 1) the staff proposal; 2) Board Option 1, which is the same as the staff proposal except more stringent for new sources in impacted communities; and 3) Option 2, which is the same as the staff proposal except without the Community Risk Reduction Plan threshold option.





Environmental Justice Air Quality Coalition • Immigrant Power for Environmental Health and Justice • Bay Area Clean Air Task Force • Contra Costa Asthma Coalition • Environmental Law and Justice Clinic • Regional Asthma Management and Prevention Initiative

71

November 18, 2009

Pam Torliatt
Chairperson, Board of Directors
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Mr. Broadbent and Board President Torliatt:

We, the undersigned organizations and agencies, urge the Bay Area Air Quality Management District to adopt revisions to the District's CEQA guidelines and New Source Review rule that acknowledge and address the cumulative and disproportionate impacts of toxic air pollution on low-income communities and communities of color. We support increasing health protections and standards for the entire region, but BAAQMD should adopt regulations and guidelines that provide additional protections for the communities most impacted by pollution.

We are disappointed and upset that District staff caved into industry pressure and rescinded their initial recommendations that acknowledged the disproportionate impacts of pollution and called for more health-protective standards in highly impacted communities and near schools. We believe the initial recommendations are a step forward towards addressing the wide disparities in pollution exposure and health impacts in the region. We urge the District to adopt revisions to the CEQA guidelines and NSR rule that include differential and more health-protective standards in highly impacted communities and near schools.

71-1

Moreover, we believe that lowering emissions limits for polluting industries is not enough to protect public health, especially in low income communities and communities of color most impacted by pollution. Therefore, we also urge the District to adopt the Bay Area Environmental Health Collaborative's Pollution Reduction Protocol that calls for an end to permitting most polluting industries in the hardest hit communities. This recommendation should be incorporated into the CEQA guidelines, NSR rule and all other relevant regulatory and permitting processes.

71-2

Sincerely,

Bay Area Environmental Health Collaborative
Bay Area Clean Air Task Force
Bay View Hunters Point Environmental Health and Environmental Assessment Task Force

BAEHC c/o Environmental Law and Justice Clinic, Golden Gate University School of Law
536 Mission Street, San Francisco, California 94105-2968 • Tel. 415.994.2496 • Fax. 415.896.2450 •
Contact: Gordon Mar, Interim Campaign Director • gordonmar@yahoo.com
www.baehc.org

Breathe California
Chinese Progressive Association
Environmental Law and Justice Clinic, Golden Gate University School of Law
Communities for a Better Environment
Contra Costa Asthma Coalition
Greenaction for Health and Environmental Justice
Healthy San Leandro Collaborative
Hunters View Mothers Committee
People Organizing to Demand Environmental and Economic Rights
Regional Asthma Management and Prevention
San Francisco Asthma Task Force
West County Toxics Coalition

Asian Pacific Environmental Network
Center for Environmental Health
Center for Race, Poverty, and the Environment
Citizens Against Pollution
East Palo Alto Asthma Task Force
Global Community Monitor
Green Purchasing Institute
Our City
Pacific Institute
Science and Environmental Health Network
Solano Asthma Coalition
Sonoma County Asthma Coalition
The Breast Cancer Fund
West Berkeley Alliance for Clean Air and Safe Jobs

CC: Jack Broadbent, Executive Officer/APCO, Bay Area Air Quality Management District

Comment Letter #: 71

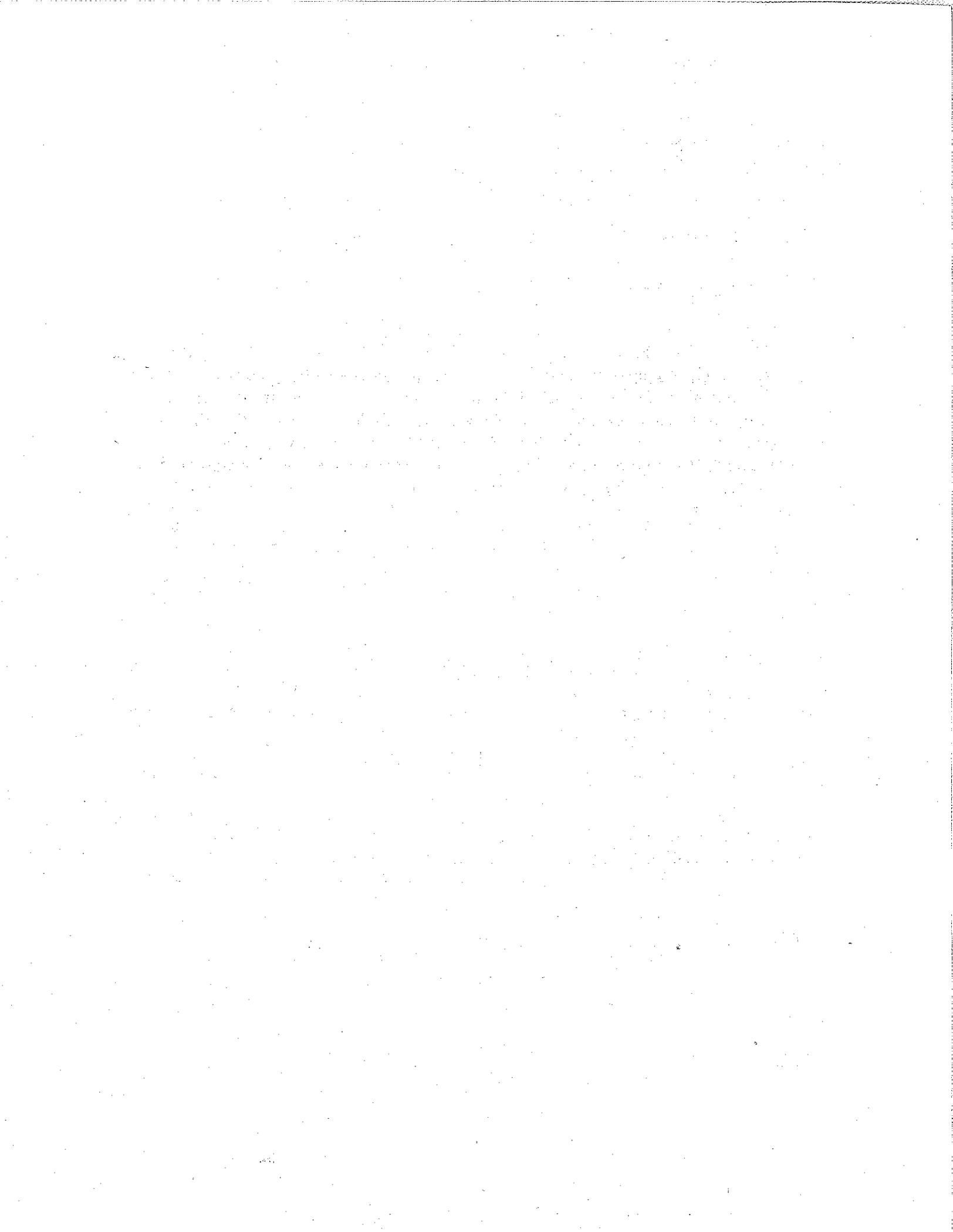
Date: November 18, 2009

From: Bay Area Environmental Health Collaborative

Response to Comments:

71-1 See comment response 69-4.

71-2 In response to similar comments heard at the CEQA public hearings, the Board of Directors will consider adopting a Bay Area Healthy Communities resolution, which identifies communities most impacted by toxic air contaminants, establishes a policy of no net increase of toxic emissions in such communities, and identifies strategies to reduce impacts in these communities. The Board considered and discussed this resolution at the December 16, 2009 Board meeting and will again consider it at the January 6, 2010 Board meeting. If adopted, this resolution would be incorporated into the District's regulatory and permitting processes.





BREATHE
CALIFORNIA

November 20, 2009

Jack Broadbent
Executive Director
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

RE: Revisions Needed in Response to Board Direction on CEQA Guidelines

Mr. Broadbent:

At the November 18 Board meeting, the Board provided direction to staff: (1) To support a tiered approach; (2) to address the problems with how the Zone of Influence excludes significantly impacted communities; (3) provide additional detail on Community Risk Reduction Plans; and (4) to review the PM_{2.5} threshold to determine a 24-hour threshold. BAAQMD staff is to be commended for the work done so far, but these concerns must be addressed to protect public health.

Cumulative Impacts Threshold Excludes Significantly Impacted Areas

As many individuals and organizations commented, there is a need for CEQA Guidance on cumulative impacts for Risks and Hazards and PM_{2.5}. However, the approach recommended by BAAQMD staff will arbitrarily limit pollution emitted beyond the 1,000 foot "zone of influence," beyond which pollution from a proposed source would not count toward meeting the cumulative pollution threshold of 100 in one million cancer risk. Still, we know from the modeled cancer risk studied by BAAQMD's CARE Task Force that the area designated as "Priority communities" is estimated to have a cancer risk exposure of 500 to 2,000 in a million.

72-1

Using an example provided in the Revised CEQA Guidelines, in areas south or east of Highway 101 in San Francisco, PM_{2.5} levels remain higher than the significance threshold as far away as 1,800 feet, assuming just that one source. We expect that as BAAQMD staff develop the screening tables for additional sources, there will be evidence to show that a radius further than 2,000 feet will be required to properly calculate cumulative pollution from local sources. If this approach is used, the recommended zone of influence must be sufficient to actually reflect significant impacts indicated by BAAQMD's screening tools. Further, the 4th sentence on page 31 of the Thresholds should be strengthened to state: "A lead agency ~~is encouraged to~~ shall 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."

Revisiting Tiered Approaches for Impacted Communities

However, this approach for determining cumulative impacts will likely still exclude areas in the Priority communities that do not have a local source immediately nearby, but as shown in BAAQMD's modeling, are exposed to cancer risks above 500 in one million. For the purpose of CEQA Guidelines, we recommend that BAAQMD revisit and adopt the "No Net Increase" or "Tiered" approaches explored in the Threshold Options Report for new sources in the Priority communities.

72-2

The "No Net Increase" approach established a Risks and Hazards Threshold of Significance of any new cancer risk in the impacted communities, due to the significant cumulative impacts from existing air pollution levels, and the "Tiered" Approach reduced the threshold by half in the impacted communities. This will provide certainty for residents of the impacted areas that new sources will be fully studied, compared to a "no project alternative," and that all feasible mitigations will be implemented prior to a jurisdiction adopting a statement of overriding considerations.

Community Risk Reduction Plans

The Community Risk Reduction Plan (CRRP), as a planning tool, may be effective in identifying pollution sources and implementing reduction strategies. However, as a CEQA Threshold of Significance, the brief description outlined on page 36 of the November 2 Thresholds Report does not begin to describe needed standards for the CRRP to ensure public health protection. We recommend incorporating these minimum standards for CRRPs:

1. First, it is critical that the Cumulative Impacts thresholds for cancer risk and PM_{2.5} will continue to apply to the CRRP and any subareas, and new sources covered in a CRRP, and that toxic best management practices will apply to new receptors.
2. It should be clarified that "consistency" with the CRRP requires a finding based on substantial evidence of project-level compliance with the Cumulative Impacts thresholds for cancer risk and PM_{2.5}, in addition to other conditions required in the CRRP.
3. The risk and exposure reduction targets must be at least reductions to the levels required to meet the Cumulative Impacts thresholds for cancer risk and PM_{2.5}, but should also seek to reduce cumulative cancer risk from all modeled sources below the level established defining a Priority Community, currently 500 in one million.
4. These levels may be appropriate to adopt as plan-level thresholds for CRRPs.

72-3

Need for a 24-Hour Threshold and Scientific Review of Fine Particulate Matter Threshold

According to BAAQMD reports from the CARE Task Force, 29 percent of the cancer risk caused by air pollution in the Priority communities comes from construction exhaust. Diesel particulate matter can be controlled with clean or retrofitted equipment that can reduce these toxic particles by 85%. The proposed annual average threshold for PM_{2.5} may be appropriate for regular operating levels, but is insufficient to recognize construction impacts, which occur on a more short-term basis. These short-term impacts also exacerbate the incidences of asthma attacks and cardiovascular health risks such as heart attacks. It is critical that BAAQMD review

72-4

the best available health studies to determine the appropriate level for project-level and cumulative PM_{2.5} pollution.

I am also now informed that according to CARB research in 2008 on the health response function, and the pertinent Mortality Incidence Rate from the California County Health Status Profiles in 2006, that the proposed PM_{2.5} thresholds could result in less than significance findings for individual projects causing 1,071 in one million excess deaths, and cumulative pollution causing 2,856 in one million excess deaths, assuming 50 years exposure. If this health outcome-based information is correct, I strongly urge BAAQMD to review the best available health studies to determine a more stringent level for PM_{2.5} thresholds that will protect public health.

72-4

Thank you for your consideration.

Sincerely,



Andy Katz
Government Relations Director

4-27

Comment Letter #: 72

Date: November 20, 2009

From: Andy Katz, Government Relations Director, Breathe California

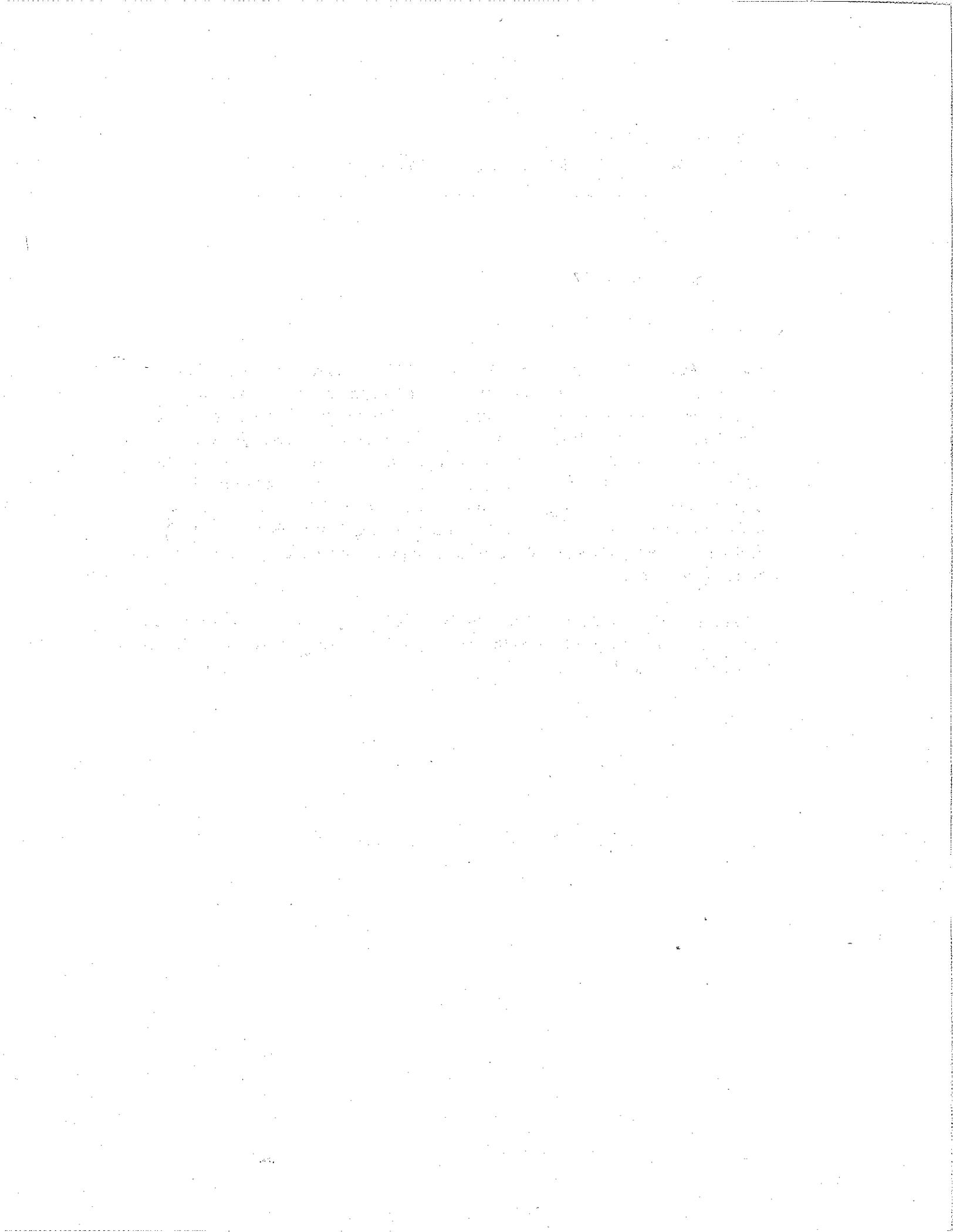
Response to Comments:

72-1 See comment response 70-3.

72-2 See comment response 70-4 and 71-2.

72-3 The goals of a Community Risk Reduction Plan (CRRP) are to reduce risk and hazard (toxic air contaminants and fine particulate matter concentrations) levels down to acceptable levels for the entire community covered by a CRRP. This programmatic approach provides local agencies a proactive alternative to address high levels of risk in communities. Staff anticipates that CRRPs would be prepared as a collaborative effort between the Air District and local governments. The Air District would contribute technical expertise, and the local governments would develop risk reduction strategies and assure community development. The recommendations in this comment will be considered in the Air District's CRRP engagement process with local governments. See also comment response 71-2.

72-4 See comment response 70-2. See also the Proposed Thresholds of Significance report (December 7, 2009) for justification that supports the Air District's recommended risks and hazards threshold.





November 23, 2009

Via Electronic Mail

Greg Tholen
Principal Environmental Planner
Bay Area Air Quality Management District
gtholen@baaqmd.gov

Re: Comments on November 2009 CEQA Air Quality Guidelines and Proposed Thresholds of Significance

Thank you for the opportunity to comment on the Bay Area Air Quality Management District's ("BAAQMD") November 2009 CEQA Air Quality Guidelines and November 2, 2009 Proposed Thresholds of Significance. The Center for Biological Diversity ("Center") is a non-profit conservation organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center's Climate Law Institute works to reduce greenhouse gas emissions to protect biological diversity, our environment, and public health. The Center has over 42,000 members, many of whom reside in the Bay Area.

The Center appreciates BAAQMD's leadership in developing thresholds of significance for greenhouse gas impacts. While science supports thresholds more stringent than that currently proposed by BAAQMD, the proposed thresholds are an important step forward in ensuring that CEQA serves its dual purpose of providing meaningful information on greenhouse gas impacts and protecting the environment. To further improve the proposed thresholds and remove unnecessary ambiguities, we make the following recommendations.

1. A Project Cannot Presume that its Greenhouse Gas Impacts Are Less than Significant By Virtue of Compliance with an SCS/APS

Page 23 of the Proposed Thresholds states: "If a project is consistent with ... a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) developed pursuant to SB 375 that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emission impacts." This is a misstatement of law. Under SB 375, a project that is compliant with an SCS/APS is only permitted to omit a consideration of the impacts from greenhouse gas emissions resulting from the car and light-duty truck trips generated by the project. Pub. Res. Code § 21159.28. Impacts from greenhouse gas emissions resulting from other aspects of the project's carbon footprint, such as energy use and water consumption must still be considered. Therefore, it cannot be legitimately presumed that a project would not have

73-1

significant greenhouse gas impacts based on SCS or ACS compliance because compliance only addresses a subset of project emissions. To avoid unnecessary ambiguity and confusion, please remove this and any similar statements from the final version of the threshold report.

2. Include Sample Analyses and Prescriptive Criteria for a Per Capita GHG Analysis

To avoid gamesmanship and divergent CEQA analyses among projects, the proposed thresholds should include sample per capita analyses for a range of projects and set forth the assumptions that may be part of a per capita analysis. The intent of the per capita metric is to allow very well situated and well designed projects with emissions greater than the numerical threshold to make a less than significant finding. Prescriptive criteria for assessing per capita emissions and sample analyses are necessary to ensure that projects that are not well designed and not well situated do not make inappropriate assumptions in order to improperly claim they are within the per capita threshold. Additional instruction on how the per capita threshold should be utilized will also provide needed certainty and guidance to lead agencies.

73-2

3. More Fully Incorporate Considerations Articulated in the Proposed Thresholds Into the Air Quality Guidelines

While it appears that the Proposed Thresholds will be incorporated into the appendix of the Air Quality Guidelines, the Air Quality Guidelines would function as a better resource if it better captured the reasoning in the Proposed Thresholds. Specifically, the asterisk on page 6 noting that reliance on the per capita metric may not be appropriate for very large projects should be replicated in the Air Quality Guidelines.

73-3

In addition, while we appreciate BAAQMD incorporating the Center's concern in earlier comments that a threshold without an upper bound is not legally defensible, it would also be helpful if the Proposed Thresholds provided a general estimate of what constitutes a "very large" project. One possibility is to look at what CEQA considers a project of statewide, areawide, or regionwide significance under Guideline § 15206(b). Emissions from these types of projects (e.g. residential development greater than 500 dwelling units) could be estimated and used to describe the point at which the presumption that project greenhouse gas impacts are insignificant based on compliance with a per capita emissions metric no longer applies.¹

73-4

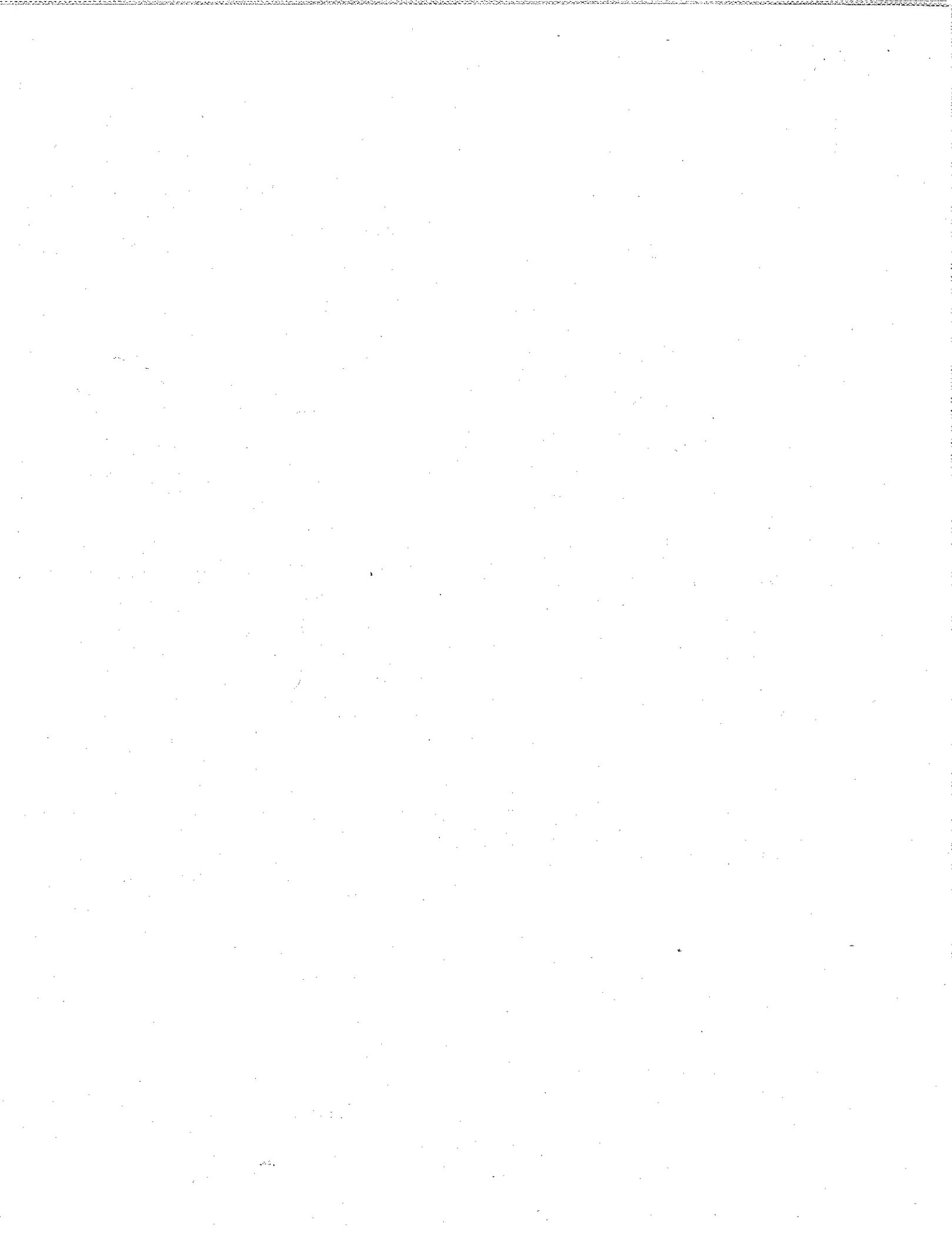
Thank you for your consideration of these comments. Please do not hesitate to contact Matthew Vespa at (415) 436-9682 x309 or mvespa@biologicaldiversity.org if you have any questions or concerns.

