



## LOCAL COMMUNITY RISKS AND HAZARDS THRESHOLDS

Analysis	Previous Proposal	Current Proposal
Single Source (New Source)	<u>Impacted Communities</u> Cancer Risk > 5 in a million Chronic Non-Cancer Hazard Index > 0.5 Acute Non-Cancer Hazard Index > 1.0 PM2.5 > 0.2 ug/m <sup>3</sup> annual average <u>Elsewhere:</u> Cancer Risk > 10 in a million Chronic Non-Cancer Hazard Index > 1.0 Acute Non-Cancer Hazard Index > 1.0 PM2.5 > 0.3 ug/m <sup>3</sup> annual average Apply existing OEHHA risk factors	<u>New Source / New Receptor</u>  <u>All Areas:</u> Compliance with Qualified Risk Reduction Plan OR Cancer Risk > 10 in a million Chronic Non-Cancer Hazard Index > 1.0 Acute Non-Cancer Hazard Index > 1.0 PM2.5 > 0.3 ug/m <sup>3</sup> annual average Use more health protective (age-sensitive) risk factors
Single Source (New Receptor)	<u>All Areas:</u> Cancer Risk > 10 in a million Chronic Non-Cancer Hazard Index > 1.0 Acute Non-Cancer Hazard Index > 1.0 PM2.5 > 0.3 ug/m <sup>3</sup> annual average Apply existing OEHHA risk factors <u>Zone of Influence:</u> 1,000 foot radius from fenceline of source or receptor	<u>Zone of Influence:</u> 1,000 foot radius from fenceline of source or receptor
Cumulative (Source or Receptor) from All Local Sources	<u>From All Local Sources</u> Cancer Risk > 100 in a million Chronic Non-Cancer Hazard Index > 1.0 Acute Non-Cancer Hazard Index > 1.0 PM2.5 > 2.0 ug/m <sup>3</sup> annual average <u>Zone of Influence:</u> 1,000 foot radius from fenceline of source or receptor Apply existing OEHHA risk factors	Compliance with Qualified Risk Reduction Plan OR Cancer Risk > 100 in a million Chronic Non-Cancer Hazard Index > 1.0 Acute Non-Cancer Hazard Index > 1.0 PM2.5 > 0.8 ug/m <sup>3</sup> annual average <u>Zone of Influence:</u> 1,000 foot radius from fenceline of source or receptor Use more health protective (age-sensitive) risk factors
<p style="text-align: center;"><u>Current Proposal is Significantly More Stringent Because:</u></p> <ul style="list-style-type: none"> <li>- More health protective risk factors that consider exposures at young ages in calculating impacts</li> <li>- Provides new PM2.5 thresholds to evaluate local impacts</li> <li>- Provides new thresholds to address cumulative impacts</li> <li>- Recommends local jurisdictions prepare community-specific risk reduction plans</li> </ul>		

Note: Shading indicates a revision

## Bay Area Air Quality Management District

November 2, 2009

Proposed Air Quality CEQA Thresholds of Significance			
Pollutant	Construction-Related	Operational-Related	
<b>Project-Level</b>			
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 <sub>x</sub>	54	54	10
PM <sub>10</sub> (exhaust)	82	82	15
PM <sub>2.5</sub> (exhaust)	54	54	10
PM <sub>10</sub> /PM <sub>2.5</sub> (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
<b>GHGs – Projects other than Stationary Sources</b>	None	Compliance with Qualified Climate Action Plan OR 1,100 MT of CO <sub>2</sub> e/yr OR 4.6 MT CO <sub>2</sub> e/SP/yr (residents + employees)	
<b>GHGs –Stationary Sources</b>	None	10,000 MT/yr	
<b>Risks and Hazards</b> (Siting a New Source or Receptor)	Same as Operational Thresholds	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 <sub>2.5</sub> increase: > 0.3 µg/m <sup>3</sup> annual average  <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	
<b>Risks and Hazards</b> (Cumulative – Source or Receptor)	Same as Operational Thresholds	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 <sub>2.5</sub> : > 0.8 µg/m <sup>3</sup> annual average (from all local sources)  <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	

<b>Proposed Air Quality CEQA Thresholds of Significance</b>		
<b>Pollutant</b>	<b>Construction-Related</b>	<b>Operational-Related</b>
<b>Accidental Release of Acutely Hazardous Air Pollutants</b>	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
<b>Odors</b>	None	Screening Level Distances and Complaint History
<b>Plan-Level</b>		
<b>Criteria Air Pollutants and Precursors (Regional and Local)</b>	None	<ol style="list-style-type: none"> <li>1. Consistency with Current Air Quality Plan control measures</li> <li>2. Projected VMT or vehicle trip increase is less than or equal to projected population increase</li> </ol>
<b>GHGs</b>	None	Compliance with Qualified Climate Action Plan OR 6.6 MT CO <sub>2</sub> e/ SP/yr (residents + employees)
<b>Risks and Hazards/Odors</b>	None	<ol style="list-style-type: none"> <li>1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) and odors</li> <li>2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways</li> </ol>
<b>Accidental Release of Acutely Hazardous Air Pollutants</b>	None	None
<p>Notes: CEQA = California Environmental Quality Act; CO = carbon monoxide; CO<sub>2</sub>e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub>= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM<sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO<sub>2</sub> = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr= year; TBD: to be determined.</p>		