

**Draft**

**Air Quality and Land Use Handbook:  
A Community and Health Perspective**



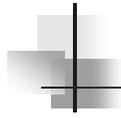
Public Workshop  
UCLA  
March 4, 2005

California Environmental Protection Agency

 **Air Resources Board**

**Presentation Outline**

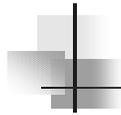
- ≈ Background
- ≈ Key Elements
- ≈ Siting of Sensitive Land Uses
- ≈ Recommendations



## Background

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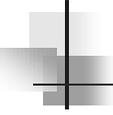
- ✧ ARB Policies and Actions for EJ (2001)
  - ✧ Identify cumulative air pollution impacts associated with land use planning and siting
  - ✧ Work with local agencies on ways to reduce impacts
- ✧ Meetings with Stakeholders on draft Handbook (2002-2004)
- ✧ Study Session (2004)
- ✧ New draft (February 2005)
  - ✧ Draws on Stakeholders and Study Session comments



## Key Elements

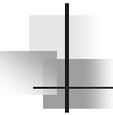
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- ✧ Offer recommendations on siting of residences, schools, and other “sensitive” land uses
- ✧ Provide information on air quality issues related to land use
- ✧ Promote consideration of localized air impacts in land use processes
- ✧ Encourage land use agencies to consult air agencies



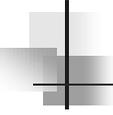
## Siting of “Sensitive” Land Uses

- ⌘ Protect children, elderly, and those vulnerable due to illness
- ⌘ Provide available health and distance-related information to land use agencies
- ⌘ Focus on siting new sensitive land uses
  - ⌘ Distance recommendations made where possible



## Recommendations

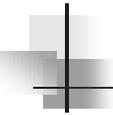
- ⌘ Specific Separation Recommendations
  - ⌘ High traffic freeways and roads
  - ⌘ Distribution centers
  - ⌘ Rail yards
  - ⌘ Chrome plating facilities
  - ⌘ Dry cleaners
  - ⌘ Large gas stations
- ⌘ General Recommendations
  - ⌘ Ports
  - ⌘ Refineries
  - ⌘ Sources of dust problems and odor complaints



## Considerations for Selecting Categories

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- ✦ Diesel particulate emissions a priority
- ✦ Toxicity of emissions
- ✦ Available health risk information
- ✦ Other factors
  - ✦ large emission sources
  - ✦ multiple pollutants
  - ✦ odors



## Cancer Risk

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(Excess Cancer Risk Per Million Population)

- ✦ California urban regional air pollution cancer risk ranges from approximately 500 to 1000
- ✦ Diesel contributes 70% of known air pollution cancer risk
- ✦ Handbook considers added risk near freeways and facilities
- ✦ Risk drops rapidly with distance and approaches background levels
- ✦ Upper-end of range represents highest risk scenario closest to source



## Available Risk Information\*

(Excess Cancer Risk Per Million Population)

- ✍ Freeways: 300 - 1700
- ✍ Rail Yards: up to 500
- ✍ Chrome Platers: 10 to 100
- ✍ Dry Cleaners: 15 to 150
- ✍ Gas Stations: less than 10 to 120
- ✍ Distribution Centers: up to 500\*\*

\*Range reflects combination of risk and distance

\*\*Analysis based on refrigerator trucks



## Other Factors Considered

- ✍ Ports
  - ✍ Risk assessments underway
  - ✍ Major source of diesel emissions
  - ✍ Other goods movement facilities with large diesel emissions such as rail yards have high risk
- ✍ Refineries
  - ✍ Large air pollution source
  - ✍ Risk assessment indicates low cancer risk, but limited data on non-cancer effects
  - ✍ Non-routine emissions and odors

**Time to hear from you!**