¹ Alternatively, SCAQMD recently proposed 25,000 tons as an upper limit for projects using a per capita metric to determine significance. (See PowerPoint for November 19th SCAQMD GHG Working Group Meeting.) The basis for the proposed 25,000 upper bound appears to be tied to the ARB reporting rule, which reflects a policy determination of what constitutes a large source of emissions.

Sincerely,

A handwritten signature in black ink that reads "Matthew Vespa". The signature is written in a cursive style with a large, sweeping initial 'M'.

Matthew Vespa
Senior Attorney

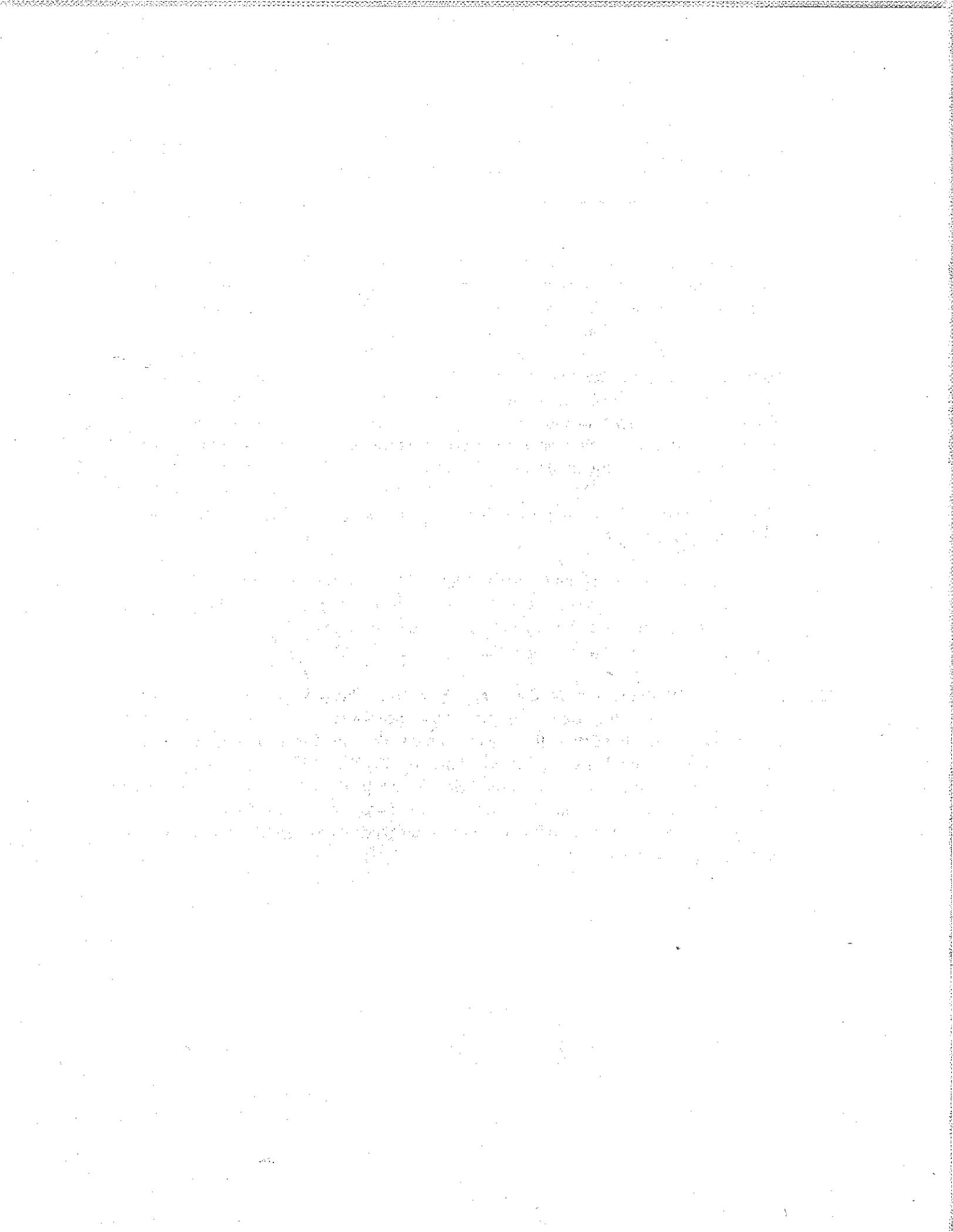


Comment Letter #: 73

Date: November 23, 2009

From: Matthew Vespa, Senior Attorney, Center for Biological Diversity

- 73-1 Air District staff agrees with the commenter that consistency with an SB 375 Sustainable Communities Strategy or Alternative Planning Strategy is not, by itself, a basis for a determination of insignificance. The Proposed Thresholds of Significance report and Draft CEQA Guidelines have been revised accordingly.
- 73-2 Staff is proposing that the Board adopt a 90-day effective period upon adoption of the thresholds. During the 90-day period, staff intends to initiate an implementation plan to assist local governments in applying the adopted CEQA thresholds for air quality. As part of the implementation plan, staff will conduct trainings for local government staff on air quality analysis and modeling tools, including sample analysis and prescriptive criteria for the GHG efficiency threshold. In addition, the CEQA Guidelines (December 7, 2009) provides guidance quantifying GHG emissions using URBEMIS, a widely available emissions modeling tool.
- 73-3 The December versions of the Proposed Thresholds of Significance report and Draft CEQA Guidelines are consistent with each other. The caveat for caution when using the efficiency-based threshold for large projects is now included on the Draft CEQA Guidelines, as the commenter suggests.
- 73-4 Staff believes that it is in the lead agency's discretion to judge what constitutes a very large project. In the Proposed Thresholds of Significance report, staff recommends that lead agencies apply the GHG efficiency threshold with some discretion since the lead agency is committing to use what is essentially its GHG "budget" in a given way. Expending this "budget" on a very large GHG efficient proposed project may affect other development opportunities in a jurisdiction. Such a project may also affect, or conflict, with a lead agency's commitment and actions to reduce its overall GHG emissions in a programmatic analysis.





City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION

Gavin Newsom, Mayor
Mitchell H. Katz, MD, Director of Health
Rajiv Bhatia, MD, MPH, Director of EH

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November 23rd, 2009

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

Re: Comment on BAAQMD Proposed Draft CEQA Thresholds of Significance

Dear Mr. Tholan:

Thank you for the opportunity to comment on the Bay Area Air Quality Management District's Proposed Thresholds of Significance for the California Environmental Quality Act (CEQA) of November 2nd, 2009.

As an advocate for public health, I appreciate the proposal's significant attention to community health impacts of air pollution hazards. The responsiveness to concerns about roadway vehicle emissions, the establishment of community zones of influence for air pollutant effects, and the inclusion of thresholds for cumulative exposures are all important and necessary improvements. However, I am concerned that the proposed thresholds leave gaps with regards to limited outcomes selected for community hazard thresholds; evidence used to support those outcomes and thresholds; the protection of sensitive receptors; and assessment of cumulative impacts of two or more pollutants. This letter provides my recommendations for how thresholds could be improved and strengthened. My comments should also be considered in the context of earlier comments on the workshop draft submitted to you on June 2nd, 2009.

As you recognize, there are important reasons for including explicit community hazard and risk thresholds under CEQA. The CEQA statute and guidelines clearly support the inclusion of human health within the concept of "significant environmental impacts" and comprehensive thresholds for air quality health impacts are would support consistent and legally defensible local CEQA practice¹ Furthermore, CEQA case law has consistently upheld the requirement to study health impacts related to changes in environmental quality.² Taken together, BAAQMD's goal for community hazards thresholds, the CEQA statute and its regulations, and case law require that established hazards due to air pollutants be considered and addressed in the CEQA process. To the extent that supportive evidence exists, guidance should provide health protective thresholds whether related to

¹ Public Resources Code § 21000 of CEQA states that "the intent of the Legislature [is] that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached." 14 Cal. Code Regulation §15065 states that a lead agency must find that a project may have a significant impact and require that an EIR be prepared if "...the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly." 14 Cal. Code Regulation §15126.2 requires that the EIR discuss "health and safety problems caused by the physical changes."

² For example: *Bakersfield Citizens for Local Control v. City of Bakersfield*, *Berkeley Keep Jets Over the Bay Committee vs. Board of Port Commissioners of the City of Oakland*, and *Californians for Alternatives to Toxics v. Department of Food and Agriculture*,

“toxics” or “criteria pollutants” or whether resulting in cancer, death, or other adverse human outcome. BAAQMD should also make clear that such thresholds apply to all sources of emissions, whether traditional major or minor point sources or mobile sources related to busy roadways or freight movement.

The proposed inclusion of thresholds for cumulative impacts, elaboration of a community air quality zone of influence, and recognition of the significance of mobile sources to community hazards are important and substantial improvements from prior guidelines. However, there are some notable gaps and I believe that BAAQMD’s proposed thresholds for community risks and hazards could be improved to better achieve their stated goal.

Recommendation 1: BAAQMD should consider additional significance thresholds based upon other health outcomes that have evidence-based causal association with air pollution (e.g., hazard of pre-mature mortality, avoidable hospitalization). To this end, BAAQMD should utilize available systematic reviews of evidence linking air pollutants to health outcomes, including reviews of pollutant health effects conducted by the California Air Resources Board (CARB 2002; CARB 2008); the recent Health Effects Institute review of air pollutant health effects; and recent reviews of roadway proximity health effects. Specific numerical thresholds for additional health outcomes should be commensurate to those proposed for cancer hazards and acute and chronic effects of air toxics. For example, additional specific thresholds provide by BAAQMD might be:

- **Probability of pre-mature mortality for the Maximally Exposed Individual (MEI) exceeds 10 in 1,000,000**
- **Probability of avoidable hospitalization for the Maximally Exposed Individual (MEI) is twice as great as that of the area population**

According to the draft thresholds document, the goal of the community risk and hazard thresholds are “...to ensure that no source creates, or receptor endures, a significant adverse impact from any individual project, and that the total of the nearby directly emitted risk and hazard emissions is also not significantly adverse.” In the proposal, BAAQMD includes risk based thresholds for cancer and acute or chronic health effects. However, there is a notable exclusion of thresholds for other adverse health outcomes which are linked to air pollution exposure at the community scale, including pre-mature mortality, avoidable hospitalization, asthma prevalence, and lung function development.³

Analysis and thresholds evaluation based on health outcomes is consistent with CEQA requirements for analysis of adverse human impacts in the EIR. CEQA case law has made a clear distinction

³ Quantitative evidence linking air pollutants and health effects are abundant. For example, the California Air Resources Board (CARB) published concentration response functions for chronic exposure to particulate exposure and diverse health outcomes and used these functions in regulatory analysis (CARB 2002). Furthermore, based on a meta-analysis of available high quality studies and a consensus of leading experts, CARB estimates that every 10 ug/ m³ increase in chronic PM 2.5 exposure translates into a 10% increase in the overall mortality rate (CARB 2008). Epidemiologic studies have consistently demonstrated that children living in proximity to freeways or busy roadways have impairments of lung function (Brunekreef 1997; Guaderman 2004); asthma symptoms (Lin 2002; Venn 2001; Kim 2004; Ryan 2005); medical visits for asthma (English 1999), asthma prevalence (McConnell 2006) and ischemic heart disease (Hoffman 2007). Reviews of roadway proximity studies have been summarized by Delfino (2002), Brugge (2008), and Boothe (2008). In addition, CARB has recently conducted health risk assessments for California rail yards and maritime ports which demonstrate impacts on cancer and non-cancer outcomes in nearby communities.

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between the analysis of changes environmental quality and the additional required analysis of public health impacts of those changes. For example, in the Bakersfield case cited above, the court ruled that health effects must be analyzed even though the air quality impacts were deemed significant.

Health outcomes based thresholds analysis is *necessary* to evaluate cumulative health impacts (e.g., additive, synergistic) from two or more different pollutants. Co-emitted pollutants and pollutants from different sources may have cumulative effects on the same outcome (e.g. cardiovascular effects, mortality). Pollutant based outcomes and thresholds (e.g., the proposed thresholds for PM 2.5) only apply to the evaluation of cumulative impacts from two or more sources of the same pollutant.

Finally, health outcomes based thresholds are advantageous as they are robust to changes in scientific evidence. There is rapidly evolving changes in knowledge about exposure-response relationships and the harmful pollutants. For example, dose-response relationships between PM 2.5 and health effects have evolved with improve exposure assessment methods in epidemiologic studies. Thresholds for health outcome (e.g. mortality) would be robust to emerging relationship between pollutants and health outcomes (e.g. mortality, lung development) are rapidly emerging. Recent evidence has uncovered links between ozone and pre-mature mortality from respiratory causes.⁴ We are learning that ultra-fine particulate matter from combustion sources is also associated with cardiovascular changes and mortality.⁵

Recommendation 2: BAAQMD's proposed quantitative PM 2.5 thresholds for community risk and hazards, currently referencing EPA Significant Impact Levels, should be re-assessed based on actual health evidence relating PM 2.5 exposure and adverse effects. Given their expertise, it may be advisable to ask the Office of Environmental Health Hazard Assessment (OEHHA) to review community hazard thresholds before their adoption if this has not already been done.

The stated purpose of community risk and hazard thresholds for PM 2.5 is to protect sensitive receptors from air pollution health effects from air pollution sources. This implies that the rationale for the numerical threshold for PM 2.5 standard should be based upon available peer-reviewed scientific literature relating PM 2.5 exposure levels and health hazards in community settings.

EPA interprets the SIL to be the level of ambient impact that is considered to represent a "significant contribution" to regional non-attainment. Thresholds for regional non-attainment could be appropriate for judgments on regional criteria air pollutant impacts but were not designed or intended to be a criterion or standard for the protection health and welfare effects. The use of SIL, alone, as a basis for community risk and hazard judgments would be unprecedented.

In the current draft, BAAQMD proposes thresholds for single sources (0.3 ug/ m3) or cumulative effects (0.8) based on two alternative methods used by EPA to develop options for "significant

⁴ Jerrett M, Burnett RT, Pope CA 3rd, Ito K, Thurston G, Krewski D, Shi Y, Calle E, Thun M. Long-term ozone exposure and mortality. N Engl J Med. 2009 Mar 12;360(11):1085-95.

⁵ Samet JM, Rappold A, Graff D, Cascio WE, Berntsen JH, Huang YC, Herbst M, Bassett M, Montilla T, Hazucha MJ, Bromberg PA, Devlin RB. Concentrated ambient ultrafine particle exposure induces cardiac changes in young healthy volunteers. Am J Respir Crit Care Med. 2009 Jun 1;179(11):1034-42.

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 impact levels (SIL) SILs are used by EPA in reviews of new major sources of air pollution (NSR) to prevent regional deterioration in air quality.⁶ To arrive at the SIL PM_{2.5} option of 0.8 µg/m³, EPA multiplied an established PM₁₀ SILs of 1.0 µg/m³ by the ratio of emissions of PM_{2.5} to PM₁₀ using a database of utilities and industrial point source emissions (excluding mobile sources). To arrive at the SIL option of 0.3 µg/m³, EPA used a different approach, multiplying the PM₁₀ SIL of 1.0 µg/m³ by the ratio of the current Federal ambient air quality standards for PM_{2.5} and PM₁₀ (15/50).⁷ The differences in the methodologies used to arrive at the 0.3 and the 0.8 µg/m³ significant impact level options do not appear to have a relationship to either health or cumulative impacts analysis. The options appear to represent what EPA currently considers as a range of appropriate SIL values.

BAAQMD provides additional support for a 0.8 µg/m³ threshold from one modeling study conducted to assess downwind PM_{2.5} concentrations 150 meters from a specific segment of I-5 used for one study on mice. In general, 150 meters is a reasonable estimate of the observed spatial extent of many roadway proximity health effects. However, a threshold based on modeled concentrations should reflect the diversity of road types, operating conditions, emissions profiles, and meteorological characteristics found in epidemiological studies where health outcomes were linked to traffic proximity. This approach may be feasible as many studies were conducted in California. BAAQMD could provide similar modeled concentrations for other vehicle pollutants (e.g. nitrogen oxides) that may be causal agents for roadway proximity effects.

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 Since the PM_{2.5} threshold is intended for use with mixed mobile and stationary sources, we believe the preferred approach is to set health-based threshold based upon best available peer-reviewed human epidemiological literature relating PM_{2.5} exposure levels and health hazards. A number of well-designed studies of PM_{2.5} and health outcomes have analyzed observed effects of inter-community variation of exposure (versus variation among cities). These studies appear to be currently the most appropriate studies to use in defending community based hazard thresholds and may be more appropriate than inter-regional and traffic proximity studies for community based thresholds. Based on a recent study of intra-urban pollution in Los Angeles, a 10 µg/m³ increase in PM_{2.5} would result in a 17% increase in non-injury mortality.⁸

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⁶ EPA proposed and documented three alternative options for PM_{2.5} SILs in the Federal Register Vol. 72, No. 183 published on Friday, September 21, 2007. Significant Impact Levels (SILs) are numeric values derived by EPA used to evaluate the impact a proposed major source may have on the NAAQS. The SIL is one element of the USEPA program to prevent deterioration in regional air quality and is utilized in the new source review (NSR) process. New source review is required under Section 165 of the Clean Air Act, a permit applicant must demonstrate that emissions from the proposed construction and operation of a facility "will not cause, or contribute to, air pollution in excess of any maximum allowable increase or maximum allowable concentration for any pollutant." The purpose of the SIL is succinctly and accurately stated in the draft thresholds document as a screening level that triggers further analysis in the permit application process. For the purpose of NSR, numerical limits, including increments and SILs are separately set for three types of areas. Class I areas are areas where especially clean air is most desirable including national parks and wilderness areas. Class II areas are those where there is not expected to be substantial industrial growth. Class III areas are those designated by a State for the highest relative level of industrial development. Subsequent to the promulgation of an ambient air quality standard for PM_{2.5}, EPA has been working developing regulations for NSR for PM_{2.5} along with numerical values for increments (maximum allowable increases) and SILs.

⁷ California PM_{2.5} AAQS of 12 µg/m³ is 20% lower than the federal AAQS of 15 µg/m³.

⁸ Jerrett M et al. Spatial Analysis of Air Pollution and Mortality in Los Angeles. *Epidemiology*. 2005; 16: 727-736

The California Air Resources Board developed concentration-response relationship for PM 2.5 and several health outcomes in their 2002 regulatory impact assessment for the PM 2.5 ambient air quality standard. The table below illustrates the health impacts of a 0.8 ug/m³ increase in PM 2.5 on a hypothetical 1,000,000 population in Alameda County. Most of CARB's dose response functions are based on inter-regional exposure differences versus inter-community differences.

More recently, CARB developed a consensus based concentration response function for chronic exposure to PM 2.5 and pre-mature mortality in 2008. The table below illustrates the health impacts of a 0.3 and 0.8 ug/m³ increases in PM 2.5 on a population of 1,000,000 over a 50 year period. Notably, the proposed thresholds appear to allow mortality hazards an order of magnitude above the upper end of EPA's acceptable risk range of 10⁻⁴ to 10⁻⁶ for cancer hazards.

There is an extensive literature on roadway proximity health effects and many studies have included dose response analysis for individual measured or modeled pollutants. While it is clear that proximity to busy roadways is harmful to health, at this point, I do not believe it is advisable to attribute health effects from roadway proximity to one or more specific vehicle pollutants because of the correlation among pollutants. For example, nitrogen oxides, particulates and ultra fine particulates all have spatial variation associated with roadways. In addition, busy roadways may be a surrogate for other adverse environmental exposures (e.g. noise) and stressors with important health effects.

Recommendation 3: For protection of new receptors, BAAQMD should propose a single health protective threshold, whether for pollutant or health outcome based thresholds, for the location of new receptors based on cumulative effects.

BAAQMD states its goal as ensuring that a new receptor is not subject to significant adverse impacts. With regards to health protection of receptors, all sources of air pollution in a zone of influence are acting cumulatively on that receptor. In other words, whether there are multiple small sources or one large source, the cumulative exposure to the receptor is what has health relevance. Understandably, new sources might be subject to different thresholds to take into account existing areas sources. However, I believe that there should be only one hazard threshold that is applied to *new* receptors, and that threshold should be protective of all existing or proposed exposure sources acting cumulatively.

Recommendation 4: In the rationale for thresholds, BAAQMD should specify methods of analysis and methodological assumptions to be used in emission and exposure assessments and should describe how methods used to model air pollution concentrations correlate with measures associated with health outcomes in empirical research.

Direct measurement of air pollution exposure, modeling or interpolating exposure from available measurements, land use regression models, and dispersion models can be all used to assess exposure at the community and each method requires different data sources. Different methods or use of different parameters or assumptions within methods can lead to variability in measures of air pollution and associated health risk. For example, line source dispersion models to evaluate roadway sources require data on traffic volumes, emissions factors, meteorology, and topography and choices with regards to receptor location and height. Thresholds cannot be consistently applied absent specification of these methods and their assumptions.

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Most community-level epidemiologic studies of air pollution and health are based on modeled air pollutant concentrations. Understandably, cross validation of measures and modeled pollutant concentration is a subject of ongoing work in atmospheric science. Where possible, BAAQMD should provide validation studies of methods available or proposed to model air pollutant concentrations for threshold evaluations.

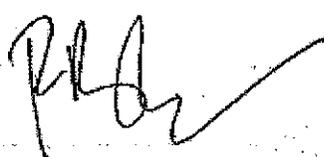
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Thank you for your consideration of these comments. Protecting communities from adverse health effects from air pollutant is an important goal of CEQA and local jurisdictions rely heavily on BAAQMD thresholds and guidance in CEQA practice. Clear defensible, scientifically rigorous, and health protective thresholds guidance from BAAQMD will ultimately help protect and improve community health.

Overall, the thresholds document is an important development for public health protection but it could more clearly make the distinction between significance thresholds for air quality and significant thresholds for health effects related to changes in air quality. In my opinion, providing significance thresholds base on health outcomes appears to be a more interpretable and defensible and a less challenging approach than establishing pollutant specific thresholds. This approach would allow cumulative impacts assessment, avoid the need for BAAQMD to develop a specific PM 2.5 or pollutant threshold for community risks and hazards, and would be robust to expected developments in air pollution and health science. Nevertheless, if BAAQMD decides to promulgate pollutant based thresholds for cumulative impacts (e.g. for PM 2.5), to ensure defensibility and consistent implementation, they should be based on all available evidence and specify methodologies for exposure assessment.

I hope these comments will assist BAAQMD in this important task. I would appreciate an opportunity to discuss any questions you may have about my recommendations.

