



BAY AREA  
AIR QUALITY  
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DISTRICT

# **Update on Amendments to Air Toxics New Source Review (NSR) Rule**

**CARE Program  
Cumulative Impacts Working Group  
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# Presentation Outline

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1. Background on Air Toxics NSR
2. Draft amendments to Air Toxics NSR rule
3. OEHHA risk assessment guideline revisions
4. Rule development schedule



# BAAQMD Toxics NSR Program

- Began in 1987
- Program requirements established in District Reg. 2, Rule 5 adopted in 2005
- Goals
  - Avoid significant increases in health risks from TAC emissions from stationary source projects
  - Provide net health risk benefits when existing sources are replaced or modified
- Applicability
  - Diesel engines
  - Gasoline dispensing facilities
  - Soil-vapor extraction systems
  - Furnaces, boilers, various other combustion sources
  - Many other types of sources including refinery processes, storage tanks, coffee roasters, crematories, furniture strippers, asphalt plants, etc.

# BAAQMD Toxics NSR Program

- Health Risk Screening Analysis (HRSA)
  1. Determine air concentrations by dispersion modeling
  2. Evaluate surrounding land use
  3. Calculate exposures for nearby residents, off-site workers, and other members of the public
  4. Use toxicity values to calculate health risks
- Existing Standards
  - Best Available Control Technology for Toxics (T-BACT)
    - Cancer risk = 1.0 in a million
    - Chronic HI = 0.2
  - Project Risk Limits
    - Cancer risk = 10.0 in a million
    - Chronic and Acute HI = 1.0



# Health Risk Screening Analysis (HRSA)

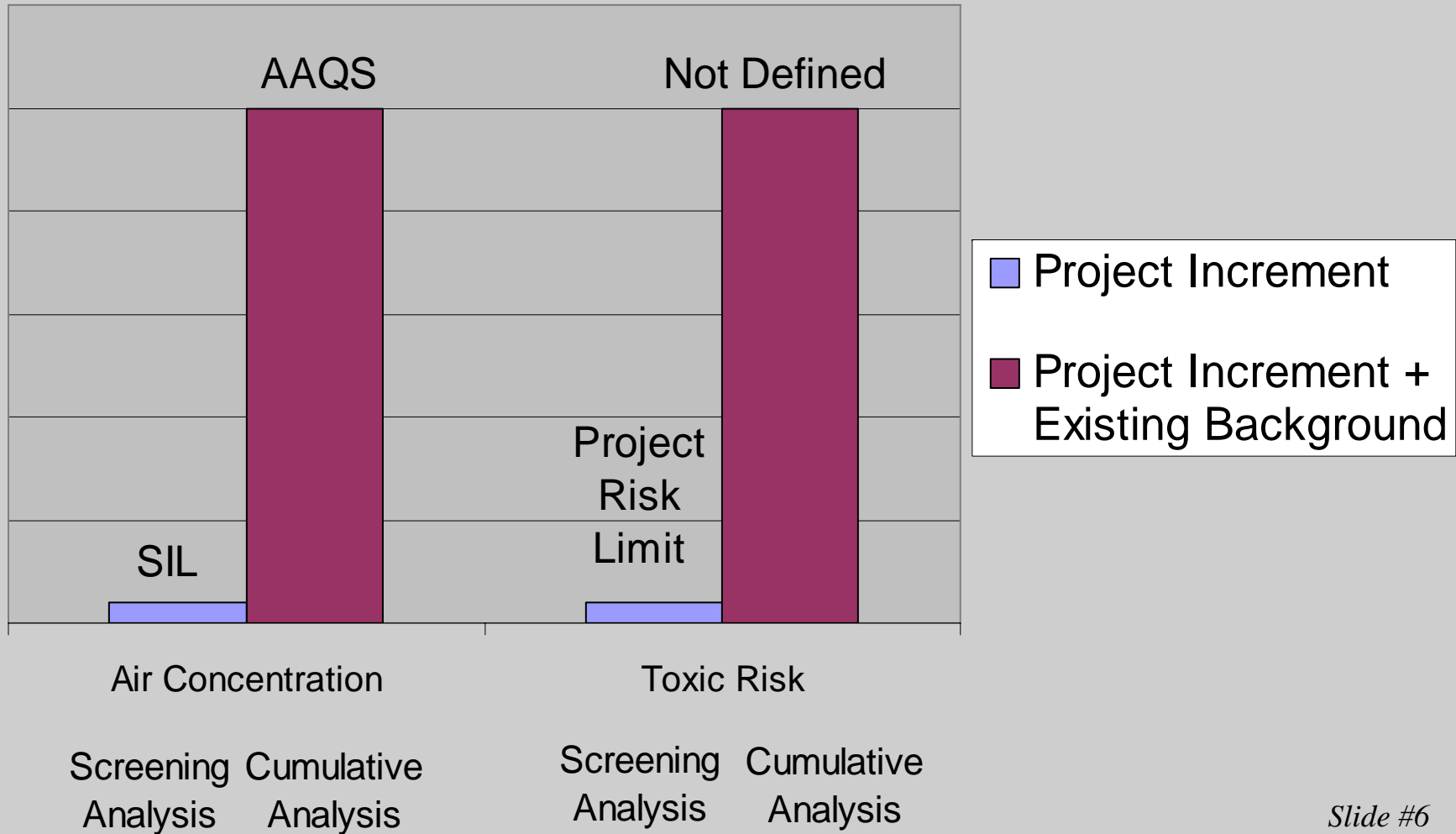
- OEHHA guidelines followed
- Cancer risk
  - Exposure x Potency = Cancer risk (expressed as a probability)
- Non-cancer risk
  - Exposure / Reference Exposure Level (REL) = Hazard Index
- Incremental, single-tiered, approach used
  1. Screening analysis
    - Maximum incremental increase in risk due to project emissions
    - Project Risk Limits



# New Source Review Approaches for Regulating Criteria Pollutants and Toxic Air Contaminants

Criteria Pollutants

Toxic Air Contaminants





# Draft Air Toxics NSR Amendments

- To address cumulative impacts, establish more stringent NSR standards for new/modified sources located in Priority Communities under the CARE Program
- Increase stringency by a factor of two
- T-BACT
  - Cancer risk = 0.5 in a million
  - Chronic HI = 0.1
- Project Risk Limits
  - Cancer risk = 5.0 in a million
  - Chronic and Acute HI = 0.5
- Add new cumulative health risk tracking provision in Priority Communities



# OEHHA Risk Assessment Guideline Revisions

- OEHHA is revising risk assessment procedures to provide a greater degree of health protection to children
  - Revised Reference Exposure Levels (RELs)
  - Revised cancer risk assessment guidelines
    - Age-dependent adjustment factors
- May not need to include “sensitive receptor” provision in Reg. 2, Rule 5
- May affect socioeconomic impact analysis
  - Dependent on number and type of facilities affected by more stringent risk standards





# Rule Development Schedule

- Draft regulatory concept issued in March 2009
- Outreach
  - Cumulative Impacts Working Group briefings
  - CARE Task Force briefing
  - Industry group briefings
- Public workshop expected in late July 2009
- Consideration of adoption late in 2009 or early in 2010