BAAQMD

CEQA Guidelines Update

Alameda County Transportation Commission
March 24, 2011

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Bay Area Air Quality Management District
Why Update the CEQA Guidelines?

• Provide guidance to local lead agencies in evaluating air quality impacts of land use development
• Include thresholds of significance, analytical tools, mitigation measures
• Last published 1999, update needed
  ▪ Attain health-based air quality standards for ozone and fine PM
  ▪ Reduce health impacts from toxic air contaminants and fine PM
    ▪ Highest exposures to toxics & fine PM near roadways, industry
  ▪ GHG reductions to achieve AB 32, SB 375
• Goal: encourage air quality beneficial land use
  – Support infill, TOD, mixed use
  – Minimize public health impacts of new development
GHG Thresholds

- Address critical void
  - No thresholds for GHGs in CEQA previously existed
  - Legal scrutiny by AG, environmental groups
- Based on AB 32 and Scoping Plan – allows statewide consistency
- Thresholds options
  - Plan based – consistency with Climate Action Plan OR
  - “Bright line” – 1,100 metric tons/yr OR
  - Efficiency based – 4.6 tons/service population/yr (residents & employees)
- Credit for lower vehicle use/efficiencies of infill, mixed use projects
- Thresholds will be revisited if/when State guidance available
- Consistent w/Office of Planning & Research State CEQA Guidelines
- Provides certainty: legally defensible approach, level playing field
Regional Air Toxics
Emissions and Risk

Air Toxics Emissions

Modeled Air Toxics Risk

Legend:
- Cancer Risk
  - <100
  - 100-200
  - 200-300
  - 300-400
  - >400

Data from 1 km x 1 km grid:
- Cancer Risk from Diesel PM
- 1,3-butadiene
- Benzene
- Formaldehyde
- Acetaldehyde

Cancer risk-weighted emissions (lbs/day * unit risk factor):
- > 0.02
- 0.01 - 0.02
- 0.005 - 0.002
- 0.001 - 0.002
- < 0.0001
- < 0.0001
Public Health Impacts of Pollution Near Freeways

- Health studies consistently show that living near highways has serious health consequences
  - Children living near a busy highway more likely to develop asthma and wheezing, suffer increased asthma attacks.
  - Exposure to traffic-related pollution, especially fine PM, significantly increases risk of heart attacks and premature death.
  - Pregnant women exposed to high levels of pollution from cars and trucks are more likely to experience problems with baby’s development, such as low birth weight.

- Pre-term and early childhood exposures to carcinogens are ten times more important than previously estimated
- Local land use decisions play an important role in determining exposure to air pollutants
  - San Francisco ordinance on air quality and infill development
Encourage Healthy Infill

Poor housing site

Good housing site
Local Community Risks and Hazards

- CARE program identifies 6 priority communities in Bay Area
  - High emissions, concentrations of toxics & vulnerable populations
- Quantitative thresholds or plan-based approach
  - Address new sources of pollution and new receptors near existing sources (e.g., freeways)
  - Thresholds address PM and toxic risk
  - Consider localized impacts – within 1,000 feet
  - Consider individual sources and cumulative impacts
- Promote infill, while protecting residents
- Potential conflicts may often be resolved through site specific analysis and reasonable mitigation
- Encourage community risk reduction plans
Community Risk Reduction Plans

- Community wide planning approach to reduce cumulative impacts
- Streamline CEQA review for projects consistent with Plan
- CRRP elements (similar to climate action plans)
  - Consider future development plans
  - Establish future goals, emission reduction targets
  - Prepare emission inventories and modeling
  - Develop & implement emission reduction measures
  - Monitor progress
  - Public involvement process
- Collaborative effort between local gov’t & Air District
- Air District preparing local emission inventories, modeling
- Air District provide funds to local jurisdictions to support CRRP development and implementation
- Pilot projects underway in San Jose, San Francisco
Board Adoption and Subsequent Activities

- Extensive discussions with Board of Directors during 2009, 2010
- District Board of Directors approved significance thresholds June 2, 2010
  - Most thresholds effective immediately
  - Risk & hazard thresholds for new receptors effective May 1, 2011
- District staff working closely with city & county staff, regional agency staff, consultants, developers, etc.
  - Responding to inquiries, providing data & technical assistance
  - Many meetings and presentations
  - Tracking implementation
  - Reviewing CEQA documents, submitting comments
  - Local gov’t workshops – Feb./March 2011
  - Work with ABAG and MTC to convene PDA/air quality work group
  - Responding to questions & concerns re Guidelines’ impact on infill devel.
Support for Infill, TOD

• GHG thresholds
  – Acknowledge efficiencies of infill – take credit for lower vehicle trips, energy efficiency, etc.
  – GHG efficiency threshold supports larger infill projects

• Risk and hazards thresholds
  – Extensive outreach to local gov’t, developers to improve understanding, receive feedback
  – Community risk reduction plans integrate with local planning activities
  – Extensive technical support documents assist evaluations
  – Case studies confirm thresholds are achievable, while health protective
    • Many projects pass screen level evaluations
    • Many additional projects pass with more site specific analysis and/or reasonable mitigation
Board set effective date for risk & hazard threshold to May 1, 2011

Clarify project screening process on website

Update freeway and roadway screening tables

Update stationary source screening tables

Update project screening, modeling guidance document

Provide technical support to local gov’t, developers

Support community-wide planning through CRRPs

Collaborate with regional, local agencies on community-wide planning in PDA communities

Develop community development guidelines
Community Development Guidelines

- Simplify process for analyzing and mitigating risk & hazard impacts
- Provide worksheet/checklist to streamline approach
- Standardize setbacks and mitigation measures
  - Model local emissions and pollutant concentrations for roads, freeways, stationary sources
  - Account for future emission reductions from regulations in place
- Examples of potential risk reduction strategies
  - Indoor air quality filters and ventilation
  - Building heights and air intakes
  - Truck routes and idling limits
  - Setbacks for drycleaners, back-up generators, gas stations, etc.
  - Land use and transportation planning to reduce vehicle emissions
Convened Air Quality/PDA workgroup with ABAG & MTC
- Identify air quality concerns in Priority Development Areas
- Support plan level efforts to address air quality impacts and CEQA
- Streamline CEQA review of PDAs
- Coordinate with SB 375 process

Regular staff meetings among ABAG, MTC, BAAQMD

Model to calculate benefits of transportation measures in PDAs

Regional agency staff meeting with Bay Area Planning Directors Association (BAPDA)
- Coordinate regional programs
- Support local planning and development
Case Study: The Uptown, Oakland

Project characteristics:
700 multifamily units,
14,000 sq. ft. retail,
downtown Oakland

Step 1 – Determine 1,000 foot radius

Step 2 – Identify local roads (>10,000 vehicles/day) and freeways to be evaluated

Step 3 – Identify local permitted sources
**Roadway Impacts Near The Uptown**

<table>
<thead>
<tr>
<th>Roads</th>
<th>PM2.5 (ug/m3)</th>
<th>CEQA Threshold</th>
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<tbody>
<tr>
<td>Highway 980</td>
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<td>Highway 123</td>
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<tr>
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<tr>
<td>Broadway</td>
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<table>
<thead>
<tr>
<th>Roads</th>
<th>Cancer (cases per million)</th>
<th>CEQA Threshold</th>
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**Permitted Sources Near The Uptown**

**Table 1: PM2.5 Emissions**

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<th>Source</th>
<th>PM2.5 (ug/m3)</th>
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<td>Air Heater</td>
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**Table 2: Cancer Risk**

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<th>Cancer (cases per million)</th>
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<td>Gas Station 1</td>
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