Sincerely,



Rajiv Bhatia, MD, MPH

- cc: Henry Hilken, BAAQMD
Jack Broadbent, BAAQMD
Tom Rivard, SFDPH
Karen Cohn, SFDPH
Bart Ostro, OEHHA
George Alexeeff, OEHHA
Matt Lakin, USEPA
Paul Amato, USEPA
Bob Prentice, BARHHI

Hazard of Premature Mortality for California Residents Due to Change in Concentration of PM 2.5 at Significance Thresholds Proposed by BAAQMD

	Individual Project Threshold	Cumulative Threshold
Acceptable concentration of PM2.5 (ug/ m3) from sources in zone of influence	0.30	0.8
Consensus Estimated of Relative Risk All-cause Mortality (CARB 2008)	1.01	1.01
2007 California Mortality Incidence Rate (Deaths per 100,000 persons per year)	618	618
Excess Annual Pre-mature Mortality (Deaths Per Million Persons Per Year)	19	49
Lifetime excess Annual Hazard of Pre-mature Mortality (Deaths Per Million Persons over 50 years)	927	2472
EPA acceptable risk range for cancer hazards (cancers per million persons per lifetime)	1 - 100	1 - 100

Annual health impacts of an 0.8 ug /m3 change in PM 2.5 for a hypothetical 1,000,000 population in Alameda County based on Concentration Response Functions used by CARB in its 2002 regulatory impact assessment of particulate matter standards

Outcome	Age Group Affected	Study / Author	Total Population	Age Specific Population	Baseline Incidence Rate	Excess Exposure Pm 2.5	Beta Pm2.5	Annual Excess Events
Annual Mortality Rate	Age >30	Krenzel, 2000	1,000,000	589000	1.10E-02	0.8	1.33E-02	68
Annual Chronic Bronchitis	Age > 27	Abbey, 1993	1,000,000	655000	3.78E-03	0.8	1.32E-02	27
Daily Hospital Admissions for Asthma	Age <65	Sheppard, 1999	1,000,000	889000	2.63E-06	0.8	2.51E-03	2
Annual Acute Bronchitis	Age 8-12	Dockery, 1996	1,000,000	968000	4.40E-02	0.8	2.72E-02	878
Daily Lower Respiratory Symptoms	Age 7-14	Schwartz, 1994	1,000,000	109000	1.20E-03	0.8	1.82E-02	690
Daily Work Loss Days	Age 18-65	Ostro, 1987	1,000,000	635000	6.48E-03	0.8	4.60E-03	5517
Daily Minor Restricted Activity Days	Age 18-65	Ostro, 1989	1,000,000	635000	2.14E-02	0.8	7.41E-03	29275

Sources:

- (1) Baseline incidence rates based on 2002 CARB Staff Report on Particulate Matter AAQS;
- (2) Baseline mortality rates estimated by the Alameda County Public Health Dept using California Vital Statistics Data
- (3) Fraction of Population in Age Range at Risk based on American Community Survey 2005 data for Oakland California.

Comment Letter #: 74

Date: November 23, 2009

From: Rajiv Bhatia, MD, MPH, Director of Environmental Health, Environmental Health Section, Department of Public Health, City and County of San Francisco

Response to Comments:

74-1 The District agrees that thresholds based on health outcomes—such as premature mortality, avoidable hospitalization, asthma prevalence, and lung-function development—may be a useful approach, one worthy of further consideration. However, to undertake, develop and assess, this approach would require a significant effort, input from other health agencies, and a longer timeframe than can be considered for the timely development of the Thresholds of Significance update. As an interim step, the District has revised the draft thresholds document to present the implications of the proposed threshold for PM_{2.5} in terms of increments in premature mortality based on a concentration-response relationship developed in the consensus based review conducted by the California Air Resources Board (CARB 2008).

74-2 The District believes that EPA's Significant Impact Levels (SILs) are appropriate comparators for derivation of the proposed PM_{2.5} threshold. EPA interprets the SIL to be the level of PM_{2.5} increment that represents a "significant contribution" to regional non-attainment. The District recognizes that the SIL options are being considered to protect public health at a regional level by helping an area maintain the National Ambient Air Quality Standards (NAAQS) and were not designed to be thresholds for assessing community risk and hazards. However, since it is the goal of the Air District to achieve and maintain the NAAQS and California Ambient Air Quality Standards (CAAQS) at both regional and local scales, the SILs may reasonably be considered in formulating thresholds of significance under CEQA for local-scale increments of PM_{2.5}.

Furthermore, the PM_{2.5} thresholds were compared to actual health studies and found to be consistent with modeled PM_{2.5} concentrations where no health impact was observed on the immune systems of mice from exposure to near-roadway particles. Specifically, to quantify the roadway concentrations of PM_{2.5} that contributed to the health impacts reported by Kleinman et al (2007), the Air District modeled the emissions and associated particulate matter concentrations for the roadways studied. The results of the modeling indicate that at 150 meters (492 feet), where no significant health effects were found, the downwind concentration of PM_{2.5} was 0.78 µg/m³, consistent with the proposed EPA SIL option of 0.8 µg/m³. Moreover, the single source threshold (0.3 µg/m³) is consistent with the roadway action level adopted by City and County of San Francisco Department of Public Health, which also relied on health outcome studies.

74-3 The District proposes two thresholds for new receptors based on exposure to single source and cumulative impacts from all nearby sources. Single source thresholds for receptors are provided to recognize that within the area defined (1,000 foot radius) there can be variations in risk levels that may be significant. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the area defined by the selected radius. Cumulative thresholds for receptors are designed to account for the effects of all sources within the defined area. The purpose of providing two thresholds is to ensure that no single source is responsible for the majority of emissions

which cumulatively may be below the threshold, but singularly may exceed health-based standards established under the District's Regulation 2, Rule 5: New Sources of Toxic Air Contaminants.

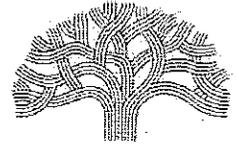
- 74-4 The District will produce a companion document to the CEQA guidance entitled the Recommended Methods for Screening and Modeling Local Risks and Hazards that will contain specific methods for conducting screening and refined air dispersion modeling. The document will be made available through the District web site prior to the effective date of the guidance.

California Air Resources Board. (2008). *Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California*. Staff Report. Sacramento, CA. October 24. Available:

<<http://www.arb.ca.gov/research/health/pm-mort/pm-mort.htm#NEW>>. Accessed November 2009.

Kleinman, M.T., Sioutas, C., Froines, J.R., Fanning, E., Hamade, A., Mendez, L., Meacher, D., Oldham, M. (2007) Inhalation of Concentrated Ambient Particulate Matter Near a Heavily Trafficked Road Simulates Antigen-Induced Airway Responses in Mice; *Inhal. Toxicol.*, 19 (Supp. 1), 117-126.

CITY OF OAKLAND



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VIA U.S. MAIL AND ELECTRONIC MAIL

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November 23, 2009

Mr. Greg Tholen
Principal Environmental Planner
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
gtholen@baaqmd.gov

RE: Oakland Comments on BAAQMD Proposed Thresholds of Significance and Draft CEQA Guidelines (November 2009)

Dear Mr. Tholen:

This letter is a follow-up to my letter dated October 9, 2009, (see attached) regarding the Bay Area Air Quality Management District's Draft CEQA Guidelines. Thank you for considering and responding to my previous letter and thank you for the opportunity to review and comment on the revised Draft Guidelines. The City of Oakland has reviewed the following documents concerning the revised Draft Guidelines: Proposed Thresholds of Significance (November 2, 2009); Air Quality Guidelines (November 2009); and Public Review Comments & Responses. While the City applauds the District for undertaking such a challenging and important task, the City still has a number of concerns regarding the proposed Thresholds and Guidelines.

The City of Oakland respectfully submits the following comments and requests (a) that the District again provide detailed responses to the City's comments, and other public comments, prior to the Board taking any action on the Thresholds or Guidelines and (b) an opportunity to review and comment on such responses and any revisions to the proposed Thresholds or Guidelines for at least 30 days before the Thresholds and/or Guidelines are submitted to the Board for adoption.

General Comments

1. Adoption of Thresholds and Guidelines: District staff is currently proposing to have the Board adopt the proposed Thresholds of Significance but not the CEQA Guidelines so that staff will have the ability to update the Guidelines in the future on an as-needed basis without the need for the Board to re-adopt the Guidelines. The City is concerned with this approach. The Guidelines provide critical direction on how the Thresholds should be

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implemented. Without final adopted Guidelines the Board and the public are unable to fully understand the implications of the proposed Thresholds and to determine whether the proposed Thresholds are appropriate. For example, at the November 18, 2009, Board hearing there was considerable discussion between the Board and staff concerning a recent change to the proposed cancer risk threshold. Staff explained that the change to the threshold was due to a change to the assumptions which would be included in the Guidelines. This example illustrates the importance of having the Guidelines finalized and adopted with the Thresholds. At the November Board hearing, one member of the Board stated that she was concerned about the proposal to adopt the Thresholds and not the Guidelines.

It isn't clear if staff considers the revised Draft Guidelines (November 2009) essentially finalized so that the public and the Board can rely on the revised Draft Guidelines when interpreting the proposed Thresholds or if the revised Draft Guidelines are only considered illustrative of the type of Guidelines that will eventually be finalized by staff. The City does not believe the revised Draft Guidelines should be considered finalized for the purpose of understanding and interpreting the proposed Thresholds because the revised Draft Guidelines are inconsistent with the proposed Thresholds and are incomplete as explained below in comments 4, 5, 6, and 7.

75-1

The City strongly recommends that the Guidelines be finalized before the Thresholds are adopted so that both the Guidelines and Thresholds can be adopted together. If staff seeks the authority to revise the Guidelines administratively in the future without the need to have future revisions adopted by the Board, the Board can provide that authority to staff when the Guidelines are initially adopted. Any such delegation of authority to staff to revise the Guidelines should make clear that there needs to be adequate opportunity for public review and comment before staff revises the Guidelines.

In the event that the Board adopts only the Thresholds and not the Guidelines, the City requests that staff clarify exactly what is being adopted by the Board. Currently, it is not clear if staff is proposing to have the Board adopt the entire Proposed Thresholds of Significance document (November 2, 2009), just the Thresholds table from the Proposed Thresholds of Significance document (Table 1 - Proposed Air Quality CEQA Thresholds of Significance), the Thresholds listed in the revised Draft Guidelines (November 2009), or the Thresholds contained in some other document. The reason it is important to explicitly state which Thresholds are being adopted is because the proposed Thresholds have undergone numerous revisions and the Thresholds listed in the Proposed Thresholds of Significance document differ somewhat from the Thresholds listed in the revised Draft Guidelines (see the language variation for operational-related risks and hazards thresholds).

Also, if the Board adopts only the Thresholds and not the Guidelines, the City requests that staff provide information to the public and the Board prior to the adoption of the Thresholds that details a timeline and process for finalizing and releasing the Guidelines.

The City recommends that the Guidelines be finalized as soon as possible after adoption of the Thresholds in order to provide the needed guidance on implementation of the Thresholds. The City also requests that the process to finalize the Guidelines include opportunities for public review and comment. Since the Guidelines are highly technical in nature and because there are a variety of parties interested in the Guidelines, the City recommends that staff convene a working group of key stakeholders to provide input on the Guidelines. The City would be interested in participating in such a group.

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2. Screening Criteria & Smart Growth: In my October 2009 letter (see comment 3) I pointed out that the District's proposal to recommend the use of the same screening criteria for operational-related impacts throughout the region would not support smart growth because development in urban infill locations with convenient access to transit would result in lower vehicle trips and emissions. In the response to this comment staff states that lead agencies may use screening criteria that agencies feel are appropriate. The City acknowledges that lead agencies may use alternative screening criteria, however, it is unlikely that lead agencies will have the resources to develop alternative screening criteria, particularly given the current economic climate. The City requests that the District develop screening criteria for infill development now. The City believes the District is in a better position to develop such screening criteria because the District has already developed one set of screening criteria. If the District develops infill-related screening criteria the Guidelines will better support the District's goal of encouraging smart growth.

75-2

3. Vehicle Trip Rate Reduction: District staff states that the Thresholds and Guidelines support smart growth and infill development because, among other reasons, projects in urban infill locations with convenient access to transit would result in lower vehicle trips and emissions. Staff has also stated that the District will provide recommendations and guidance to lead agencies on quantifying the appropriate vehicle trip rate reduction for urban infill locations. The City supports the proposal for the District to provide these recommendations and guidance. Because vehicle trip rate reduction is a fundamental basis of the ability of the Thresholds and Guidelines to support smart growth, the City requests that the District provide these recommendations and guidance in the Guidelines now, prior to the adoption of the Thresholds and/or Guidelines, so that the smart growth intent of the Thresholds and Guidelines can be fulfilled when lead agencies begin implementing the Thresholds and Guidelines.

75-3

Operational-Related Impacts

4. Greenhouse Gases/Climate Action Plan Threshold: The Thresholds listed and discussed in the Proposed Thresholds of Significance document (November 2, 2009) include a threshold for compliance with a Qualified Climate Action Plan for operational-related greenhouse gas project-level impacts. This threshold is listed in Table 2-1 in the revised Draft Guidelines (November 2009) but the threshold is not discussed in the text of the revised Draft Guidelines. If this threshold is proposed, there should be guidance on the threshold in the Guidelines.

75-4

In the Proposed Thresholds of Significance document, criteria are provided detailing the requirements of a Qualified Climate Action Plan. There are two components of a Qualified Climate Action Plan listed on page 24 that are uncommon in climate action plans and should be removed. The document states that a Qualified Climate Action Plan should identify a "land use design." Climate Action Plans typically do not identify a land use design, such as a land use map, for the community. Land use design is typically found in the land use element of the general plan. Also, the document states that a Qualified Climate Action Plan should identify financing mechanisms to achieve the identified goal by 2020. General planning documents, including climate action plans, rarely identify financing mechanisms for stated programs and actions, particularly for programs and actions which may occur several years into the future.

75-4

Community Risk and Hazard Impacts

5. Screening Criteria: The revised Draft Guidelines refer readers to Appendix F for discussion of screening criteria for local community risk and hazard impacts. Appendix F is not included in the document. The City requests an opportunity to review and comment on Appendix F before the Thresholds and/or Guidelines are adopted by the Board.

75-5

Construction-Related Impacts

6. Greenhouse Gas Thresholds: The proposed Thresholds state that there is no proposed threshold for construction-related greenhouse gas impacts. However, the revised Draft Guidelines recommend that construction-related greenhouse gas impacts need to be quantified and the document provides recommended mitigation measures. If the District recommends that construction-related greenhouse gas impacts be evaluated, it would be more clear to the user of the Thresholds if the Thresholds state something to the effect of "No Numeric Threshold – Should be Quantified" for construction-related greenhouse gas impacts.
7. Risk and Hazard Screening Table: Section B.5 of the revised Draft Guidelines ("Construction Risk and Hazard Screening Table") states that this section is to be added to the document. The City requests an opportunity to review and comment on this section before the Thresholds and/or Guidelines are adopted by the Board.

75-6

75-7

Thank you again for your consideration in this matter. The City looks forward to the District's detailed response to the above comments prior to the Board taking any action on the Thresholds and/or Guidelines.

CITY OF OAKLAND



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Community and Economic Development Agency
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VIA U.S. MAIL AND ELECTRONIC MAIL

October 9, 2009

Mr. Greg Tholen
Principal Environmental Planner
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
gtholen@baaqmd.gov

RE: Oakland Comments on BAAQMD Draft CEQA Guidelines (September 2009)

Dear Mr. Tholen:

Thank you for the opportunity to review and comment on the Bay Area Air Quality Management District's Draft CEQA Guidelines. The City of Oakland respectfully submits the following comments and requests (a) that the District provide detailed responses to the City's comments, and other public comments, prior to the Board taking any action on the Guidelines, (b) an opportunity to review and comment on such responses and any revisions to the Draft Guidelines for at least 30 days before the Draft Guidelines are submitted to the Board for adoption (c) the District provide for review and comment its "Justification" for the thresholds of significance, which is currently missing from Appendix C in the Draft Guidelines, and (d) that the currently scheduled Board adoption date of October 2009 for the Guidelines be re-scheduled for a later date to accommodate the necessary public review/comment period.

General Comments

1. Guidelines Development: Due to the importance of the new Guidelines and the existence of a variety of stakeholders interested in the new Guidelines, the City believes that a collaborative process involving stakeholder representatives would be a more effective method for preparing the new Guidelines. The City requests that the District consider conducting such a stakeholder process before releasing a revised draft of the new Guidelines. If such a stakeholder process is to occur, the City would be interested in participating in the process.
2. Effective Date: To reduce potential confusion concerning the applicability of the new Guidelines to projects currently in the environmental review process, and to avoid additional (and more costly and time-consuming) environmental review for projects for

Mr. Greg Tholen
Bay Area Air Quality Management District
Oakland Comments on Draft CEQA Guidelines
November 23, 2009
Page 5

Please contact Darin Ranelletti, Planner III, at (510) 238-3663 or dranelletti@oaklandnet.com if you have any questions.

Sincerely,



Eric Angstadt
Deputy Director
Environmental Review Officer
Community and Economic Development Agency

Attachment: City of Oakland Comment Letter Re: Draft CEQA Guidelines (October 9, 2009)

Cc (via e-mail only): Chair Torliatt (ptorliatt@aol.com)
Vice Chair Wagenknecht (bwagenknecht@co.napa.ca.us)
Secretary Bates (mayer@ci.berkeley.ca.us)
Director Brown (hbrown@co.marin.ca.us)
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From: Ranelletti, Darin
Sent: Tuesday, March 24, 2009 10:27 AM
To: 'gtholen@baaqmd.gov'
Subject: BAAQMD CEQA Update Comments

Greg,

I attended the February 26, 2009, public workshop on the BAAQMD CEQA Guidelines Update. Thank you for the workshop and the opportunity to review and comment on BAAQMD's approach to the CEQA Guidelines Update. The City of Oakland expects to submit formal comments on the draft of the revised CEQA Guidelines when they are published. In the meantime, we have the following preliminary comments:

The City supports clean air policies and the analysis of air quality impacts during the planning and environmental review process. However, BAAQMD needs to consider the effects of new thresholds on infill development that may be consistent with local, regional and state development goals. Projects that would otherwise normally be exempt from environmental review under CEQA that now exceed the new thresholds would require a Mitigated Negative Declaration or an EIR. The preparation of a Mitigated Negative Declaration or an EIR is certainly a disincentive to infill development due to the time, expense and uncertainty involved. New thresholds that would trigger an impact and require a Mitigated Negative Declaration or an EIR for ordinary transit-oriented infill development would run counter to current initiatives to encourage infill. In order to protect air quality and introduce a level of certainty to the planning and environmental review process, the City recommends that the revised CEQA Guidelines identify specific performance standards and/or project features (e.g., air filters and transportation demand management (TDM) measures in new projects) that, when uniformly incorporated into development projects in accordance with section 15183(f) of the State CEQA Guidelines, will substantially mitigate potential environmental effects such that the project is self-mitigating and the potential air quality impacts of the project under CEQA are considered less than significant. Therefore, a Mitigated Negative Declaration or an EIR would not be required, but the health of project residents and the surrounding population would be protected.

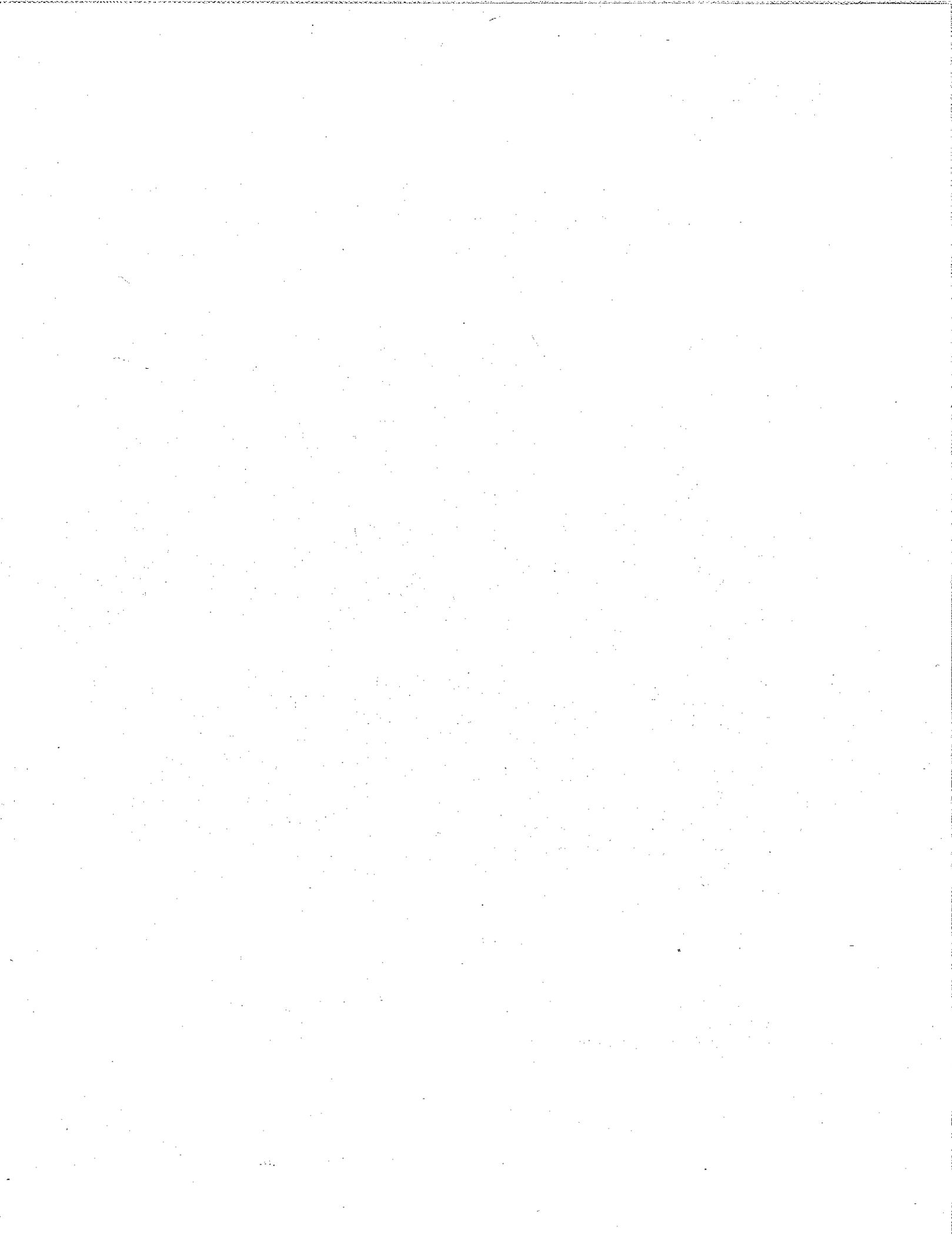
Like other cities, the City of Oakland is in the process of preparing a Climate Action Plan to encourage energy efficiency and the reduction of greenhouse gas emissions. New BAAQMD climate change thresholds that are inconsistent with local climate plans would result in confusion and inefficiencies in the planning and environmental review process. The City recommends that the revised thresholds defer to locally adopted climate plans, where these plans are adopted, when determining greenhouse gas impacts. So, for example, if a city determined that a proposed project is consistent with the city's climate plan, then the project's potential impact related to greenhouse gas emissions would be considered less than significant. This approach would introduce more certainty into the planning and environmental review process and encourage more cities to adopt energy- and climate-oriented plans and policies.

Feel free to contact me if you have any questions.

Regards,

Darin Ranelletti

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which some environmental review has already occurred, the City recommends that the District clarify when the new Guidelines will become effective and how the new Guidelines should apply to pending projects. The City recommends that the new Guidelines not apply to projects for which an application for a development permit has been deemed complete by the lead agency, or for which a Notice of Preparation for an EIR has been published by the lead agency, prior to the effective date of the Guidelines.

In order to allow lead agencies a reasonable amount of time following the adoption of the Guidelines to review the adopted Guidelines and prepare for implementation of the Guidelines, the City recommends that the Guidelines not become effective until at least ninety (90) days after the Guidelines are adopted.

3. Screening Criteria & Smart Growth: The City supports the proposal to use screening criteria to screen out projects that would result in a less-than-significant impact. Unfortunately none of the proposed screening criteria consider the location of the project. The District proposes that the same screening criteria be applied to projects in urban infill locations and to projects in suburban locations. Since projects in urban infill locations with access to transit tend to result in fewer vehicle miles traveled (VMT) than projects in suburban locations without access to transit, it is likely that many projects in urban infill locations that exceed the screening criteria, thereby signifying a potentially significant air quality impact, would not exceed the thresholds of significance after the anticipated emissions are quantified. This approach is inconsistent with the District's stated goal of promoting smart growth and infill development, as well as with SB 375.

