Study Session on the Relationship Between the Location of Sensitive Receptors and Pollution Sources

Sponsored by the California Air Resources Board

Joseph K. Lyou, Ph.D.
Executive Director
California Environmental Rights Alliance

October 4, 2004
Presentation Outline

• Things I Think We Can Agree Upon
• The Basis of the Debate
• Thorough Analysis” Shortcomings
• Precedents for Requiring Buffer Zones
• Buffers Are Not the Antithesis of Science
Things I Think We Can Agree Upon

- Health studies show that criteria and toxic air pollutants adversely impact public health.
- Incompatible land use decisions should be avoided.
- Land use decisions should be based upon the best available information.
One Thing I wish we would agree upon:

"The Legislature finds and declares . . .

(e) That, while absolute and undisputed scientific evidence may not be available to determine the exact nature and extent of risk from toxic air contaminants, it is necessary to take action to protect public health."

Source: Calif. Health & Safety Code §39650
The Basis of the Debate

• ARB Draft Handbook: “4. What types of siting scenarios should trigger a thorough analysis of air quality impacts?”

• Environmental Position: “4. What types of siting scenarios should be avoided because of air quality impacts?”
“Thorough Analysis” Approach Shortcomings

- A generic recommendation for site-specific analyses would make a bad situation worse.
- Cities, counties, and school districts make many thousands of land use decisions every year in California.
- It would be impossible to conduct independent site-specific analyses for every potentially bad land use decision.
More Shortcomings

• A generic requirement for site-specific analyses unfairly shifts the burden of proof to impacted community members.

• The “thorough analysis” approach will most adversely impact those who lack the resources to fight bad decisions and those who have the least influence upon decision-makers (i.e., low-income communities of color).
Precedents for Requiring Buffer Zones

- Land use decision-makers have established buffer zones for schools and adult entertainment businesses.
- Pending ARB regulations include buffers.
- Regulations restricting the use of certain pesticides include buffer zones.
- A local planning ordinance in Louisiana requires buffer zones.
Schools, Guns & Buffers

Any person who possesses a firearm in . . . a school zone shall be punished [with up to 5 years in state prison] . . . "School zone" means . . . within a distance of 1,000 feet from the grounds of the public or private school.

Source: California Penal Code §626.9(b),(e)
L.A. County Planning & Zoning Code

Adult businesses shall not be located:
1. Within 250 feet of any property located in a residential or agricultural zone
2. Within 500 feet of any church, chapel or other publicly recognized place of worship . . . and
3. Within 500 feet of any public or private school (kindergarten through twelfth grade) or child care center . . . and
4. Within 500 feet of any park owned by a public entity . . .

Source: L.A. County Code §22.62.020(A)
Stationary Diesel Engine Regulations

“No owner or operator shall operate a . . . stationary emergency diesel-fueled [compression ignition] engine for non-emergency use . . . between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds.”

Source: Proposed 17 CCR 93115(e)(2) as filed with OAL on 9/24/04
California pesticide regulations

“DeF and olethiazol applications shall not be made within one-half mile of any area zoned as residential where people are actually residing or other inhabited residential area designated by the commissioner or any school in session or due to be in session within 24 hours.”

Source: 3 CCR 6470(a)(3)
Buffer Zone Requirement in Louisiana

“Major [M-2] operations must be located two thousand (2,000) feet from the nearest R, CR-1 or C-2 District and a lesser distance if clearly dictated by industry standards and approved by the Board of Adjustments. . . . A one mile buffer zone between M-3 and residential and commercial zones must be maintained. ”

Source: St. Charles Parish Zoning Ordinance of 1981
Buffers Are Not Antithesis of Science

- Recommendations about buffers should be based upon the best available scientific findings.

- If scientific findings are lacking, ARB officials should acknowledge these data gaps and use their professional judgment to recommend “red zone” and “yellow zone” buffers.

- To the extent that ARB officials know that site-specific parameters influence exposure to air toxics (e.g., wind patterns, stack heights, etc.), they should incorporate that information into their recommendations.
Dr. Joseph K. Lyou  
Executive Director  
California Environmental Rights Alliance  
P.O. Box 116  
El Segundo, CA 90245-0116  
(310) 536-8237  
jlyou@EnviroRights.org