Page 1-1 of the Draft Guidelines states that the District uses tools to support smart growth. The proposed screening criteria do not appear to support smart growth if an urban infill project that would otherwise be exempt from environmental review exceeds screening criteria that are applied to all projects in the region only to determine later that the project would not exceed the quantified threshold of significance after the completion of a lengthy and costly environmental review process. The City recommends that the screening criteria consider the location of the project so that the screening criteria are more accurate indicators of anticipated emissions. For example, for each topic in the Guidelines (criteria air pollutants, greenhouse gases, etc.) there could be two sets of screening criteria—one for urban infill locations and one for suburban/rural locations. One possible method for identifying urban infill locations would be to reference the Priority Development Areas (PDAs) designated through the Bay Area's FOCUS Program. The FOCUS Program is a regional development and conservation strategy for the Bay Area sponsored by the District, the Association of Bay Area Governments, the Metropolitan Transportation Commission, and the Bay Conservation and Development Commission that focuses future regional growth in infill development areas near transit. Development in PDAs supports the FOCUS Program, smart growth, and SB 375 because PDAs are infill locations in the region with convenient transit access and lower per capita VMT.

4. Mitigation Measures: In Oakland, many of the mitigation measures recommended in the Draft Guidelines for mitigating potentially significant impacts are already incorporated into projects when they are initially proposed by project sponsors or are regularly imposed on projects by the City as Uniformly Applied Development Standards (pursuant to State CEQA Guidelines section 15183(f)) through the use of Standard Conditions of Approval. As the City recommended previously in the e-mail sent to you on March 24, 2009 (see attached), the City recommends that the Guidelines state that if a project includes any of the mitigation measures as part of the project description, or if the mitigation measures would already be imposed on a project through the use of Best Management Practices, Performance Standards, Uniformly Applied Development Standards or Standard Conditions of Approval, then the benefits of the measures can be considered during the initial emissions screening/analysis/quantification and not necessarily during detailed CEQA review. Therefore, the initial emissions analysis/quantification would more accurately reflect the project's potential environmental impact and a Mitigated Negative Declaration or EIR would not be required assuming the project does not exceed the thresholds of significance (or other applicable thresholds).
5. Justification for Thresholds of Significance: The current version of the Draft Guidelines does not include the justification for the proposed thresholds of significance (Appendix C). The City can not fully comment on the proposed thresholds without seeing the justification. As stated previously, the City requests the opportunity to review and comment on the justification before the Draft Guidelines are submitted to the Board for adoption.

Operational-Related Impacts

6. Greenhouse Gases/Climate Action Plan (p. 2-2): At the District's September 10, 2009, workshop in Oakland on the Draft Guidelines, District staff stated that one of the thresholds of significance for operational-related greenhouse gas (GHG) emissions would be compliance with a qualified climate action plan. Compliance with a climate action plan is listed in the Draft Guidelines for plan-level GHG impacts but not for project-level operational-related GHG impacts. The City recommends that the climate action plan threshold for project-level operational-related GHG, as presented at the September workshop, be included in the Guidelines. The City recommends that the term "Qualified Climate Action Plan," which was used at the September 2009 workshop, be used in the Guidelines to refer to climate action plans that satisfy the criteria listed on page 2-9. The City also recommends that the Guidelines provide more detailed guidance on the level of rigor and detail that a climate action plan must include, in addition to the components listed on page 2-9, in order for the plan to be considered a Qualified Climate Action Plan. The City questions whether the components listed on page 2-9 are the most appropriate indicators of a climate action plan that would successfully reduce GHG emissions. It is likely that a wide range of climate action plans would include these components with some plans being more effective than others. The City believes that the collaborative

stakeholder process recommended in comment 1 (above) would be an effective process for identifying appropriate criteria for Qualified Climate Action Plans.

7. Greenhouse Gas Quantification (pp. 5-2 through 5-4): The Draft Guidelines recommend using the California Climate Action Registry (CCAR) General Reporting Protocol (GRP) for quantifying indirect GHG emissions from energy generation. The Guidelines should provide more guidance on which year the emission factors should be based on and whether the factors should be based on the local utility provider, a state average, or something else. To date, the CCAR has not projected emission factors for future years. The Guidelines should clarify whether the most recent set of certified CCAR emission factors should be used or if the lead agency should estimate project year emission factors. The City recommends the former approach (using the most recent certified emission factors) to ensure consistency among lead agencies.

The Draft Guidelines recommend that direct and indirect emissions be counted when quantifying GHG emissions, including emissions from vehicles, energy generation, and water conveyance. The City recommends that operational emissions associated with waste generation also be counted in order to provide a more accurate count. Existing models, such as the EPA's Waste Reduction Model (WARM), can estimate GHG emissions associated with waste generation and disposal.

8. Mitigation Measures (pp. 3-16 & 3-17): What is the purpose of the non-quantifiable non-URBEMIS mitigation measures in the Draft Guidelines? The City recommends that the Guidelines provide guidance on the use and value of these measures. Would the use of these measures reduce a project's potential operational impact from significant to less-than-significant? Also, see comment 4 (above) for general recommendations concerning Standard Conditions of Approval and mitigation measures.

Community Risk and Hazard Impacts

9. Definitions (pp. 2-6 & 4-2): The term "sensitive receptors" should be defined in the Guidelines. Also, the term "sensitive receptor" and the term "receptor" are both used. Please clarify if these terms have the same meaning.
10. Screening Criteria (New Sources) (p. 2-6): Similar to the screening criteria proposed for other topics in the Guidelines, the City recommends that screening criteria be included for siting a new source of toxic air contaminants (TACs) and/or PM_{2.5} so that projects that do not exceed the criteria would be considered to result in a less-than-significant impact and not be required to quantify the cancer risk or undergo a detailed CEQA evaluation. The benefits of providing screening criteria would be (a) project sponsors, lead agencies, and the public would know which types of projects are likely to emit TACs and/or PM_{2.5} and (b) smaller projects unlikely to result in a significant impact would not be required to undergo a detailed CEQA evaluation.

11. Types of New Receptors (pp. 4-4 & 4-5): The City recommends that the Guidelines clarify which projects involving receptors would be required to analyze the cancer risk when locating within 1,000 feet of a source of TAC. Would all discretionary projects under CEQA involving receptors proposed within 1,000 feet of a source of TAC, including, for example, a new single-family home proposed within 1,000 feet of a dry cleaner, be required to analyze the cancer risk? Would the risk analysis be required for projects that would otherwise be categorically exempt from environmental review under CEQA due to the presence of a TAC source located within 1,000 feet?
12. New Receptors and Smart Growth (pp. 4-4 & 4-5): Data from the Draft 2007-2014 Housing Element of the Oakland General Plan indicate that housing opportunity sites capable of accommodating approximately 4,500 dwelling units in Oakland are located within 1,000 feet of a freeway. "Opportunity sites" are vacant or underutilized sites which are currently zoned for high-density housing. The 4,500 dwelling units represent nearly half of all the potential housing that could be accommodated on opportunity sites in the city. This figure represents only a conservative estimate of potential new housing to be developed near existing TAC sources because the number only includes housing near freeways, it does not include housing near other sources of TAC. If other TAC sources are included, the amount of housing units would likely increase substantially. Requiring each of these housing developments to quantify the cancer risk would discourage development of needed infill housing due to the potential time, expense, and unfamiliarity associated with hiring the air quality consultants necessary to quantify the cancer risk. Given the large number of potential new housing units to be developed near freeways and other sources of TAC, and the goals of the District, SB 375, and the Bay Area FOCUS Program of promoting smart growth and infill development, the City believes it is important for the community risk and hazard impact methodologies and thresholds to carefully balance the goals of promoting smart growth and minimizing local health impacts. The City believes the best way to balance these goals is to prioritize which projects are required to quantify the cancer risk through the use of screening criteria (e.g., project size, project type) and to promote the use of standardized and feasible BMPs in a manner discussed in comments 3 and 4 (above) such that projects which meet the screening criteria or incorporate the required BMPs are not required to quantify the cancer risk and are considered to result in a less-than-significant impact under CEQA.
13. Identifying Sources When Siting New Receptors (p. 4-4): In order to facilitate the evaluation of potential cancer risks when siting new receptors, the City recommends that the District publish a database and map of existing TAC sources in the region. The City's experience is that the California Air Resources Board's online Facility Search Engine is not complete.
14. HRAs When Siting New Receptors (pp. 4-4 & 4-5): The Draft Guidelines recommend that in order to analyze the potential cancer risk of siting a new receptor within 1,000 feet of an existing source of TAC the lead agency should evaluate the Health Risk

Assessment (HRA) prepared for the source. Have HRAs been prepared for all existing sources with TAC emissions above the District's prioritization level, including freeways, high-volume roadways, and sources in operation prior to the requirement to prepare an HRA? In the event that a new receptor is proposed within 1,000 feet of a TAC source for which an HRA was not prepared, how would the potential cancer risk be evaluated?

15. TBACT/TBP Measures for Impacted Communities (p. 4-5): The Draft Guidelines state that all projects in impacted communities must implement the specified Toxic Best Available Control Technology (TBACT)/Toxic Best Practice (TBP) measures. Please clarify if the TBACT/TBP requirement applies to all projects located in impacted communities, including, for example, projects located more than 1,000 feet of a TAC source, or only to projects located within 1,000 feet of a TAC source. Also, please provide more detailed recommendations on the proposed tree-planting measure. Is there a minimum number of trees or planted area required? Is there a minimum tree size required at the time of planting?
16. Exterior Spaces of New Receptors (pp. 4-5 through 4-7): The TBACT/TBP measures and the mitigation measures in the Draft Guidelines focus on mitigating impacts to the interior of a building. It is not clear how or if exterior spaces, such as parks and private yards/courtyards, are to be evaluated. Please clarify whether or not impacts to exterior spaces are to be evaluated and, if they are to be evaluated, how they should be evaluated and mitigated. If a project would result in a significant impact but the impact can be mitigated to a less-than-significant level with measures that reduce impacts to the interior of the building, is the entire project mitigated to a less-than-significant level or is only the interior space mitigated to a less-than-significant level (and the impact remains significant because the exterior spaces are unmitigated)? If exterior spaces are to be evaluated and mitigated, it would be helpful if the Guidelines included mitigation measures specific to exterior spaces. Also, see comment 4 (above) for general recommendations concerning Standard Conditions of Approval and mitigation measures.
17. Mitigation Measures (New Receptors) (pp. 4-6 & 4-7): Please clarify if only one, some, or all of the recommended mitigation measures would be required to mitigate a significant impact to a less-than-significant level or if the lead agency should use its judgment to determine how many mitigation measures are necessary to mitigate the impact to a less-than-significant level. Also, see comment 4 (above) for general recommendations Standard Conditions of Approval and concerning mitigation measures.
18. Mitigation Measures (New Sources) (pp. 4-6 & 4-7): The Draft Guidelines do not contain recommended mitigation measures for siting new sources of TAC. The City recommends that the Guidelines recommend appropriate mitigation measures for new TAC sources, preferably by project type (similar to the mitigation measures recommended for mitigating odor impacts). Also, see comment 4 (above) for general recommendations concerning Standard Conditions of Approval and mitigation measures.

Plan-Level Impacts

19. Types of Plans (pp. 5-1 through 5-7): Please clarify if all of the proposed thresholds of significance for evaluating plan-level impacts under the various topics apply to all types of long-range plans and to each plan adopted by the lead agency. It does not seem appropriate to apply thresholds of significance for a topic unrelated to the plan. For example, applying the community risk and hazard impact thresholds to the Noise Element of the General Plan would not be appropriate because TACs are not related to noise. Also, it would be redundant and unnecessary to apply policy thresholds to a plan when the policies are contained within an existing plan that has already been adopted by the lead agency. For example, if the community risk and hazard policies regarding special overlay zones are already contained in the Land Use Element of the General Plan, it would be unnecessary to apply the community risk and hazard thresholds to a proposed Housing Element of the General Plan. The City recommends that each set of thresholds should only be applied to relevant long range plans and that the applicable thresholds would not be exceeded, and the potential plan impact would be less-than-significant, if the recommended policies already exist in another adopted plan.

Also, the Draft Guidelines state that the guidance offered in Chapter 5 should be applied to discretionary, program-level planning activities. However, not all discretionary, program-level plans are considered a "project" under CEQA that would be subject to environmental review. Long-range programmatic plans that do not contain regulatory policies, such as so-called "vision" plans that articulate a desired physical appearance for an area or certain climate action plans that merely express a vague commitment to a reduction of GHG emissions, may not be subject to CEQA review. The language in the Draft Guidelines may confuse readers to believe that all long-range plans, whether or not they are subject to CEQA, must conduct the analysis contained in Chapter 5. The City recommends that the Guidelines state that the methods in Chapter 5, as well as all of the guidance in the Guidelines, apply only to projects subject to CEQA. Since currently there is no uniform standard for the content of climate-change-related plans, there exists a wide range of types of climate-change-related plans, including plans containing only abstract visions and plans containing concrete regulatory policies. Therefore, the City recommends that the Guidelines provide guidance on which types of climate-change-related plans the District believes are subject to CEQA review.

20. Greenhouse Gas Thresholds (pp. 5-2 through 5-4): The Guidelines recommend that the same GHG thresholds of significance be applied to all types of plans. The City believes it is not appropriate to apply a community-wide numeric GHG threshold to all types of plans, particularly plans that concern a single topic or a limited geographic area. For example, applying the District's recommended service population GHG threshold to an economic development plan covering only a limited geographic area would only provide a limited assessment of the community's GHG impacts. It may be possible, for example, for such a plan to exceed the GHG threshold while the community as a whole does not exceed the threshold. The City recommends that community-wide thresholds, such as the

District's proposed GHG threshold, only apply to comprehensive, community-wide land use plans (e.g., General Plans).

21. Greenhouse Gas Quantification (pp. 5-2 through 5-4): Currently there is no uniform standard concerning which emission sources are to be considered when a community calculates GHG emissions. For example, GHG emission sources such as rail, air travel, upstream and downstream waste emissions, and pass-through highway emissions are traditionally counted by some communities and not others. The City recommends that the Guidelines provide guidance on which GHG emission sources should be included when quantifying GHG emissions.
22. Community Risk and Hazard Thresholds (p. 5-5): Please clarify what types of regulations or policies the required special overlay zones should contain.
23. Greenhouse Gas BMPs (pp. 5-6 & 6-14): Are the proposed BMPs for construction-related GHG emissions (plan-level and project-level) practicable? The City recommends that the District consult with the local construction industry to confirm that these BMPs can be realistically implemented and then present the results of these consultations during the CEQA Guidelines Update process prior to the Board's consideration of the proposed Guidelines.
24. Mitigation Measures (pp. 5-7 through 5-19): Please clarify if only one, some, or all of the recommended mitigation measures would be required to mitigate a significant impact to a less-than-significant level or if the lead agency should use its judgment to determine how many mitigation measures are necessary to mitigate the impact to a less-than-significant level. Also, see comment 4 (above) for general recommendations concerning Standard Conditions of Approval and mitigation measures.

Construction-Related Impacts

25. Basic Construction Mitigation Measures (p. 6-10): Since the District recommends that the Basic Construction Mitigation Measures be applied to all projects, whether or not a project would result in a significant impact, the City recommends that the measures be presented as required best management practices (BMPs) (and not labeled "mitigation measures") and moved from section 6.3 of the document to section 6.2 to avoid confusion.
26. Screening Criteria (Greenhouse Gases) (p. 6-14): Similar to the screening criteria proposed for construction-related criteria air pollutants, the City recommends that project-size-related screening criteria be included for construction-related GHG emissions so that projects that do not exceed the criteria would be considered to result in a less-than-significant impact and not be required to implement the proposed BMPs. In addition to project-size-related screening criteria, the City also recommends that projects that are consistent with a qualified climate action plan, similar to the District's proposal

for plan-level operational-related GHG emissions, be screened out and considered to result in a less-than-significant impact without the need for detailed CEQA review.

27. Greenhouse Gas Mitigation Measures (pp. 6-14 & 6-15): The District's proposal that the construction-related GHG mitigation measures be the same as the construction-related GHG thresholds of significance (i.e., the BMPs) is confusing. The City recommends that project-size-related and climate-action-plan-related screening criteria be developed for construction-related GHG emissions (see comment 26 above) and the proposed BMPs be considered mitigation measures. Also, see comment 4 (above) for general recommendations concerning Standard Conditions of Approval and mitigation measures.
28. Screening Criteria (Diesel Particulate Matter) (p. 6-15): Similar to the screening criteria proposed for construction-related criteria air pollutants, the City recommends that project-size-related screening criteria be included for construction-related diesel particulate matter (PM) so that projects that do not exceed the criteria would be considered to result in a less-than-significant impact. Screening criteria would be helpful for screening out projects that would result in a less-than-significant impact particularly since the Draft Guidelines recommend evaluating diesel PM impacts on a case-by-case basis. Determining an appropriate impact analysis on a case-by-case basis may not be practical if there are no screening criteria and all projects require an impact analysis.

Carbon Monoxide Impacts

29. Thresholds of Significance (p. 2-13): The Draft Guidelines state that the project would result in a significant impact to air quality if the project would *cause* local emissions of carbon monoxide to exceed any of the proposed thresholds of significance. Should these thresholds be interpreted to mean that the project would exceed the thresholds if the project (a) *causes* local emissions currently below the thresholds (under existing conditions) to exceed the thresholds in the post-project condition or (b) *results* in a situation where the post-project condition exceeds the thresholds (regardless of the existing (pre-project) condition)?
30. Screening Criteria (Congestion Management Program) (p. 2-13): Please clarify how "consistency" with an applicable congestion management program is defined.
31. Screening Criteria (Intersection Volume) (p. 2-14): Should this screening criterion be interpreted to mean that the project would exceed the screening criterion if the project (a) *causes* an intersection already (under existing conditions) experiencing less than the specified volume of vehicle trips to experience more than the specified volume of vehicle trips in the post-project condition or (b) *affects* an intersection already (under existing conditions) experiencing the specified volume by generating one or more vehicle trips at the intersection?

32. Emissions Quantification (pp. 7-1 through 7-4): Please clarify if the emissions to be quantified are the project's emissions, the existing emissions (without the project), and/or the existing emissions plus the project's emissions (existing-plus-project condition). The emissions to be quantified should relate with the way the carbon monoxide thresholds of significance are to be interpreted (see comment 29 above). Also, the emissions quantification procedures refer to both roadway intersections and roadway segments. Please clarify if the emissions to be quantified are emissions from roadway intersections or roadway segments and specify which roadway intersections or segments are to be quantified—all intersections/segments affected by the project (which could be dozens) or only those intersections/segments that do not meet the screening criteria.

Odor Impacts

33. Definitions (p. 8-2): The term "sensitive receptors" should be defined in the Guidelines. Also, the term "sensitive receptor" and the term "receptor" are both used. Please clarify if these terms have the same meaning.
34. Impact Determination (p. 8-3): The Draft Guidelines state that potential odor impacts should be qualitatively evaluated on a case-by-case basis. The City supports this approach but recommends that the Guidelines provide more guidance on determining, after the lead agency conducts the qualitative evaluation, whether a potential odor impact should be considered significant. For example, it would seem unreasonable to conclude that a potential odor impact would be significant if the complaint history shows one confirmed complaint for an isolated incident that does not represent normal operating conditions (e.g., if a sewer line breaks at a restaurant resulting in foul odors) or if the complaint history shows multiple confirmed complaints by one hypersensitive person in a densely populated area. In addition to considering the factors recommended on page 8-1 when evaluating a potential odor, the number of potentially affected receptors should also be considered.

Therefore, the City recommends that the Guidelines be revised to the following:

A potentially significant impact would occur when the project would frequently create substantial objectionable odors affecting a substantial number of sensitive receptors.

35. Mitigation Measures (pp. 8-3 through 8-6): The recommended mitigation measures apply to siting a new source of odors. It would be helpful if the Guidelines also included recommended mitigation measures for siting new receptors. Also, see comment 4 (above) for general recommendations concerning Standard Conditions of Approval and mitigation measures.
36. Food/Restaurants (pp. 8-5 & 8-6): It is unclear from the Draft Guidelines what level of odor impact analysis, if any, is recommended for restaurants. Recommended mitigation

Mr. Greg Tholen
Bay Area Air Quality Management District
Oakland Comments on Draft CEQA Guidelines
October 9, 2009
Page 11

measures for restaurants are listed in the Draft Guidelines. However, restaurants are not listed as one of the types of odor-generating facilities on page 2-14. Unlike the other odor-generating facilities listed on page 2-14, restaurants are commonly located in close proximity to receptors. When siting a new receptor, is it recommended to research the odor complaint history of all restaurants within a certain distance? Such an exercise may involve dozens of restaurants. When siting a new restaurant, is it recommended to research the odor complaint history of similar types of restaurants? If fast food restaurants generate odor complaints, rather than consider the siting of a new fast food restaurant a potentially significant impact under CEQA that needs to be mitigated through the course of a Mitigated Negative Declaration or EIR, the City recommends that the Guidelines include BMPs for fast food restaurants such that the restaurant would result in a less-than-significant impact if one, all, or a specified number of BMPs are incorporated such that the project would not need to be mitigated.

Thank you for your consideration in this matter. The City looks forward to the District's detailed response to the above comments prior to the Board taking any action on the Guidelines. Given the importance and complexity of these issues, the City requests the opportunity to review and comment on the revised Draft Guidelines before they are submitted to the Board for adoption. The public review period should be at least 30 days in length in order to provide adequate time to review and comment on the revised Draft Guidelines. In addition, the City needs to review and comment on the District's "Justification" for the Guidelines, which has not yet been made publicly available. Therefore, the City recommends that the adoption of the Guidelines, currently scheduled for October 2009, be re-scheduled for a later date to accommodate the necessary public review period.

Please contact Darin Ranelletti, Planner III, at (510) 238-3663 or dranelletti@oaklandnet.com if you have any questions.

Sincerely,



Eric Angstadt
Deputy Director
Environmental Review Officer
Community and Economic Development Agency

Attachment: E-mail correspondence from Darin Ranelletti, City of Oakland, to Greg Tholen, BAAQMD (March 24, 2009)

Document Letter #: 75

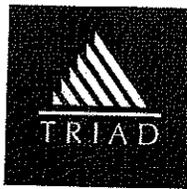
Date: November 23, 2009

From: Eric Angstadt, Deputy Director/Environmental Review Officer, Community and Economic Development Agency, City of Oakland

Response to Comments:

- 75-1 The recommendation of Air District staff is that the Board of Directors adopt only the thresholds of significance and not adopt the CEQA Guidelines. The State CEQA Guidelines require only that the thresholds of significance be adopted (SCG §15064.7). Air District staff believes it is more efficient to not have Board-adopted Guidelines, allowing for timely revisions to incorporate updates to analytical tools, mitigation measures. Air District staff continues to endeavor to make the Guidelines and thresholds consistent and easily understood. The latest versions of the Proposed Thresholds of Significance report (December 7, 2009) and the Draft CEQA Guidelines (December 2009) are consistent with each other and staff consider them final versions pending Board action. The resolution, if approved by the Air District Board, and subsequent notice of their action, will clearly state what is adopted.
- 75-2 The recommendation by the commenter to develop screening tables that reflect levels of infill development that meet the proposed thresholds would entail a great deal of uncertainty. The current screening tables are based on a common, worst-case land use scenario referred to as "greenfield" development without considering any mitigating features such as nearby support services or transit. Thus the screening tables provide a common platform with which different development types can be compared. There is not a common infill platform: each infill site presents vastly different characteristics, such as level of transit service (multimodal site versus a single bus stop) and density of nearby services. Due to this inherent uncertainty Air District staff does not recommend developing screening tables for infill.
- 75-3 Air District staff has added additional guidance in the latest version of the Guidelines on quantifying and supporting vehicle trip reductions. This guidance is provided so that infill and transit-oriented development can justifiably reduce transportation-related emissions and thereby allow larger infill projects than greenfield projects.
- 75-4 The inconsistency pointed out by the commenter between the Proposed Thresholds of Significance report and the Draft CEQA Guidelines, identifying compliance with a qualified climate action as a proposed threshold of significance, has been corrected in the December 7, 2009 version of the documents. The commenter also points out that the Proposed Thresholds of Significance report states that a climate action plan should identify a land use design, among other components, that achieve AB 32 goals. The intent of this statement is that if a city or county choose to incorporate criteria for a qualified climate action plan into their general plan, the different elements of the general plan, including the land use element, should be consistent with each other. In addition, creating an AB 32-friendly land use design can be another way to support growth that will help achieve AB 32 goals. Air District staff note that the specific criteria recommended for climate action plans does not include this criterion. Also, Air District staff is reconsidering the criterion that climate action plans should include financing mechanisms and may delete this criterion.

- 75-5 Appendix F is under development and will be added to the Guidelines once it has been completed. Appendix F will include Air District modeling to help Lead Agencies identify risk levels near roadways and other sources of risk emissions. Appendix F will be completed before we work with local agencies and begin implementation of the Guidelines before they are effective.
- 75-6 The Air District is not proposing GHG thresholds of significance for construction at this time. However, this does not relieve the Lead Agency of the requirement under CEQA to make a determination of significance for construction GHG impacts. Therefore, the draft CEQA Guidelines recommends that the construction GHG emissions be quantified and also provides methods to mitigate these emissions if the Lead Agency determines the impact significant. Air District staff will clarify the language in the draft CEQA Guidelines.
- 75-7 The construction risk and hazard screening table is under development and will be added to the Guidelines once it has been completed. The table will include Air District modeling results to help Lead Agencies identify risk levels near active construction sites. The table will be completed before we work with local agencies and begin implementation of the Guidelines before they are effective.



76

November 23, 2009

Mr. David Vintz
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

RECEIVED
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BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

Dear Mr. Vintz:

I have reviewed your organization's November 2, 2009 Proposed Thresholds of Significance for climate change impacts under CEQA. Our company is currently processing entitlements for the Angwin Ecovillage in Napa County. We expect this highly sustainable project to meet or exceed AB 32 GHG thresholds for both 2020 and 2050 owing to its comprehensive package of energy conservation and transportation-related community design features. We are also the master developer for the revitalization of downtown Vallejo, a transit-oriented, mixed use, infill project with a Specific Plan that was awarded best in the state by the APA.

I would like to offer the following observations on your land use sector for consideration in the final draft of any BAAQMD thresholds document:

1. In furtherance of the goals of encouraging transit-oriented and infill development, I am concerned that a threshold of 4.6 MT of CO₂e/SP would not be aggressive enough to help shift more greenfield projects into infill, TOD projects. While certain cities and counties already embrace commitments to a qualified Climate Action Plan, others do not as yet and could see this 2020 threshold as modest enough to continue the practice of ignoring emissions and making findings of overriding considerations.
2. Because of the sacred nature of local land use control, the more forward-thinking jurisdictions addressing reduced VMT and GHG emissions should require developers to work harder to have their impacts be considered less than significant. I suggest that estimating a 2050 threshold calculation beyond 2020 as a base requirement is superior because virtually all land use decisions exceed a 40-year life span. As you suggest, we want more projects to become a part of the emissions solution, not the emissions problem.

76-1

76-2

As a Board Member of the California Infill Builders Association ("CIBA"), I would like to thank the BAAQMD for taking the initiative to recommend thresholds of significance that will help move land use in a better direction. The comments above for more aggressive targets are my own; however, I think it is fair to say that CIBA's mission is to advocate for legislation and meaningful

76-3

policy that levels the playing field for infill builders that care about GHG emissions and sustainable development in general. I trust the BAAQMD recommended thresholds for the sustainable use of land could lead the way toward achieving that important goal.

76-3

Thank you for your consideration.

Sincerely,



Curt Johansen
Executive Vice President

C: Mary Nichols, California Air Resources Board
Edmund G. Brown, Jr., Attorney General
Mike Chrisman, California Resources Agency

1-07

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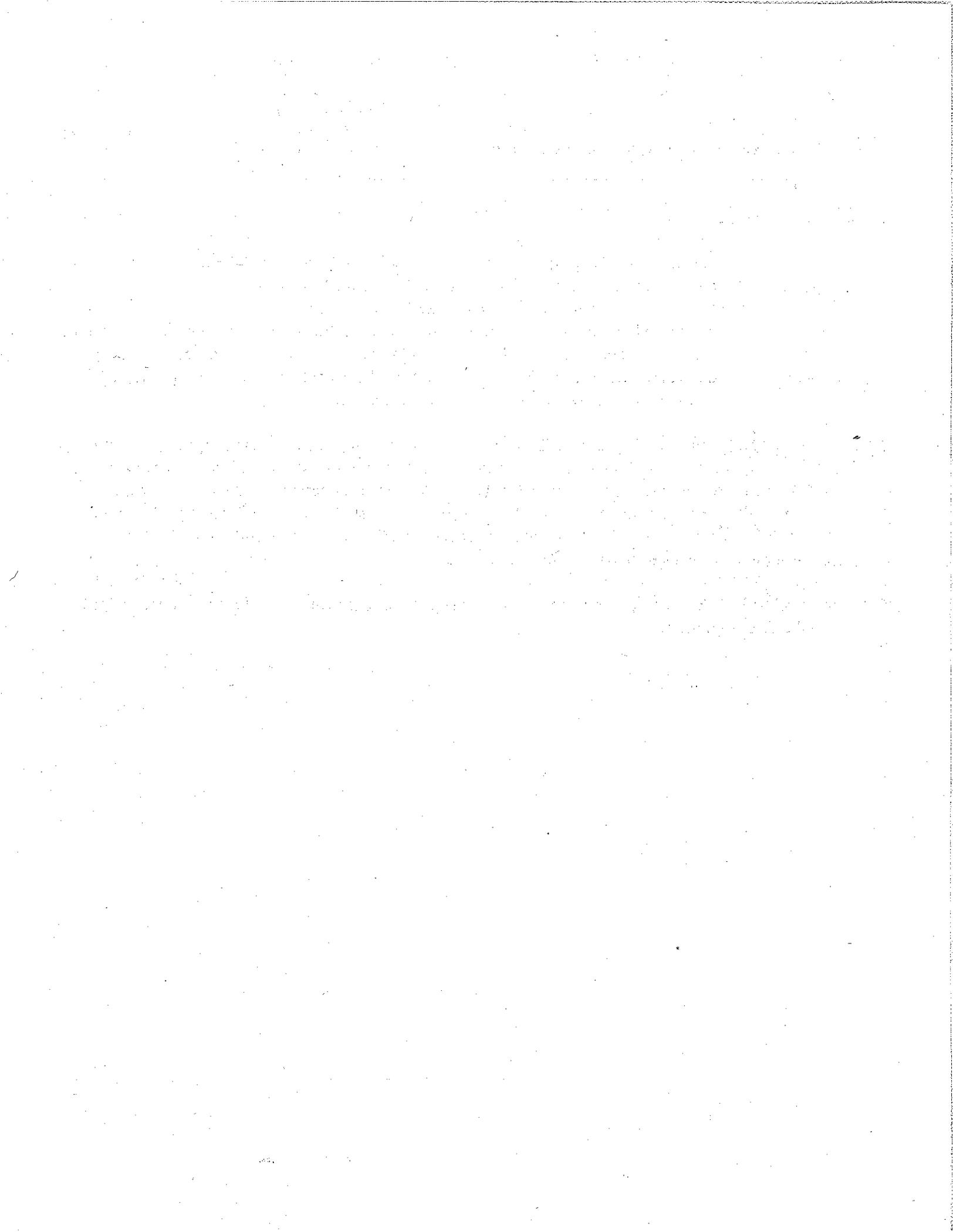
Comment Letter #: 76

Date: November 23, 2009

From: Curt Johansen, Executive Vice President, TRIAD

Response to Comments:

- 76-1 The commenter suggests that the proposed GHG efficiency-based threshold of 4.6 MT CO₂e per service population is not aggressive enough to shift more greenfield projects into infill and transit-oriented development locations. The proposed thresholds for GHG impacts are interim thresholds. Staff recognizes the need to go beyond the 2020 goals of AB 32 and set thresholds that help achieve climate stabilization. Air District staff has committed to reevaluating the GHG thresholds to both track their effectiveness and to revise the thresholds in the future to address California's longer term objective to stabilize climate change. Also see Master Responses MR-1 and MR-3.
- 76-2 Air District staff has added discussions in the Proposed Thresholds of Significance report (December 7, 2009) and the Draft CEQA Guidelines (December 2009) to clarify that AB 32 goals are interim and that its 2020 goals are a milestone toward 2050 goals and climate stabilization. Air District staff has committed to monitor implementation of the thresholds to ensure that the reduction goals are met. Staff is also committed to periodically review the proposed GHG thresholds and revise them as necessary to achieve both short and long objectives.
- 76-3 The Air District acknowledges and appreciates the support of the commenter for the proposed GHG thresholds of significance.



From: Paul Campos [pcampos@hbanc.org]
 Sent: Tuesday, November 24, 2009 3:55 PM
 To: ptorliatt@aol.com; bwagenknecht@co.napa.ca.us; mayor@cityofberkeley.info; hbrown@co.marin.ca.us; chris.daly@sfgov.org; sgarner@montesereno.org; dist1@bos.co.contra-costa.ca.us; cgroom@co.sanmateo.ca.us; scott.haggerty@acgov.org; jhosterman@ci.pleasanton.ca.us; yoriko.kishimoto@cityofpaloalto.org; cityclerk@dalycity.org; liz.kniss@bos.sccgov.org; eric.l.mar@sfgov.org; nate.miley@acgov.org; gavin.newsom@sfgov.org; mross@cityofmartinez.org; jspering@solanocounty.com; gayle@bos.co.contra.costa.ca.us; ken.yeager@bos.sccgov.org; szane@sonoma-county.org
 Cc: Jack Broadbent; Gregory Tholen; David Vintze; rosejg@co.sanmateo.ca.us; henryg@abag.ca.gov; district1@acgov.org; sheminger@mtc.ca.gov; tedd@abag.ca.gov; bdodd@co.napa.ca.us; sean@bayareacouncil.org; travis@bcdca.gov; Cathy Creswell; calla.ostrander@sfgov.org; dranelletti@oaklandnet.com; akoni.danielsen@sanjoseca.gov; dmarks@ci.berkeley.ca.us; gilliana@abag.ca.gov
 Subject: CEQA Guidelines Comments--Continued From Nov. 18 Hearing
 Dear Board Members,

I testified on the proposed CEQA Guidelines at the Board's November 18, 2009 meeting on behalf of two building industry organizations representing thousands of companies and hundreds of thousands of employees statewide. At the expiration of the 120 seconds of time allotted by Chairwoman Torliatt, I requested two additional minutes to complete my remarks. Chairwoman Torliatt denied that request and instead suggested that I submit them in writing. I do so now.

Our fundamental message to Board members is this: if you do nothing else, please read the comments below from Bay Area cities, counties, sister regional agencies, and technical consultants. They are among the 624 pages posted by BAAQMD staff late in the afternoon on Friday, November 13--two work days before the Board's November 18 meeting. These comments paint a very different picture--and in fact directly contradict--the narrative advanced by some at the November 18 meeting. That narrative is that (1) there is a universal clamor by local agencies and planners to adopt the Guidelines immediately; and (2) the Guidelines as currently proposed promote smart growth, infill, transit-oriented development, and successful implementation of SB 375.

77-1

As I stated clearly at the hearing: the organizations and interests I represent support the adoption of revised CEQA Guidelines--including thresholds of significance for GHG. But we agree with the agency and technical expert comments below that the current proposal is fundamentally flawed and that what is needed is for the full Board to engage on this issue, most appropriately by holding a full day Board workshop where all of the stakeholders and BAAQMD staff can articulate their positions, concerns, listen, and respond--all in the presence of the full Board.

We urge you not to be pushed into taking quick action for the sake of acting quickly or being the "first in the nation." We need to get this right. Please direct BAAQMD staff to schedule a full Board workshop in January to ensure that we do get it right.

Yours very truly,

Paul Campos

COMMENTS ON THE GUIDELINES

City and County of San Francisco, Planning Department:

"The San Francisco Planning Department strongly urges BAAQMD to postpone development of GHG thresholds of significance until convening with stakeholder groups and local planning agencies versed in the CEQA process. We believe that through these stakeholder sessions, the District will be able to develop appropriate CEQA thresholds of significance that advance the State and Region's efforts to reduce GHG emissions from the land use sector in a more context-sensitive way."

77-2

"BAAQMD needs to immediately establish a technical working group comprised of environmental practitioners from Bay Area cities and counties to develop revisions to correct the methodological flaws and unintended consequences that we and other commenters have identified."

"We again strongly urge BAAQMD to engage in a collaborative effort that would be more constructive than proceeding with contentious hearings and further critiques of hurriedly released documents."

"The Planning Department does not believe the the proposed BAAQMD Guidelines, with respect to greenhouse gas emissions, are consistent with the Office of Planning and Research's (OPR's) proposed amendments to the CEQA Guidelines.... [O]ur testing of the proposed thresholds for operational emissions and GHG for typical San Francisco projects indicates that smart growth development projects in San Francisco would incongruously trigger EIR requirements and have the deleterious effect of discouraging the types of projects that should be encouraged.... It is our contention that the BAAQMD Guidelines would inhibit San Francisco's ability to meet its GHG reduction targets under SB 375 and may actually impede the region's practical ability to promote land use patterns consistent with SB 375 mandates."

"BAAQMD's Thresholds of Significance proposes buffer zones wherein particular types of land uses apparently would not be allowed. This approach would be counterproductive because many opportunities in San Francisco and other cities with infrastructure that can support infill development are situated in these zones."

"Among the likely practical effects of the BAAQMD Guidelines and its belatedly released, supporting Thresholds of Significance and Appendices A-G documents is that project sponsors will not proposed projects that integrate multiple uses (i.e. retail, restaurants, cafes, etc) into one development, as this integration would almost always push a project's GHG calculations over the proposed numeric thresholds. What is not considered in these Guidelines are the effects of not integrating such land uses.... Our review of the proposed thresholds, as concluded in this letter and in a previous letter sent to BAAQMD...shows that the proposed thresholds would not further transit-oriented and infill development."

• City and County of San Francisco, SF Environment Department:

"Technical concerns with the new Draft CEQA Guidelines have been expressed by the San Francisco Planning Department. We second those concerns and would like to add the following. The proposed greenhouse gas (GHG) thresholds in the Draft 2009 Air Quality Guidelines Update are seriously flawed and should not be adopted in their current form... The proposed screening levels would trigger unnecessary and burdensome environmental review.... Instead of focusing GHG emissions on a quantitative threshold, a more appropriate mitigation approach may be to develop project-based reduction targets and standard mitigations. There should be a mechanism by which projects can reduce their emissions by a percentage compared to 'business as usual.'.... The proposed GHG regulations undermine the regional planning goals of SB 375.... Although it will take time to implement the SCS planning process, SB 375, unlike the proposed 2009 Guidelines, recognizes the importance of not just considering the land use type and square footage, but also taking into account location, density, proximity to transit and other factors affecting a project's contribution to GHGs.... The City recommends that the adoption of the Guidelines be postponed until a stakeholder review process takes place and public comment is incorporated."*

*Note: The SF Environment Department letter is signed by Director Jared Blumenfeld, recently appointed Administrator for EPA Region IX--the principal federal agency responsible for regulating air quality and developing national policy to reduce GHG emissions

City of Oakland:

"[T]he City believes that a collaborative process involving stakeholder representatives would be a more effective method for preparing the new Guidelines. The City requests that the District consider conducting such a stakeholder process before releasing a revised draft of the new Guidelines."

"[The District's] approach is inconsistent with the District's stated goal of promoting smart growth and infill development, as well as with SB 375.... The proposed screening criteria do not appear to support smart growth if an urban infill project that would otherwise be exempt from environmental review exceeds the screening criteria that are applied to all projects in the region only to determine later that the project would not exceed the quantified threshold of significance after the completion of a lengthy and costly environmental review process."

"Data from the Draft 2007-2014 Housing Element of the Oakland General Plan indicate that housing opportunity sites capable of accommodating approximately 4,500 dwelling units in Oakland are located within 1,000 feet of a freeway. 'Opportunity sites' are vacant or underutilized sites which are currently zoned for high-density housing. The 4,500 dwelling units represent nearly half of all the potential housing that could be accommodated on opportunity sites in the city... Given the large number of potential new housing units to be developed near freeways and other sources of TAC, and the goals of the District, SB 375, and the Bay Area Focus Program of promoting smart growth and infill development, the City believes it is important for the community risk and hazard impact methodologies and thresholds to carefully balance the goals of promoting smart growth and minimizing local health impacts."

City of San Jose:

"We are concerned...that in a number of instances , the proposed Guidelines will have unintended consequences and inhibit the City's attempts to focus growth in transit-rich urban infill locations.... By focusing on size rather than project performance, the new lowered thresholds will unfairly penalize large projects that are appropriately located and supported by transit, and still allow smaller, auto-oriented projects in more remote locations that result in more emissions on a per unit or per capita basis to avoid responsibility for mitigation."*

"The threshold for GHG could trigger completion of an EIR and force cities to adopt overriding considerations for some projects, including dense infill projects near transit, that otherwise would have no significant unavoidable impacts."

*Note: While BAAQMD staff has represented to the Board that the so-called efficiency option/service population approach will address the concern about penalizing large smart growth projects, in fact the proposed Thresholds of Significance include what has come to be called the "Infamous Asterisk": "**Staff notes that the efficiency-based thresholds should be applied to individual projects with caution... If there is a fair argument that the project's emissions on a mass level will have a cumulatively considerable impact on the region's GHG emissions, the insignificance presumption afforded to a project that meets its efficiency-based GHG thresholds would be overcome." In other words, the averred safe harbor is not a safe harbor at all.

City of Berkeley:

"It is therefore with great surprise and concern that we find the proposed Guidelines to fall far short of achieving that goal [effectively addressing climate change]. Moreover, if adopted without significant modification, the Guidelines would have unintended consequences that would set the region back from the goal we are all trying to achieve.... The Guidelines would not promote regional smart growth which is fundamental to achieving GHG reduction goals related to land use and transportation. The Guidelines would essentially eliminate the 'infill-exemption' for many multi-family infill projects.... The Guidelines place too much and too narrow reliance on jurisdictions adopting enforceable Climate Action Plans for promoting overall policies to reduce GHG at a time when there are no clear metrics or standards for developing and measuring/modeling the efficacy of such plans." 77-2

"The draft BAAQMD guidelines take a myopic approach to the issue of how CEQA should be applied in regard to GHG emissions for land use and transportation. Instead of recognizing at the beginning of the process the importance a project's location has on VMT and associated emissions, the draft Guidelines treat all projects as if they had the same impact and then seek to mitigate it. This is backwards.... Rather than treat all projects the same, the Guidelines should begin with the premise that the CEQA process should be minimized for projects consistent with achieving the locational and development criteria that would limit or eliminate the need for air quality impact assessment, especially for GHG emissions."

"The draft Guidelines have no measures for how a plan promoting appropriate smart growth infill development can 'take credit' for the location that growth in the region. Meanwhile, each project and each plan, no matter how transit friendly and no matter how 'green,' will have localized impacts. Those localized impacts may be significant on a local level, while providing significant regional benefits by efficiently accommodating growth with minimum air quality impacts. The Guidelines do not yet account for such a regional benefit.... [T]he most important benefit of smart growth is not localized or even limited to a few jurisdictions--it is regional.... [T]he Guidelines not only fail to actively encourage development patterns essential to meeting GHG goals, but would make things worse."

"The Guidelines' solution to the the high cost and increased risk to development of project-by-project CEQA assessment of GHG impacts is for cities to prepare detailed Climate Action Plans.... Berkeley has prepared what is considered to be one of the most specific and far reaching Climate Action Plans in the country, and yet that plan would not meet the standards set forth in the BAAQMD document.... In preparing the City of Berkeley's CAP, we reviewed CAPs from all over the country and did not find one that would meet BAAQMD's proposed requirements."

"The recent release of the [Thresholds Document] has let to considerable confusion. The relationship of this new document to the Guidelines is difficult to easily determine.... After speaking to BAAQMD staff, the relationship of the two is still not entirely clear to us, and having these two documents released at different times has let to the feeling that there is a 'moving target' for our comments.... The Draft Guidelines are fundamentally flawed."

"In developing revised Guidelines, perhaps a more focused technical advisory group directly involving staff from local jurisdictions might be an effective means of addressing the issues raised."

"As noted in our letter, in our view these Guidelines need additional work and especially more engagement with local government CEQA practitioners.... Establishing a technical advisory committee including local government CEQA planners, along with some of the stronger regional air quality consultants, might lead to some insights and improvements."

City of Emeryville:

"We agree with the City of Berkeley that the way to encourage the kind and location of development that will meet these standards is to make it easy for them to develop dense--and we would add mixed-use--projects with transit demand management features near transit and services.... Let's not make it even harder for developers to build these projects."

City of Newark:

"The City of Newark has serious concerns that these proposed guidelines would have the unintended consequences of undermining the region's efforts to develop in a more sustainable way.... The proposed guidelines...actually undermine the City of Newark's and the Region's efforts to address this important issue."

"[T]he draft guidelines are an unfortunate step backwards. We urge the district to carefully consider its underlying goals, and devise guidelines that can better meet those goals. In revising the guidelines, a focused technical advisory group directly involving staff from local jurisdictions might be an effective means of addressing the issues raised."

City of Fremont:

"The City of Fremont concurs with comments from the City of Berkeley that the guidelines have the potential to undermine approval of desirable and long-term beneficial development projects by lengthening their evaluation.... The City's recent experience in site selection exercises is that competition is not just within the air basin or California, but rather within the United States as a whole. It is unlikely that we could have retained a local solar panel manufacturing plant expansion project supported by the Governor and United States Department of Energy if the project schedule had included six additional months of review and complexity for a construction impact EIR." 11-2

"We support the use of performance and per capita types of metrics for evaluating projects and not penalizing large projects that operate efficiently."

Alameda County:

"Alameda County wishes to support the discussion and arguments of the City of Berkeley.... We believe the City makes a number of excellent points about potential drawbacks of the new guidelines regarding GHG emissions.... The Guidelines would place obstacles to local and regional smart growth efforts, which are fundamental to achieving GHG reduction goals related to land use and transportation. The Guidelines would essentially eliminate the 'infill exemption' for many multi-family projects.... We urge you to consider these concerns and work closely with the agencies who, on a daily basis, must deal with these issues and arrive at effective and workable solutions to the climate change problems facing each of us."

City of San Leandro:

"The City of San Leandro supports the recommendations contained in the City of Berkeley's comments.... Additionally, we believe that BAAQMD is proposing adoption of the CEQA Guidelines too quickly as staff may not have foreseen the unintended consequences of these guidelines. We urge BAAQMD to extend its timeline in order to consider these consequences."

City of Redwood City:

"While supporting the District's efforts to protect the Bay Area's air quality, the City has taken this opportunity to alert the District to potential conflicts between various District programs and proposals and the City's and region's efforts to restore job growth and improve the economic circumstances of all residents in the Bay Area."

City of Union City:

"[I]t is anticipated that the Guidelines may fail to encourage development patterns essential to meeting the State's greenhouse gas emissions reduction goals.... This methodology will have a detrimental impact on infill projects...."

City of San Rafael:

"We are concerned that the draft documents do not appropriately or fairly address the assessment of project-level operational impacts for infill projects in urban areas."

City of Livermore:

"[W]e are very interested in the realistic implementation effects of the proposed thresholds, particularly at the project level. Specifically, we are concerned (and in agreement with comments provided by the City of Berkeley).... Given the importance of comments that are being raised by numerous jurisdictions, we respectfully request that the BAAQMD acknowledge and address the comments received prior to taking any action to adopt the new Guidelines. Additionally, we encourage the BAAQMD to revise the guidelines and allow for additional opportunity for stakeholder input and review of the Guidelines."

City of Santa Rosa:

"Please...provide direction on methodologies for measuring project/cumulative levels of GHG impacts. We currently use the URBEMIS software but have no direction on its effectiveness or standardization."

Association of Bay Area Governments (ABAG):

"While we support limits on the addition of new emission sources in these priority communities, we are concerned about any steps the Air District might take that would limit the introduction of new residents and workers into these areas. Many areas within the Air District's priority communities have also been identified by local governments as Priority Development Areas (PDAs) through the FOCUS program. The PDAs are infill development opportunity areas where local governments are committed to developing housing, amenities, and services to meet the needs of residents in a pedestrian-friendly environment near transit.... It would be counterproductive if the Air District's proposed threshold changes act as a deterrent to growth in these areas and push development to greenfield sites in the outer suburbs, where the amount of driving would be greater.... Given the need to balance air quality concerns with the potential benefits of infill development, the Air District should evaluate the relative merits of proposed mitigation measures based on their effectiveness, costs, ease of implementation, and any potential for discouraging development in these areas."

71-2

Metropolitan Transportation Commission (MTC):

"[W]e believe this threshold could erroneously lead to significant impacts, even when implementation of the proposed project would result in improved air quality. In particular, a project that encourages transition of vehicle fleets to electric vehicles could result in improved air quality, but also higher levels of vehicle travel relative to population increase."

David J. Powers & Associates:

"The thresholds for greenhouse gas emissions, considering indirect emissions from electricity use, could trigger completion of an EIR and the need to adopt overriding considerations for some projects that otherwise would have no significant unavoidable impacts. Our concern is that identifying significant unavoidable GHG impacts too frequently will cause the issue to lose its meaning and there will be less of a distinction between smart growth and urban sprawl. For example, in the case of infill projects and new industrial projects on brownfield sites, where a climate action plan has not been adopted (most of the Bay Area), this threshold could discourage redevelopment in areas that ultimately would reduce VMT per capita or VMT per Service Population (SP)."

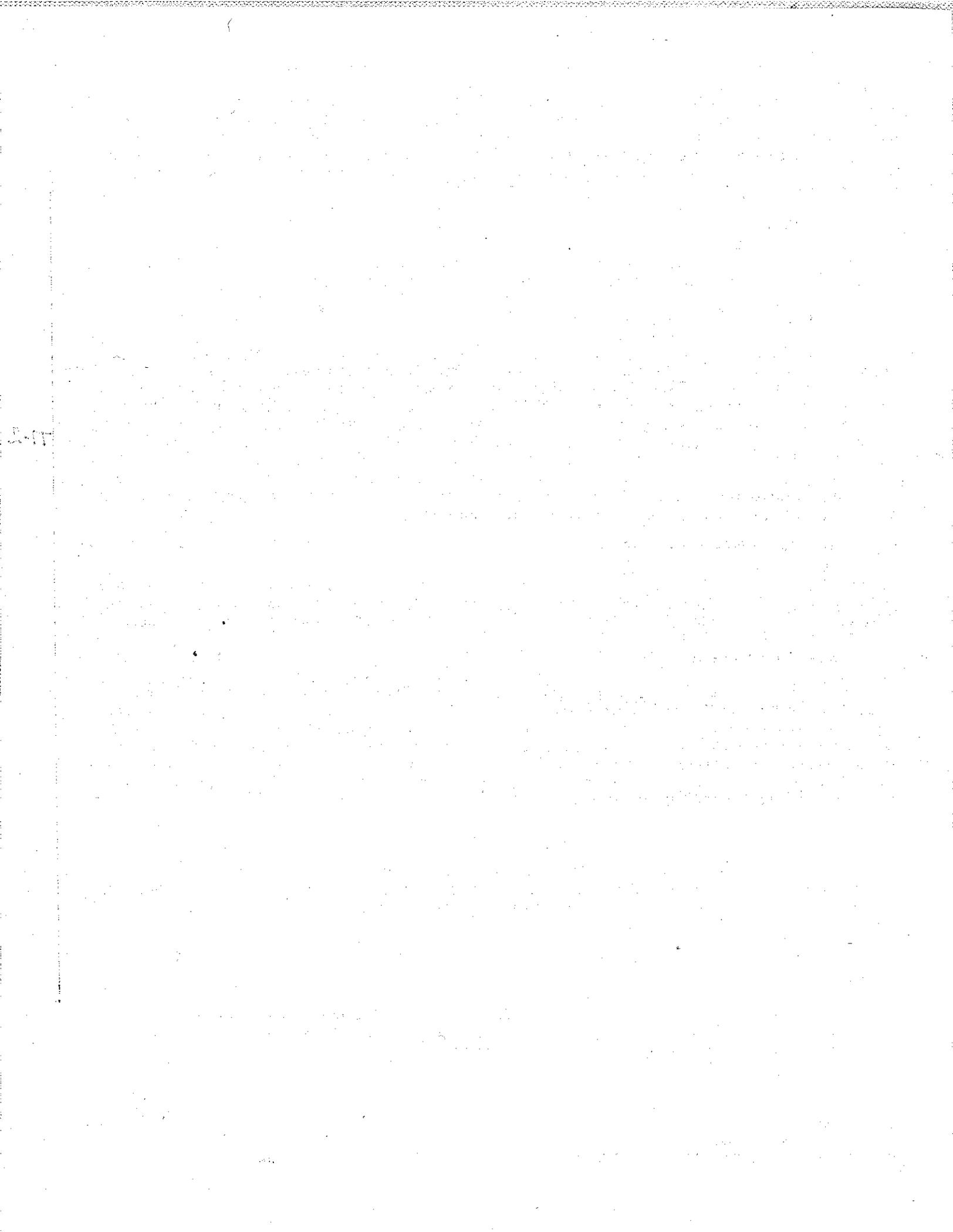
LSA:

"The proposed threshold of significance for GHG emissions of 1,100 metric tons is extremely low. Many projects would have a significant, if not significant and unavoidable, impact if the threshold is established at this level.... [S]uch a low threshold may require detailed analysis of projects that would otherwise not have a significant environmental impact in any other topical area."

Jones & Stokes:

"[The Guidelines should] allow project applicants to demonstrate 25 to 35% reduction by comparison to default/BAU [Business as Usual] GHG calculation to project project GHG emissions.... Doesn't make sense to make 'good' development get 25-35% 'more' mitigation on top of good design."

--
Paul Campos
Sr. V.P. & General Counsel
Home Builders Association of Northern California



Comment Letter #: 77

Date: November 24, 2009

From: Paul Campos, Senior Vice President, Home Builders Association of Northern California

Response to Comments:

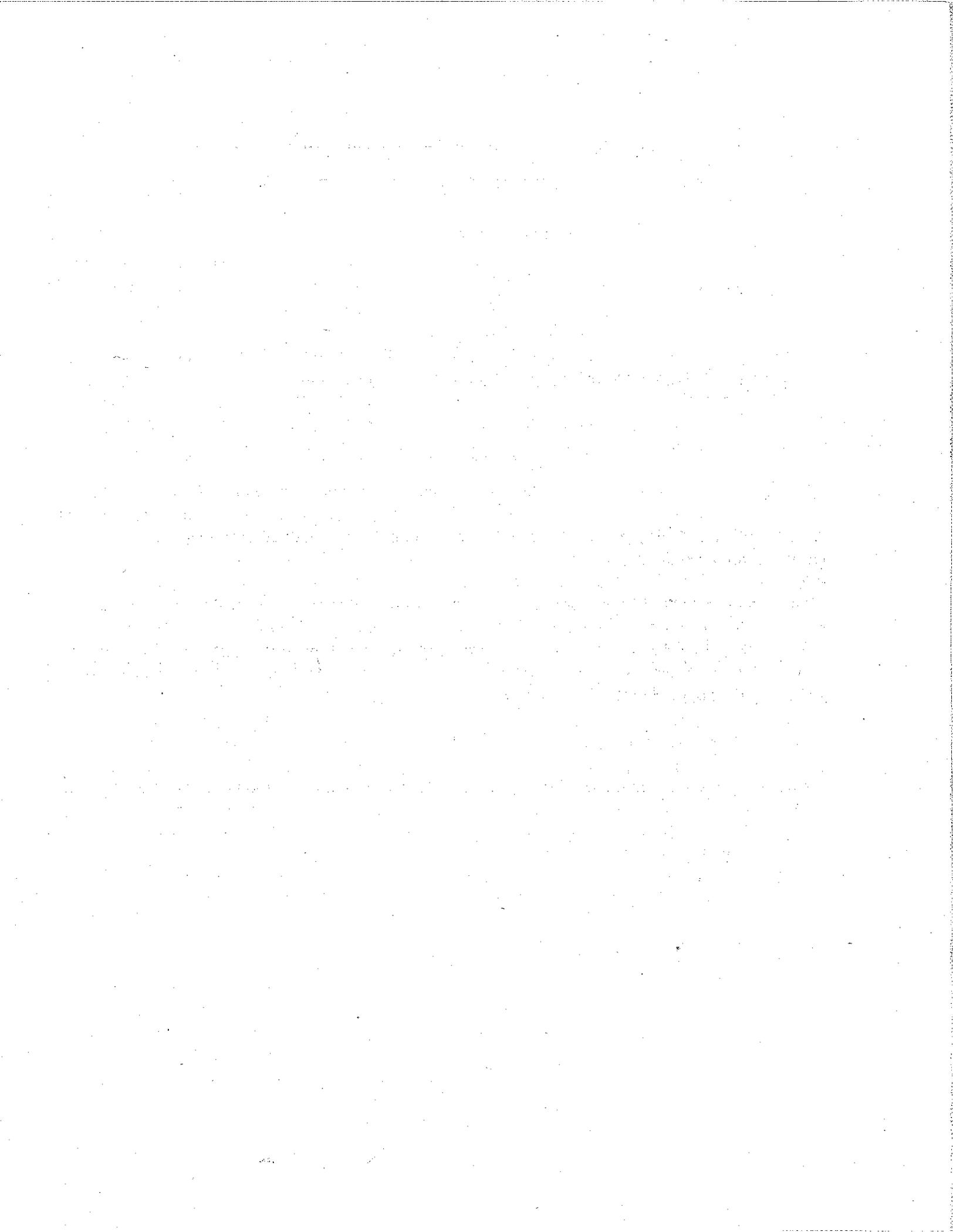
77-1 The purpose of the CEQA Guidelines is to recommend what the Air District would consider a significant air quality impact under CEQA for proposed projects. As part of its update to the District's CEQA Guidelines, Staff developed a GHG threshold largely in response to local governments' expressed need for additional guidance in this area. Staff initiated the CEQA Guidelines update process in February 2009 and provided a number of opportunities, through multiple workshops and commenting periods, for stakeholder to articulate their positions and concerns. Staff responded to formally written comments received before November 1, 2009 in the November 18, 2009 Board meeting packet. Throughout the process, Staff reported to the Board on the CEQA Guidelines, including concerns expressed by stakeholders.

It is in the Board's discretion to hold a full day Board workshop to discuss the CEQA Guidelines. At the December 2 Board meeting, the Board directed staff to meet with local government planning directors and health officers. Following, staff invited local government planning directors and health officers to a workshop on December 15, 2009.

Staff is proposing that the Board adopt a 90-day effective period upon adoption of the thresholds. During the 90-day period, staff intends to initiate an implementation plan to assist local governments in applying the adopted CEQA thresholds for air quality. As part of the implementation plan, staff will meet with local governments and stakeholders to address concerns and provide training and guidance for applying the adopted CEQA thresholds to proposed projects.

See also Master Response 3 and 8.

77-2 Staff provided responses to the comment excerpts listed by the commenter in the November 18, 2009 Board packet.



Transportation Solutions Defense and Education Fund

P.O. Box 151439 San Rafael, CA 94915 415-331-1982

November 25, 2009
By E-Mail

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

Re: Response to Comments on the Revised Draft CEQA Thresholds of Significance

Dear Greg:

TRANSDEF, the Transportation Solutions Defense and Education Fund, submitted a comment letter on the Revised Draft CEQA Thresholds of Significance and testified at the November 18th Board hearing. We would like to offer the following observations about the process of developing new Guidelines, identify some concerns about the current staff proposals, and point out problems in the responses to our previous comments. We'll start by thanking District staff for producing Table 1 of the November 2nd Proposed Thresholds. It is an exemplar of conciseness, organization and clarity.

Observations on the Process

The path to the adoption of new CEQA Guidelines has been overly chaotic, with various staff documents offering inconsistent recommendations for thresholds. It has been very hard to understand exactly what the District was recommending, and which version was the authoritative one. There have been so many documents, with similar titles, that it is far too easy to get confused, and to lose one's place. Part of the problem may very well be the volume of information that is contained in these documents. That volume poses a strain on both the staff and the reviewing public.

It is particularly irksome that some documents, after being reviewed by the public, are being allowed to become obsolete and irrelevant. For example, much work went into reviewing the Revised Draft Options and Justification Report. It seems disrespectful to the public to suddenly change course and abandon this document. This had not been identified as a temporary document, being used just to jumpstart the Guidelines process. In the final analysis, the process would have been much less confusing had this document never been issued.

Very late in the process, the decision was apparently made to separate the Thresholds adoption from the Guidelines adoption. However, the steps to the adoption of the Guidelines have remained unclear. Will staff just bless them one day?

To remedy the confusion, we strongly recommend the District take the following steps:

1. Issue a table prior to the next Board hearing which identifies the threshold recommendations for each of the District's 2009 documents. This would allow the public to see how recommendations have changed as the documents were revised.

78-1

2. Announce a clear-cut comment period for comments on the November 2009 draft of the Guidelines. We are concerned that staff may adopt these without having conducted a proper comment cycle. Given all the work involved with the Thresholds, many organizations, like ours, simply have not had the bandwidth to intensively review the Guidelines yet. It would be especially helpful if the District produced a redline version, showing what was changed from the September draft of the Guidelines.

78-2

3. The Responses to Comments assert that "Air District staff does not anticipate revising the Revised Draft Options and Justification Report." (57-6). That leaves open the question of whether any Appendices will be added to the November 2nd Proposed Thresholds of Significance. This needs to be resolved.

78-3

4. The District must clean up the names of the documents linked to on its CEQA Guidelines page. It would be best if a table could be created that shows the different versions of the same document, grouped into a row or column, each with a date in its title. The current format, in which all the links are squeezed into a narrow column, is exceedingly unhelpful.

78-4

5. Upon reviewing Table 1 of the November 2nd Proposed Thresholds, it suddenly became apparent that the category "Risks and Hazards" is different from all the other entries in the Pollutants column, in that it does not represent a pollutant, or even a class of pollutants. Could this category be renamed Toxic Air Contaminants? Because we doubt that the term "Risks and Hazards" has any regulatory definition, we would strongly prefer that this category use standard air quality terminology.

78-5

GHG Efficiency-Based Thresholds

TRANSDEF believes that errors in the methodology used to develop the Land Use Projects and Plan-Level GHG Efficiency-Based Thresholds will result in impacts that cumulatively will prevent the State of California from achieving its AB 32 targets. The consistent problem for both Thresholds was the failure to separate out the existing service population from the future additional population. The efficiency thresholds as proposed in the November 2 document would set significance as exceeding the average emissions for the service population in 2020.

78-6

However, this would require the existing population to reduce its emissions to the same degree as new development, something that is unlikely to ever happen. The very structure of existing suburban development has a much higher embedded level of energy consumption than that of compact transit-oriented mixed use development. This is why the ARB Scoping Plan was able to call for 5MMT reductions from the Land Use sector, and why the Legislature needed to enact SB 375 so as to actually achieve those reductions.

According to our calculations, if new developments were 50% more energy-efficient than existing residents, that would require new development to achieve a GHG efficiency target of 3.9 MT/SP, while existing residents achieved 4.7 (thus resulting in the average of 4.6, as calculated in Table 6). If new developments were 100% more energy-efficient than existing residents, that would require new development to achieve a GHG efficiency target of 3.4 MT/SP, while existing residents achieved 4.8. As shown by these calculations, the threshold for new developments would have to be substantially lower than 4.6 if the State is going to achieve an average efficiency of 4.6 in 2020.

While it may be politically convenient to avoid setting a low efficiency threshold, the evidence justifying the selection of the 4.6 MT/SP threshold, or the 6.6 MT/SP Plan-level threshold is flawed and inadequate. On the contrary, we have shown that these proposed thresholds will not limit 2020 emissions to fit within AB32 targets, because they assume equivalent and extremely unlikely emissions reductions by the existing service population.

Problems with the Responses to our Comments

1. We feel strongly that Response 57-2 dropped the ball on 2050 reduction targets. Massive emissions reductions are needed for 2050, and they need to start as soon as possible. We agree that the gap methodology may indeed be too speculative to use for 2050 targets. This should not, however, inhibit the District from effectively enlisting the CEQA process in securing 2050-scale GHG reductions from current projects. The District could encourage these "additional" reductions (essentially, mitigations that take project GHG emissions below threshold levels) by promoting within the CEQA Guidelines an awareness of the forthcoming Climate Action Registry credits. Project sponsors who are educated about eligibility for credits will be both more capable of, and more interested in, finding economically viable advanced energy efficiency improvements.

78-7

2. There is no response to Comment 57-8. Response 57-8 is actually a response to Comment 57-9. All the Response numbers, from this point to the end, need to be shifted one number higher.

78-8

3. Response 57-11 ("Comment noted") to comment 57-12 was inadequate. If we are correct that the following statement (restated in the November 2 Proposed Thresholds on page 9) is untrue, it must be deleted: "If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for State funding programmed after January 1, 2012."

78-9

4. Response 57-14 was a rationale for not instituting a no-net-TAC standard in impacted communities. Now that the Board has expressed interest in this approach, please go back to our suggestion to consider the water conservation model. In locales with such a regulatory environment, to obtain the right to install new water services, developers pay to install water efficiency devices in off-site locations. This results in a no-net increase in water consumption.

78-10

5. Response 57-16 failed to respond to our comment that the contents of a Community Risk Reduction Plan need to be mandatory, requiring that the "should" on page 37 of the November 2 Proposed Thresholds be replaced by "shall". Analogously, the "should"s on page 24 referring to the contents of a Qualified Climate Action Plan need to be "shall"s.

78-11

6. TRANSDEF asks that staff explicitly make CEQA review mandatory for establishing equivalency to a qualified climate action plan. Response 57-26 ignored the central point of our comment: A local set of policies, ordinances and projects must not be allowed to qualify as a Climate Action Plan unless it is demonstrated that it contains enough enforceable feasible measures. The best process to demonstrate this would be CEQA review, as it already contains a robust public review and comment process (even if only a Negative Declaration is required). Because an EIR may tier from a Climate Action Plan, there has to be an adequate process to determine whether a set of policies is good enough to prevent cumulative GHG impacts. CEQA and an alert public will ensure that.

78-12

Thank you for the consideration of these comments. As always, we stand ready to assist the District in the development and implementation of these Guidelines.

Sincerely,

/s/ DAVID SCHONBRUNN

David Schonbrunn,
President

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01-87

Comment Letter #: 78

Date: November 25, 2009

From: David Schonbrunn, President, Transportation Solutions Defense and Education Fund

Response to Comments:

- 78-1 To avoid confusion, staff believes that the board packet for the January 6, 2009 Board meeting should include a summary table of the proposed thresholds alone, and not other thresholds previously considered by staff. The District's CEQA webpage contains documentation of previously considered thresholds of significance. The webpage has been revised to clearly state the date each document was published.
- 78-2 Based on comments received and Board direction, staff revised the CEQA Guidelines and Proposed Thresholds of Significance report. Staff released the revised documents on December 7, 2009 to allow for a 30 day review period prior to the January 6, 2009 board meeting. The 30 day review period is in conformance with the Air District's normal practice for public notice prior to the Board's consideration of adoption of air quality plans and regulations. The revised documents are available on the District's website, along with a list of tracked revisions made to the November version of the CEQA Guidelines.
- 78-3 Once the District's Board takes action on the proposed thresholds the Proposed Thresholds of Significance report (last updated December 7, 2009) will be added as Appendix D in the CEQA Guidelines. The purpose of the Revised Draft Options and Justification Report was to explore different threshold options for potential consideration and to serve as a background resource. Once staff developed recommended thresholds, we prepared the Proposed Thresholds of Significance report to present the staff-recommended proposed thresholds for public input and Board direction.
- 78-4 Staff agrees that the current document table on the District's CEQA webpage could be confusing and is working on ways to better display the table and document contents.
- 78-5 The "risk and hazards" grouping is intended to act as a more easily understood terminology for explaining concerns surrounding toxic air contaminants and fine particulate matter. The commenter is correct in that "risks and hazards" does not have a regulatory definition. However, with regard to the potentially significant public health impacts of toxic air contaminants and fine particulate matter, staff believes that the term "risks and hazards" better represents these pollutants than the standard air quality terminology.
- 78-6 The GHG efficiency threshold is based on the efficiency level that all land use, including existing land uses, needs to be at by 2020. The CEQA process cannot address existing land uses, but it does allow us to push for new projects to meet higher efficiency levels. The push for new development to be more GHG efficient will begin the downward slope needed to meet 2050 emission targets for climate stabilization. Staff also recognizes that the GHG efficiency threshold is an interim one that will be monitored, reevaluated, and adjusted as necessary to ensure that new development is able progress toward the state's 2050 goals. The Proposed Thresholds of Significance (December 7, 2009) provides additional justification for the GHG efficiency threshold.

- 78-7 The CEQA Guidelines (December 7, 2009) provides numerous mitigation measures for lead agencies to implement to reduce a proposed project's GHG emissions to below the threshold levels. Lead agencies may also offset their GHG emissions through the purchase of Climate Action Registry credits, as recommended by the commenter.
- 78-8 Staff apologizes for the incorrect numbering of comment responses.
- 78-9 Staff will investigate whether the statement, "If MPOs do not meet the GHG reduction targets, transportation project would not be eligible for State funding programmed after January 1, 2012," in the CEQA Guidelines is incorrect and will correct is as necessary.
- 78-10 See comment response 71-2.
- 78-11 See comment response 72-3.
- 78-12 Staff agrees that the best way for lead agencies to demonstrate enforceable feasible measures is through a CEQA review. A lead agency's set of policies, ordinances, and projects should undergo CEQA review if they qualify as a project under CEQA in the State CEQA Guidelines Section 15378; which broadly defines a project as, "the whole of an action, which has a potential for resulting either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment..."

79



SENT VIA ELECTRONIC MAIL

December 1, 2009

Mayor Pamela Torliatt, Chair, and
Members of the Board of Directors
Bay Area Air Quality Management District
939 Ellis Street
San Francisco CA 94109

Re: **Request for Postponement in Board's Adoption of New CEQA GhG
Thresholds and Guidelines; Establishment of a Meaningful Stakeholder
Review Process**

Dear Mayor Torliatt and Members of the Board of Directors:

We are writing to you to respectfully request that the Bay Area Air Quality Management District (District) postpone adoption of any new CEQA Guidelines and Thresholds of significance and immediately establish a stakeholder review process that includes public workshops and engagement by the Board. As individual organizations we have been active in discussions at the California Air Resources Board, at local air districts, and elsewhere around the state regarding the need for a new CEQA threshold of significance for greenhouse gas (GhG) emissions to guide local lead agencies as they consider individual project proposals.

The serious flaws in the District's current threshold proposal and related guidelines prompt us to write together to express our deep concern. If adopted, the one-size-fits-all proposal will not only fail to help reduce statewide GHG emissions but could move California backwards by discouraging the very type of smart growth, infill and transit oriented development that is a critical component of meeting the State's AB 32 goals. The District's strict numeric threshold approach for stationary sources may also have the counterproductive effect of discouraging desirable energy supply projects—whether upgrades to existing facilities or new projects—and thereby result in higher, rather than lower, overall statewide GhG emissions.

We echo the significant concerns expressed in the hundreds of pages of comments received by the District from Bay Area cities, counties, regional agencies and other key stakeholders who are in unprecedented agreement that the District's proposal would:

- *"undermine efforts to encourage a more focused growth pattern that capitalizes on the region's existing transportation and infrastructure investments..."* (ABAG Comments About Air District CEQA Guidelines Update, June 23, 2009);
- *"erroneously lead to significant impacts, even when implementation of the proposed project would result in improved air quality..."* (MTC letter to Greg Tholen RE: CEQA Threshold of Significance Report, Oct. 12, 2009);
- *"have unintended negative environmental consequences, undermining the ability of the Bay Area to meet its share of GHG reduction targets..."* (Letter from SF Dept. of Environment to Greg Tholen, Oct. 26, 2009);
- *"further undermine(s) Smart Growth Policies to reduce GHG emissions"* (City of Livermore Guidelines Comment Letter, Oct. 26, 2009);
- be *"inconsistent with the District's stated goal of promoting smart growth and infill development, as well as with SB 375."* (Oakland Comments on BAAQMD CEQA Guidelines (September 2009), Oct. 9, 2009);
- *"have unintended consequences that would set the region back from the goal we are all trying to achieve...[and] are fundamentally flawed"* (City of Berkeley, Comments on CEQA Guidelines, Oct.26, 2009);
- discourage *"the kind of dense housing projects we need to meet the greenhouse gas emissions standards."* (Letter from City of Emeryville to Greg Tholen Re: Comments on Proposed CEQA Guidelines, Oct. 26, 2009);
- *"chill development of important local/state projects by adding another layer of costly mitigation that may be unnecessary and unjustified."* (WSPA Comments on BAAQMD CEQA Guidelines, Oct. 26, 2009); and
- *"fundamentally conflict with State directives on achieving greenhouse gas reductions."* (CBIA Letter to Mayor Pam Torliatt & Members of the Board Re: The Need to Substantially Extend the Comment Period on the District's Proposed CEQA Guidelines, and to Rethink Fundamentally Flawed Provisions That Directly Conflict with State Legislation and Policy on Reducing Greenhouse Gas Emissions, Oct. 6, 2009).

79-1

The Adoption of new CEQA GhG Thresholds is Critical and Must Not Be Rushed. If adopted by the Board, these CEQA Guidelines and thresholds will be truly groundbreaking. It will be one of the first times in the state, and indeed the nation, that a government agency has determined local and project level limits on GHG emissions. Given the significant volume of comments received by the District on the most recent draft proposal and the serious and overwhelming concern expressed in the majority of those comments it would be contrary to public policy to adopt such far-reaching new standards without first responding to those comments, revising the proposal accordingly, and allowing for additional public review and comment prior to consideration of a final proposal by the Board. Therefore, we respectfully request that the District Board direct staff to thoroughly evaluate and respond to the public comments received to date, make necessary revisions to the draft proposal, and postpone submission of a final proposal to the Board until the public has additional time to review and comment on that final proposal.

79-2

A More Robust Stakeholder Engagement Process Must Be Undertaken To Develop the District's Final Proposal. Given the importance of the new guidelines, the variety of stakeholders involved, and the inherent complexity and uniquely evolving nature of the science, law and policy related to GHG and global climate change the District should establish a collaborative process involving stakeholder representatives to help them further refine their CEQA Guidelines and Thresholds proposal. To address these issues effectively, the District should take advantage of the significant technical expertise and essential practical experience of the cities, counties, regional organizations, businesses and other stakeholders available to them. Moreover, if the District's proposals are to be implemented successfully it is critical that they are well understood and accepted by those stakeholders who have responsibility for their implementation and evaluation. A robust stakeholder process—one that includes public workshops and engagement by the Board—will be invaluable to long term success of the District's efforts. To proceed in any other way would be contrary to the goals and rationale put forth by District staff and echoed by members of the Board.

79-3

Respectfully,

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Comment Letter #: 79

Date: December 1, 2009

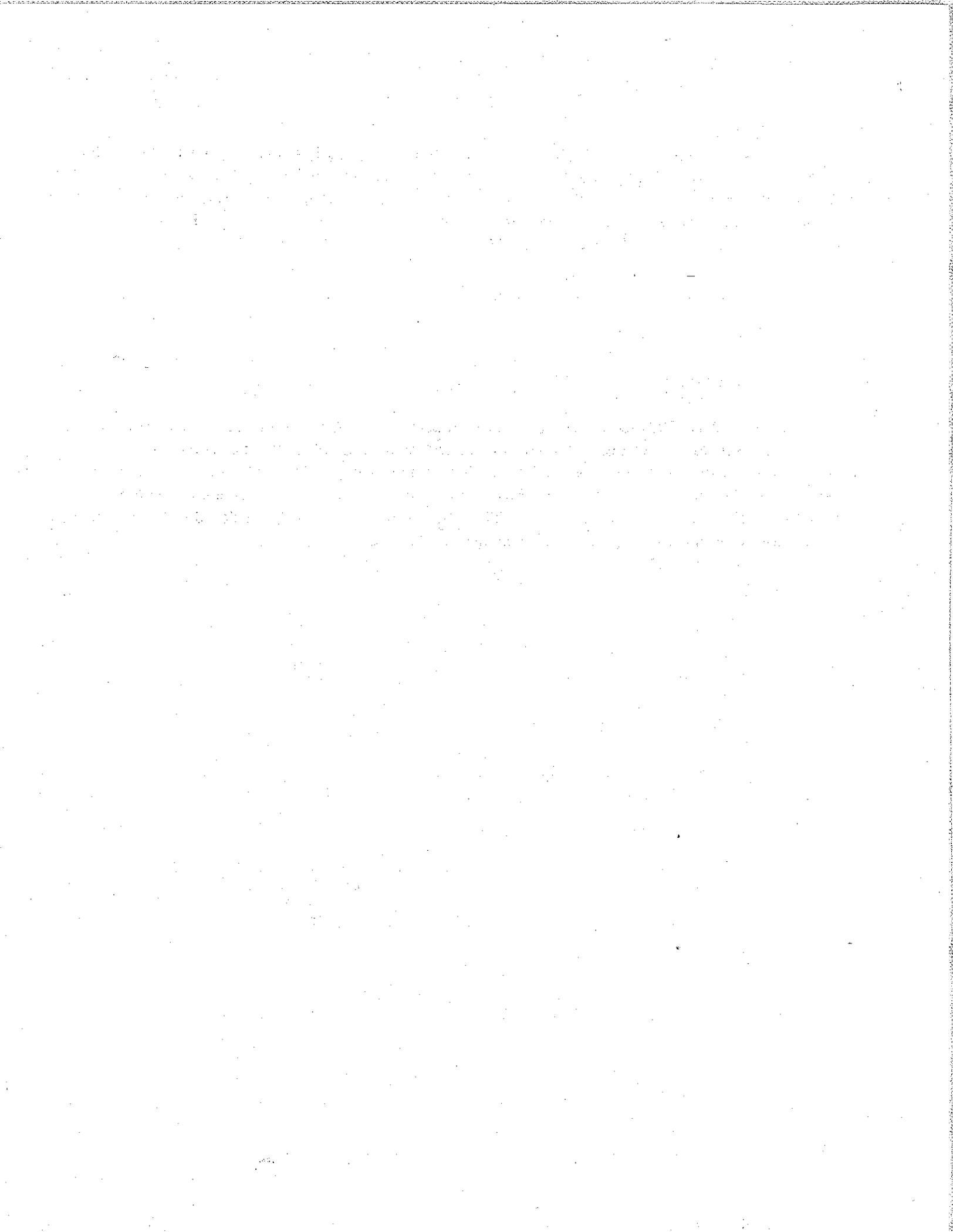
From: Richard Lyon, Vice President, Government Affairs, California Building Industry Association; Rex S. Hime, President and CEO, California Business Properties Association; Catherine Reheis-Boyd, Executive Vice President and Chief Operating Officer, Western States Petroleum Association; Dorothy Rothrock, Vice President, Government Relations, California Manufacturers and Technology Association; Robert Callahan, Policy Advocate, California Chamber of Commerce; Mark Smith, American Council of Engineering Companies, California

Response to Comments:

79-1 See comment response 77-1 and 77-2.

79-2 At the December 2, 2009 Board meeting, the Board decided to postpone consideration of adoption of the proposed thresholds to the January 6, 2009 Board meeting. Staff released an updated Proposed Thresholds of Significance report and CEQA Guidelines on December 7, 2009 to allow for a 30 day review period prior to the January 6, 2009 board meeting. The 30 day review period is in conformance with the Air District's normal practice for public notice prior to the Board's consideration of adoption of air quality plans and regulations. See also comment response 77-1.

79-3 See comment response 77-1.





November 30, 2009

Honorable Pamela Torliatt
Chair, Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Chair Torliatt and Board Members,

Thank you for the opportunity to comment on behalf of the Silicon Valley Association of REALTORS® (SILVAR) and the San Mateo County Association of REALTORS® (SAMCAR) regarding agenda item 9, "Public Hearing Continued from November 18, 2009 to Receive Testimony on Proposed Amendments to the Bay Area Air Quality Management District's (District) California Environmental Quality Act (CEQA) Thresholds of Significance."

SILVAR and SAMCAR represent over 7,000 real estate professionals on the Peninsula and in the South Bay and serves as an advocate for homeowners and balanced communities. Our associations have several concerns about the District's recommended thresholds of significance for greenhouse gas (GHG) emissions, potentially scheduled for approval as early as January of next year.

The new thresholds would result in subjecting many projects to CEQA review that previously were not, and for projects to incorporate significant mitigation to avoid CEQA review. Our specific concerns are: (1) the District appears to subject the Bay Area to substantially greater regulation than is necessary to achieve its "fair share" of statewide greenhouse gas reductions; (2) the District unfairly burdens new development to achieve the necessary mitigation for land use related GHG emissions; (3) the recommended thresholds of significance for GHG emissions could limit the economic feasibility of small to mid-size development projects and may promote smaller, disjointed development proposals to avoid CEQA review; (4) the District has not provided sufficient guidance for calculating the GHG emissions and reductions as part of the current effort to develop proposed thresholds; and (5) the District does not provide sufficient explanation or support for much of the underlying analysis used to bolster its recommended approach to the GHG threshold of significance.

In addition to the concerns related to GHG emissions, we also raise concerns about the recommended thresholds of significance for Risks and Hazards associated with the toxic air contaminants (TACs). Specifically, the District does not discuss other regulatory actions that should result in the reduction of TACs. There is an inconsistency between GHG emission reduction goals and the District's efforts to minimize TAC exposure, given existing development patterns.

Through these proposed thresholds the District appears to subject the Bay Area to substantially greater regulation than is necessary to achieve its "fair share" of statewide greenhouse gas reductions. California Assembly Bill 32 required that the state reduce its GHG emissions to 1990 levels by the year 2020. Table 2 of the Proposed Thresholds report indicates California's 1990 GHG emissions from the land use sector were 295.53 million metric tons of

80-1

carbon dioxide equivalents per year (MMT CO₂e/yr) and the 2020 "Business As Usual" GHG emissions are projected to be 400.22 MMT CO₂e/yr. As shown in the table, these values result in a 26.2 percent reduction from the 2020 projected emissions needed *statewide* to meet the 1990 levels. Table 3 indicates that the AB 32 scoping plan will provide for reductions accounting for 23.9 percent of the 1990 emissions levels necessary for GHG emissions reductions for the land use sector. This leaves a "gap" of 2.3 percent between the emissions reductions that are needed based on a statewide reduction from 2020 "Business as Usual" to 1990 actual emissions (26.2 percent) and those that are provided for in the Scoping Plan (23.9 percent).

Table 4 of the Proposed Thresholds provides emissions data specifically for the San Francisco Bay Area Air Basin (SFBAAB). It shows that the SFBAAB's emissions from the land use sector were 60.3 MMT CO₂e/yr in 1990. It projects that the 2020 levels will be 71.1 MMT CO₂e/yr. As shown on Table 4, the District then applies the 2.3 percent "gap" that is assumed from the statewide calculation to the 71.1 MMT CO₂e/yr Bay Area projected 2020 emissions total. This results in 1.6 MMT CO₂e/yr as the additional reduction in GHG emissions that the District concludes must be achieved from land use projects in the District.

The problem with this approach is the District provides no justification for applying the statewide gap to the SFAAB as a "fair share" reduction. The District states: "This necessary 2.3 percent reduction in projection GHG emissions from the land use sector is the 'gap' the Bay Area needs to fill to do its share to meet the AB 32 goals." However, the data provided in Tables 2 and 4 of the Proposed Thresholds make clear that the SFBAAB already out-performs the state as a whole in curbing GHG emissions. In 1990, the SFBAAB's land use emissions accounted for approximately 20.4 percent of the total emissions in the state. In 2020, the SFBAAB's land use GHG emissions are projected to be 17.8 percent of the total emissions in the state. While it would take a 26.2 percent decrease in projected 2020 statewide GHG emissions from the land use sector in order to get to 1990 levels for the state as a whole, it would only take a 15.2 percent decrease in projected 2020 GHG emissions from the land use sector in order to get to 1990 levels in the Bay Area. Merely applying the 23.9 percent reduction from AB 32 measures to the SFBAAB would reduce the 2020 projections to well below 1990 levels, without changing thresholds of significance or requiring additional mitigation. In other words, there is no "gap" between what is needed for emissions reductions in the Bay Area and what is provided for by the AB 32 measures – the Bay Area has already done what is needed "to do its share to meet the AB 32 goals."

The District does not appear to provide any justification for applying the statewide gap to the SHBAAB as a necessary "fair share" reduction. The region's density, growth patterns, and public transit all have likely contributed to the significantly lower relative growth in GHG emissions between the 1990 levels and 2020 projections in the Bay Area when compared to the state as a whole. By applying the statewide gap to the Bay Area, the District forces residents and businesses to provide far more than the area's "fair share" of GHG emissions reductions, and fails to credit emissions mitigation that has already been achieved in the Bay Area. This is fundamentally unfair.

In addition, the District's application of the statewide gap to the Bay Area may be economically imprudent as well, since it is possible GHG emissions reductions could be more cost-effectively obtained in other areas in the state (such as in areas in which the GHG emissions have risen at a level that is relatively higher than the state as a whole). The cost of greater GHG emissions reductions in the Bay Area may be higher than in other regions, given the successful efforts that have already been undertaken to reduce the relative growth in GHG emissions.

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1-08

We suggest the District provide justification for its proposal to require emissions reductions in the Bay Area that bring GHG emissions not only to 1990 levels, but well below those levels. Based on the data presented in the Proposed Thresholds report, the Bay Area region will achieve GHG emissions reductions to levels below 1990 levels merely through the application of the AB 32 scoping plan measures alone. Through these thresholds the District is proposing to require the Bay Area to assume well more than its "fair share" of GHG reductions. The Bay Area, compared to the state as a whole, has contributed less to the increase in GHG emissions since 1990, yet it is being asked to assume more of the responsibility for correcting the state's problem in that regard. We request that the District abandon its approach of requiring greater GHG emissions reductions than is necessary for the Bay Area to meet statewide goals, and that the District abandon, or at least postpone, any adoption of recommended project-level thresholds of significance for GHG emissions.

The District will unfairly burden new development to achieve the necessary mitigation for land use related greenhouse gas emissions through the new thresholds. Even assuming (i) the District is truly meeting its "fair share" of GHG reductions, and (ii) that it is properly allocating to new land use development the burden of additional reductions beyond those that will result from AB 32 measures, there remains the significant question of whether the mitigation is achievable. The District's approach assumes, without proper support, that every project above the bright line threshold could feasibly reduce its GHG emissions beyond the amount that will result for all projects by means of the AB 32 measures. The recommended thresholds for project review have been set at a level where the new development projects captured by the thresholds will need to achieve mitigation of 26.2 percent of their collective GHG emissions in order to close the assumed gap between the District's assumed "fair share" of emissions reductions and the amount that will be achieved by AB 32 measures alone.

Although this 26.2 percent figure happens to be the same as the 26.2 percent statewide reduction in projected 2020 emissions from land use sectors in order to achieve 1990 levels, there does not appear to be any necessary relationship between these numbers. The proposal to achieve 26.2 percent mitigation from new land use developments that exceed the proposed CEQA threshold is a function of setting the recommended threshold level at 1100 MT of CO₂e per year. If a higher threshold were selected, it would capture fewer projects, but each of the captured projects would need to achieve a higher mitigation rate. If the threshold were set below 1100 MT, it would capture more projects, and mitigation levels could be less than 26.2 percent.

The Proposed Thresholds report indicates the "baseline" for measuring mitigation is annual emissions for a project of "equivalent size and character" based on the URBEMIS model and the California Climate Action Registry's General Reporting Protocol for 2008. The Proposed Thresholds state, "[b]ased on the information available and on sample URBEMIS calculations, [the District] found that mitigation effectiveness of between 25 and 30 percent is feasible." However, the only support for this finding appears to be one table and accompanying calculations in Appendix D of the Option and Justification Report. This table analyzes potential mitigation for a low rise residential apartment and provides mitigation in the form of increased density, regional transit availability, affordable housing, bicycle and pedestrian facilities, reduced parking, and onsite renewable energy generation. This one example, which at best could be applied to 5 percent of the total residential development in the Bay Area, is hardly sufficient to establish that a mitigation effectiveness of 25 to 30 percent is feasible for all developments.

The District's approach also seems to assume there will be no emissions reductions provided by any project that is under the CEQA thresholds of significance. This assumption is not justified, particularly considering that the cost and process associated with review under CEQA would in

80-2

itself be sufficient motivation in some cases to cause developers to incorporate additional GHG reduction strategies in order to achieve emissions below the bright-line thresholds of significance. While these types of GHG reductions may be more difficult to document, they warrant some consideration given the very likely fact that such products, which fall under the baseline threshold, would employ GHG reduction measures. The Proposed Thresholds recognize the likelihood of this scenario as well, where they specify that “[p]rojects with emissions greater than the threshold would be required to mitigate to the threshold level” or provide mitigation during CEQA review.

80-2

The District fails to adequately consider emissions reductions that could be achieved for existing development—beyond those provided in the AB 32 scoping plan. The scoping plan discusses some of these measures, such as renewable energy and energy efficiency, but it is hardly complete. There is no discussion of increased use of public transit to serve existing developments, local planning efforts that could provide increased pedestrian or bicycle accommodations, non-regulatory incentives that could be used to further increase energy efficiency, or use of renewable resources beyond the programs discussed in the scoping plan.

We request that the District change its current approach of allocating all of the supposed “fair share... 1.6 MMT gap” land use related GHG emissions reductions to new development. The district should provide a better estimate of GHG emission reductions that can be achieved by existing development, as well as mitigation measures undertaken by new developments that are below the bright line thresholds. Both of these categories likely offer feasible reductions that are currently unaccounted for in this approach. We also ask the District to provide better support for the determination of “feasible mitigation” and, in particular, demonstrate the feasibility of mitigation for all land use categories.

The recommend threshold of significance for GHG emissions could limit the economic feasibility of small to mid-sized development projects or result in developers pursuing smaller, disjointed development proposals in order to avoid CEQA review. The District’s proposed bright line threshold of 1,100 MT of CO₂e/yr equates to the CO₂e generated by approximately 60 single family houses. Based upon our calculations, this would also equate to the CO₂e generated by an apartment or condo/townhouse development of approximately 68,000 – 80,000 square feet (depending upon whether it is a low, mid, high rise development); a retail development of approximately 19,600 square feet; or an office development of 52,300 square feet. Projects of these sizes would not generally be considered to be large projects that would typically require review under the CEQA requirements. While we recognize the use of the alternative efficiency baselines could allow for these smaller projects to still demonstrate they do not result in a significant impact, the very low proposed project threshold could lead to significant change in how projects are designed and proposed.

80-3

To avoid potential CEQA review, it is possible project proponents will seek to reduce project sizes or divide the project into smaller, independent components. While there are some limitations on segmenting projects to avoid CEQA requirements, such an approach could still be used to create small projects that are individually independent and complete and do not implicate the prohibition on segmentation. If this strategy is employed, it could result in multiple mid-sized development projects that may be poorly integrated from a planning and energy efficiency standpoint than a single, larger, more comprehensively planned development of equivalent total size.

Alternatively, the relatively low thresholds could result in stifling new development to the extent that the cost, delay and additional approval risk associated with CEQA review is significant

enough to affect the economic feasibility of a project that would not otherwise require CEQA review. This concern is recognized on the Options and Justification Report, which states:

“It could prove difficult for the smallest of projects to implement sufficient mitigation measures to reduce their GHG emissions by 26 percent, thereby requiring these smaller projects to prepare an EIR for no other impacts than GHG emissions and climate change.”

The District makes this statement in the context of “Option 1B,” which would not introduce new thresholds of significance for GHG emissions, but would impose a requirement for all projects subject to CEQA to reduce GHG emissions by 26 percent. It is unclear why the District does not address this concern as equally valid for its recommended “bright line threshold” option, which has essentially the same implication for those projects that exceed the threshold but are unable to mitigate sufficiently to avoid the EIR requirement.

80-3

We request that the District consider how the relatively low review thresholds will impact small to mid-size development proposals, and address whether the required mitigation is economically feasible for these projects, as well as whether the costs of review under CEQA will discourage new development. The District should also identify the likely increase in the number of additional projects that will be required to undergo CEQA review as a result of the proposed GHG review thresholds.

The District has not provided sufficient guidance for calculating the GHG emissions and reductions as part of the current effort to develop proposed thresholds. In Section 2.3.2.4 of the Proposed Thresholds, the District states: “Staff will provide the methodology to calculate a project’s GHG emissions in the revised CEQA Guidelines.” However, the GHG calculation methodology should be provided now, so that affected parties can fully appreciate the implications of the proposed GHG thresholds of significance. Neither the Options and Justification Report nor the Proposed Thresholds report provides sufficient indication of how and on what basis a development project will calculate projected GHG emissions and measure the effect of proposed mitigation measures.

80-4

In particular, the Proposed Thresholds report indicates “Project applicants and lead agencies could use readily available computer models to estimate a project’s GHG emissions, based on project specific attributes, to determine if they are above or below the bright line numeric threshold.” This statement would appear to allow a degree of flexibility and discretion on how the calculations are performed, assuming there are some differences among the computer models. Such flexibility could be useful in refining the analysis for development proposals of various types, but it also raises the potential for conflicts between project proponents and reviewing agencies when different models or assumptions are used for determining whether a project exceeds the bright line threshold, or whether sufficient mitigation is provided.

One issue that should be addressed by the GHG calculation methodology is the potential use of GHG emissions offsets. There are likely to be numerous verifiable and measurable emission offsets that could be incorporated into a project mitigation package. Examples of these that may be applicable to the San Francisco Air Basin are open space conservation or restoration, wetland restoration, and local renewable energy credits.

California’s CEQA Guidelines §15064(b) require that a standard of significance be based on “scientific information and other factual data to the extent possible.” By failing to provide the

specific details as to how GHG emissions and mitigation effects will be calculated, it is difficult to assess whether the District has satisfied this regulatory requirement.

We request that the District postpone the adoption of the Proposed Thresholds until the GHG calculation methodology has been prepared, and the public has been provided with the opportunity to review and comment on it. The District should provide very detailed information to support the calculation methodology, including documentation on how the baseline projection is determined and how mitigation or offsets are valued. After this calculation methodology is provided, we request that the District update the Proposed Thresholds with additional supporting materials showing how the calculations are performed, and provide sample calculations for different project types and project sizes. The District should also address the potential use of GHG emission offsets.

80-4

The District does not provide sufficient explanation or support for much of the underlying analysis it used in developing its recommended approach to greenhouse gas thresholds of significance. To support its recommended thresholds of significance for GHG emissions, the District researched its "historical CEQA database (2001-2008) to determine the frequency distribution trend of project sizes and types that have been subject to CEQA over the past several years." It then applied this project size distribution trend to forecasted land use development for the Bay Area, which is based on population and employment data from the California Department of Finance and the California Economic Development Department, and translated the projections into land use categories consistent with those contained in the Urban Emissions Model (URBEMIS). It forecasts the trends for the years 2010 through 2020.

There are several questionable aspects of this approach. First, it appears the District made an assumption about future growth patterns with respect to the assignment of URBEMIS land use categories. Specifically, the projections appear to show the relative percentage of single family housing will be increasing over the forecast period, with single family housing representing 62.16 percent of residential development in 2010, increasing to 64.22 percent in 2020. The basis for this assumption is unclear as there is no quantitative or qualitative discussion on trends provided in the Options and Justification Report or its Appendices. Also, the difference, while arguably small, is significant given the relative values assigned to these categories in the URBEMIS program for GHG emissions. Even a small relative increase in single family house construction would have a large overall effect on GHG emission projections, given that single family homes are shown to produce greater GHG emissions per unit than other residential development. As a result, the assumptions built into the District's projections factor significantly into the calculation of GHG emissions.

80-5

In addition, it appears the data primarily used for this analysis came from a CEQA database. The District does not identify what percentage of overall growth this database represents. Presumably, there was a significant portion of growth that happened between the years of 2001 and 2008 that was not subject to review under CEQA. It is possible the assumptions on future land use trends are skewed by the limitations of this data set.

Also, the District does not discuss the inherent shortcomings associated with using projected Vehicle Miles Traveled (VMT) as the basis for projecting GHG emissions, without also factoring in how the location of the development will affect its contribution to VMT. The District admits these concerns in the Proposed Thresholds report as part of its discussion of Plan-Level Criteria Pollutant Thresholds, noting "the impact to air quality is not necessarily growth but where that growth is located." The District does not provide any detailed explanation of how GHG emissions are developed for land use categories in the URBEMIS and how this program overcomes

potential concerns about the location of growth as a factor in the emissions calculations. It is likely that a single family development located near transit would result in reduced VMTs and have a lower GHG emissions output than one located in a sprawling, car-oriented community. However, the URBEMIS appears to assign the emissions based on use type alone, without also taking into account location variations.

The assumed relationships between various land uses and their GHG emissions has significant implications for the calculations that led to the District's proposed thresholds. If the analysis underestimates the GHG emissions associated with projected development patterns, the District's proposal may be subjecting more projects to CEQA review, or requiring more mitigation from projects than is needed to achieve the targeted amount of GHG reduction from new development. However, to the contrary, if the District's projections overestimate the GHG emissions associated with projected future development, it would further undercut the District's efforts to close the "gap" by focusing exclusively on mitigating emissions from new development.

We request that the District provide more background information to clarify the projections and modeling provided in Appendix B of the Options and Justification Report utilized as the basis for the proposed thresholds.

The District's reports do not discuss other regulatory actions that may relate to the reduction of pollutants other than greenhouse gases. The Options and Justification Report and the Proposed Thresholds report provide a good summary of the regulatory proposals associated with GHG emissions reductions. There is also a discussion of how the California Air Resources Board's new off-road regulations will affect construction-related air pollutant and precursor emission levels. However, neither report describes how any existing or proposed regulatory measures could reduce risks and hazards related to operations-related toxic air contaminants (TACs).

The omission is most noticeable in the context of the siting of new sensitive receptors near existing pollutant sources. For example, a project proponent is seeking to site a new residential project within 1,000 feet of an existing source, this project would be presumed to make a significant impact under the Proposed Thresholds and require CEQA review. If there are any existing or proposed regulatory programs that could reduce the risk associated with this existing source, these should be factored into the analysis of whether CEQA review is required. The calculation should also take into account the relative economic efficiency and social utility of requiring additional emissions reductions for the existing source compared with limiting or imposing an additional burden on development in nearby areas.

There are also potentially significant property right implications in having the right to develop a use that is properly zoned and suited to the land in question limited or subject to additional costs and delays by virtue of the risks created by a nearby private pollution source. The loss of value or additional cost to the affected property in such case is a direct result of the use of the nearby landowner. In effect, the landowner wishing to develop a residential project is assuming additional regulatory cost and potential additional mitigation as a result of their property being affected by off site pollution. In the analogous context of underground plumes of pollutants that spread from a source to impact an abutting property, there is an already established remedies by which landowners can be made whole from the diminished value and additional costs that they incur as a result of the spreading pollution. One would expect property owners who are affected by the proposed sensitive receptors siting requirements to seek similar recourse in appropriate cases.

80-5

80-6

We request that the District modify the Proposed Thresholds to account for existing or proposed regulatory measures that could reduce sources of TACs. The Proposed Thresholds should recognize that, where such measures are likely to reduce pollution from the regulated sources, the local communities should have flexibility in determining whether the siting of new, non-sources developments near existing sources constitutes a "significant impact" and require CEQA review.

The District does not address the apparent inconsistency between GHG emission reduction goals and its efforts to minimize TAC exposure, given existing development patterns. The Proposed Thresholds present an apparent conflict between certain goals related to GHG emission reductions, and the minimization of risks and hazards associated with toxic air contaminants (TACs). To reduce GHG emissions, the District suggests the use of smart growth and infill development near existing transit. To reduce TAC risks and hazards, the District recommends limiting the exposure of people to existing pollutant sources, such as areas within 1,000 feet of major roadways. However, there are numerous areas within the Bay Area that are located within 1,000 feet of a major roadway that would also be considered smart growth areas, due to the presence of public transportation or other urban infill characteristics. The District's proposal does not provide any guidance as to how smart grown or infill development in such areas would be treated with respect to CEQA review.

80-7

We request that the District recognize the apparent inconsistency between GHG emission reduction goals and its efforts to minimize TAC exposure, and request that the District provide guidance to local decision makers on reviewing projects that present such conflicts.

Again, thank you for allowing us the opportunity to comment regarding on Proposed Amendments to the District's California Environmental Quality Act (CEQA) Thresholds of Significance. We respectfully request that the District address our concerns prior to moving forward on these amendments.

Sincerely,



Adam Montgomery
Government Affairs Director
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Comment Letter #: 80

Date: November 30, 2009

From: Adam Montgomery, Government Affairs Director, Silicon Valley Association of Realtors; Michon A. Coleman, Government Affairs Director, San Mateo County Association of Realtors

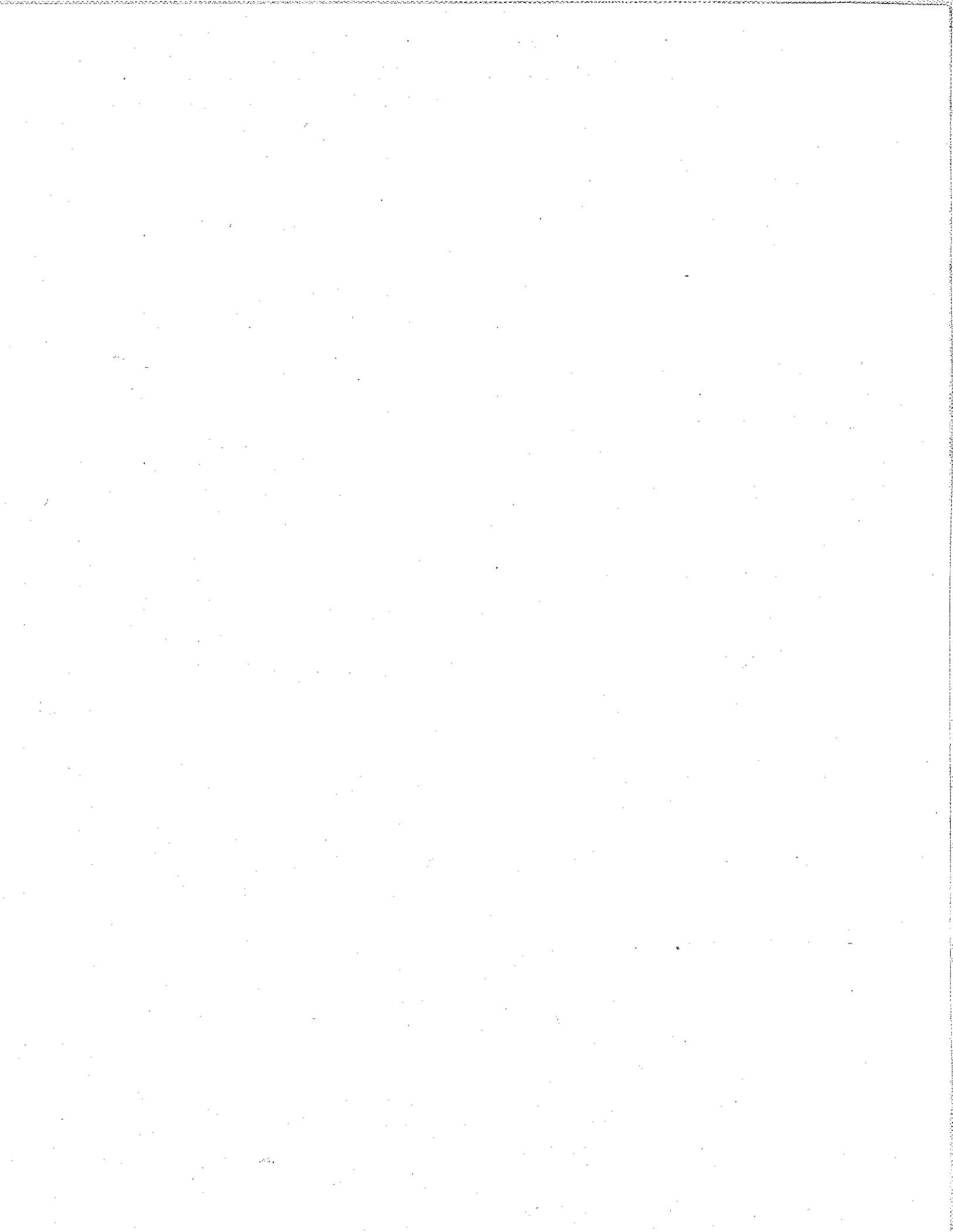
Response to Comments:

- 80-1 Air District staff disagrees with the commenter's contention that it is not appropriate to apply the statewide-derived gap of 2.3 percent needed from new land use to the Bay Area emissions inventory. The premise of the Air District's approach is that California will need a 26.2 percent reduction from the projected land use emission sectors by 2020 to reach the 1990 target, the AB 32 Scoping Plan measures will reduce GHG emissions from land use by 23.9 percent, leaving a gap of 2.3 percent. Thus, if all areas of the state reduce new land use-related emissions by 2.3 percent then new land use subject to CEQA will contribute its share of reductions needed to reach AB 32 goals statewide. The commenters also assert that there is no gap and that the AB 32 Scoping Plan will achieve the Scoping Plan goals. Air District staff point out that it is the Air Resources Board's view that local governments are "essential partners in achieving California's goals to reduce greenhouse gas emissions" (AB 32 Scoping Plan at page 26). Without actions by local government, such as mitigating significant GHG emissions from new land use, the state would need to take more drastic measures than those proposed in the Scoping Plan.
- 80-2 The commenters suggest that the proposed threshold will unfairly burden new development. Development of the proposed GHG thresholds assumes that existing land use will provide reductions through statewide measures, for example, by using low carbon fuel or buying a Pavley-regulated car. Furthermore, CEQA recognizes that "[t]he capacity of the environment is limited" and charged lead agencies with the duty to avoid reaching "critical thresholds for the health and safety of the people of the state" (Pub. Res. Code, § 21000). This duty is especially important in the context of climate change, where we are at or near the atmosphere's ability to absorb more GHG emissions without risking catastrophic and irreversible consequences. Therefore, as the extent of the environmental problem becomes more severe, the threshold of significance may need to be stricter to avoid significant impacts. The Air District's analysis of the gap approach assumes that not all projects above the threshold will reduce their emissions down to the threshold, some feasibly achieving 25-30 percent others less, and some projects not significantly higher than the threshold will reduce their emissions down to the threshold but less than 25-30 percent of the project's emissions. The commenters also contend that projects below the threshold will not contribute GHG emissions reductions. In fact these projects will contribute reductions through state and local requirements such as energy efficiency measures and green building standards.
- 80-3 The commenters point out that the proposed threshold for GHG of 1,100 metric tons may require relatively small projects to require the preparation of environmental impact reports or divide projects into smaller ones to avoid doing so. To overcome these concerns Air District staff is also proposing an efficiency threshold that allows projects with higher emissions to be less than significant if built in an efficient way. Staff analyzed specific projects with local agency staff and have found that efficient infill projects with nearby support services and transit can be feasibly designed or mitigated below the threshold. Also see Master Responses MR-1, MR-2, MR-3 and MR-4.

- 80-4 The commenters state that the draft CEQA Guidelines do not provide sufficient guidance for calculating the GHG emissions and reductions. The draft CEQA Guidelines dated December 2009 include additional guidance on estimating GHG emissions. In addition staff is preparing an implementation program, including workshops and training, that will be held before the Guidelines become effective. Also see Master Response MR-6.
- 80-5 The development projections used in BAAQMD's TOS sensitivity analysis were based on future population and employment growth projections from the California Department of Finance and Economic Development Department, and were not based on past development trends, as the commenter asserts. The dataset obtained from the CEQA projects database is based on past development projects, but was only used to derive the types and size distribution of projects that were subject to CEQA in BAAQMD's jurisdiction (e.g., thousand square feet of retail proposed under a single development project, number of residential dwelling units proposed under a single development project). BAAQMD acknowledges that historical data does not necessarily represent future development project attributes, but absent any other type of dataset, BAAQMD felt past project size distributions were appropriate to use for this exercise. The project size and type frequency distributions were used to allocate projected development (which was treated independently of past development) into representative project categories or "bins" (e.g., 1-50,000 square feet of retail, 50,001-100,000 square feet of retail, etc.) that were used in the TOS sensitivity analysis. BAAQMD's approach to development projections was based on DOF and EDD data, which has a good track record of projecting demographic growth in California. Because DOF and EDD are reliable sources for growth projection data, BAAQMD does not anticipate that development, air pollutant emissions, or emissions reduction potential was substantially overestimated. The commenter's assertion that projections were based on looking backwards is inaccurate. Please refer to Appendix D of the November 2009 version of the *Draft Air Quality Guidelines*.
- 80-6 Contrary to the commenters' assertion, a new residential project locating within 1,000 feet of a source is not presumed to make a significant impact. Only if the residential project is impacted by nearby sources above the proposed thresholds would it be a potentially significant impact for risk. Air District staff has accounted for existing regulation in developing the thresholds and screening criteria. While the draft CEQA Guidelines provides screening tools that are based on default assumptions, staff guidance allows users to input actual data and information that reflects the actual environment at the project site at the time the project is proposed. In addition, screening tools develop by Air District staff take into account adopted regulations that will reduce source emissions.
- 80-7 Staff understands that it could be challenging to develop infill projects that are near major sources of toxic air contaminants. The purpose of the CEQA thresholds is to identify what the Air District would consider to be a significant air quality impact under CEQA. The proposed GHG and risks and hazards thresholds were developed, based on substantial evidence and staff expertise, to avoid significant impacts to air quality and public health. It is true that the GHG thresholds will encourage regional smart growth and infill development because it will be more difficult for less efficient/greenfield development to meet the proposed thresholds. Parallel to the District's effort to encourage infill development, the District is implementing a number of programs to reduce risks and hazards associated with toxic air contaminants.

The Lead Agency still must use its judgment in applying the thresholds to a given situation. BAAQMD strongly encourages Lead Agencies to consult with the District whenever necessary. If an Agency is

unsure of how to apply the guidance to a particular situation, the Agency should seek input from District staff.



EDMUND G. BROWN JR.
Attorney General

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DEPARTMENT OF JUSTICE



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December 2, 2009

81

Via U.S. and Electronic Mail

Gregory Tholen
Principal Environmental Planner, Planning and Research
Bay Area Air Quality Management District
939 Ellis Street
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GTholen@baaqmd.gov

RE: **California Environmental Quality Act (CEQA) Air Quality Guidelines,
Final Draft (dated November 2009);
Proposed Thresholds of Significance (dated November 2, 2009)**

Dear Mr. Tholen:

The Attorney General's Office writes to support the Bay Area Air Quality Management District's leadership in addressing thresholds of significance for greenhouse gas (GHG) emissions. The Attorney General submits these comments pursuant to his independent duty to protect the natural resources of the State and not on behalf of any other entity or agency.

81-1

As you know, thresholds function as rebuttable presumptions that can greatly assist lead agencies in making the required project-by-project determination of significance where CEQA streamlining is not otherwise available.¹ Air District staff recommends GHG thresholds for three types of projects: (1) stationary sources permitted by the Air District; (2) land use projects permitted by local government; and (3) and general plan updates. (For ease of reference, a table containing staff's recommendations is attached to this letter.) The latter two recommendations, if approved by the Board, would serve as general guidance for cities and counties which, of course, retain their discretion to determine significance for projects under their jurisdictions.

Below, we highlight some of the most important aspects of staff's recommendations that give rise to our support:

¹ The need for GHG thresholds should reduce over the coming months and years, as cities and counties address GHG emissions at the programmatic level (see Proposed CEQA Guideline § 15183.5, subd. (b)), and as Metropolitan Planning Organizations complete Sustainable Community Strategies, giving rise to statutorily defined CEQA exceptions and exemptions for smart growth projects under Senate Bill 375.

- **The thresholds are designed to meet clear emissions reduction objectives.** Staff's recommended thresholds are devised to meet clearly identified, quantifiable objectives that relate back to the goal of reducing the risk of dangerous climate change. Such objectives are important not only for establishing the necessary substantial evidence to support the thresholds, but will be important yardsticks against which to measure the success of the thresholds once applied, allowing the Air District and lead agencies to determine whether to make modifications or changes.
- **The stringency of the thresholds matches the seriousness of the problem.** In enacting CEQA, the legislature observed that "[t]he capacity of the environment is limited" and charged lead agencies with the duty to avoid reaching "critical thresholds for the health and safety of the people of the state" (Pub. Res. Code, § 21000, subd. (d).) This duty is especially important in the context of climate change, where we are at or near the atmosphere's ability absorb more GHG emissions without risking catastrophic and irreversible consequences. Based on the data provided, it appears that staff's recommended thresholds, while not triggered by every project, still provide substantial opportunities for mitigation. In light of the problem we face, a less stringent approach likely would be more vulnerable to legal challenge. 81-2
- **The thresholds minimize the potential for "gaming."** The recommended thresholds utilize clearly identified benchmarks (total annual emissions or GHG efficiency ratios) that will apply to every project; they are not devised project-by-project based on the attributes of the project and the project's location (e.g., 29% below "business as usual," however that might be defined). This substantially reduces the possibility that the thresholds could be "gamed" to circumvent a finding of significance that is otherwise warranted. It also substantially increases the likelihood that the thresholds will be applied in a generally consistent and predictable way, which should benefit not only lead agencies, but also project proponents.
- **The thresholds recognize that CEQA is more than just a mechanism to enforce other laws and regulations.** Staff's recommendations recognize the important role of local governments in achieving our statewide GHG emissions reductions targets. This is consistent with the Air Resources Board's view that local governments are "essential partners in achieving California's goals to reduce greenhouse gas emissions." (AB 32 Scoping Plan at p. 26.)

To improve the documents, the Air District may wish to consider the following:

- **Better explain how the thresholds will serve not only interim, but longer-term climate objectives.** The final set of documents would benefit from a short discussion explaining how the thresholds will serve the State's longer-term (beyond 2020) climate objectives. It would also be helpful if the documents would clarify that general plans and Climate Action Plans that extend beyond 2020 should have appropriate GHG targets (whether expressed in terms of total emissions or GHG efficiency ratios) that apply beyond that date.² 81-3

² See Attorney General's Office, General Plan/CEQA/GHG Frequently Asked Questions at p. 4, available at http://ag.ca.gov/globalwarming/pdf/CEQA_GP_FAQs.pdf.

- **Work with Bay Area cities and counties to ensure that the efficiency-based threshold fulfills its purpose to encourage smart growth.** Staff's innovative recommendation for a threshold based on "very GHG-efficient projects" (see Proposed Thresholds of Significance at p. 20) establishes that, when properly employed, CEQA can in fact work to the advantage of lower-carbon development, including infill. We understand that some infill builders already have submitted letters expressing general support for staff's proposal (and, indeed, encouraging the Air District to go further). We encourage the Air District to continue to work with cities and counties to ensure that the efficiency-based threshold, not only in theory but in practice, will account for the substantial benefits of projects that are energy, water, and transit smart. 81-4
- **Make an express commitment to monitor the thresholds over time and to adjust if necessary.** The documents imply at various places that staff will evaluate how the thresholds perform and, if they are not achieving the stated objectives, make recommendations for changes or modifications. The Air District should make an affirmative commitment to this process – sometimes called "adaptive management" – given the importance of not simply identifying GHG emissions reductions goals, but of achieving them. 81-5
- **Correct the references to SB 375.** The supporting documents state that if a land use project complies with an SB 375 Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), the lead agency may find that the project's GHG-related impacts will be less than significant. An SCS/APS is not, however, a city or county land use document. Moreover, it addresses emissions only from cars and light trucks and not from all aspects of a project's operation. We suggest that the document simply refer to the CEQA streamlining and exemptions available under SB 375 by reference to the specific provisions of the statute. 81-6
- **Ensure that the text of the documents are consistent.** We noted that the important caveat about the limits of the use of the efficiency-based threshold that appears under Table 2.2 in the Proposed Thresholds of Significance document does not appear in similar tables in the Air Quality Guidelines. This caveat should appear in both places so it is not overlooked. 81-7

We appreciate the opportunity to participate in this very important process. Please contact us if you have any questions.

Sincerely,

/s/

JANILL L. RICHARDS
Deputy Attorney General

For EDMUND G. BROWN JR.
Attorney General

Excerpted from Proposed Thresholds of Significance (Nov. 2, 2009) at p. 6

Project Type	Proposed Thresholds
Land Use Projects	Compliance with Qualified Climate Action Plan OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr* (residents + employees)
Stationary Sources	10,000 MT of CO ₂ e/yr
General Plans	Compliance with Qualified Climate Action Plan (or similar criteria included in a General Plan) OR 6.6 MT CO ₂ e/SP/yr (residents + employees)

* Staff notes that the efficiency-based thresholds should be applied to individual projects with caution. As explained herein, lead agencies may determine that the efficiency-based GHG thresholds for individual land use projects may not be appropriate for very large projects. If there is a fair argument that the project's emissions on a mass level will have a cumulatively considerable impact on the region's GHG emissions, the insignificance presumption afforded to a project that meets an efficiency-based GHG threshold would be overcome.

Comment Letter #: 81

Date: December 2, 2009

From: Janill L. Richards, Deputy Attorney General, for Edmund G. Brown Jr., Attorney General, Department of Justice, State of California

Response to Comments:

- 81-1 The Air District acknowledges and appreciates the support of the California Attorney General for the proposed GHG thresholds of significance.
- 81-2 The Air District recognizes the important aspects underlying the basis for the proposed GHG thresholds. Throughout development of the thresholds, Air District staff endeavored to provide clarity and certainty for land use development stakeholders, stringent yet feasible thresholds that can be consistently applied to projects and plans and ensure that the Bay Area will be "an essential partner" and part of the solution to climate change.
- 81-3 Air District staff has added discussions in the Proposed Thresholds of Significance report (December 7, 2009) and the Draft CEQA Guidelines (December 2009) to clarify that AB 32 goals are interim and that its 2020 goals are a milestone toward 2050 goals and climate stabilization, as recommended by the commenter. Air District staff has also committed to reevaluating the GHG thresholds to both track their effectiveness and to revise the thresholds in the future to address California's longer term objective to stabilize climate change.
- 81-4 As the commenter suggests, Air District staff has been working with Bay Area cities and counties to provide a better understanding of the advantages and substantial benefits of the proposed thresholds, and to ensure the proposed analytical methodologies and mitigation strategies are understood and used consistently. Staff has also committed to an implementation program that includes workshops and training programs for local stakeholders.
- 81-5 The Air District Board has requested staff, and staff has committed, to monitor implementation of the thresholds to ensure that the reduction goals are met. Staff is also committed to periodically review the proposed GHG thresholds and revise them as necessary to achieve both short and long objectives.
- 81-6 Air District staff agrees with the commenter that consistency with an SB 375 Sustainable Communities Strategy or Alternative Planning Strategy is not, by itself, a basis for a determination of insignificance. The Proposed Thresholds of Significance report and Draft CEQA Guidelines have been revised accordingly.
- 81-7 The December versions of the Proposed Thresholds of Significance report and Draft CEQA Guidelines are consistent with each other. The caveat for caution when using the efficiency-based threshold for large projects is now included on the Draft CEQA Guidelines, as the commenter suggests.

