Air Toxics Program

Board of Directors
Santa Barbara County
Air Pollution Control District

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Overview

- Background
- Air Toxics
- Health Risk
- Toxics Regulations
- Risk Management
- New Source Review Health Risk Program
- Accomplishments
- Work in Progress
- Next Steps
Background

- Children’s Environmental Health Protection Act
- OEHHA revising health risk assessment Guidance Manual
- Risk may increase
Air Toxics

• Air Toxic: Chemical in the air with potential to cause health problems
Health Risk

- Health Risk: Increased likelihood that exposure to air toxics will result in negative health effects.
Health Risk

- **Cancer risk**
  - Expressed as probability: number of chances-in-a-million

- **Non-cancer risk**
  - Chronic
  - Acute
  - Expressed as Hazard Index (HI)

- Hazard Index = $\frac{\text{Predicted Air Toxic Exposure}}{\text{Acceptable Air Toxic Exposure}}$
Health Risk Assessments

- OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments
- ARB Hotspots Analysis Reporting Program (HARP)
Toxics Regulations

• State:
  – Air Toxics "Hot Spots" Information and Assessment Act
  – Airborne Toxic Control Measures (ATCMs)

• Federal:
  – National Emission Standards for Hazardous Air Pollutants (NESHAPs)
1. Identify amount of air toxics emitted by facilities;
2. Estimate potential health risk for members of public exposed;
3. Inform individuals exposed to significant health risk; and
4. Protect the public health by reducing significant health risks
Risk Management

• Board actions:
  – Adopted AB 2588 public notification thresholds in 1993
  – Adopted AB 2588 risk reduction thresholds in 1998

• Health Risk Significance Thresholds:
  – Cancer risk \( \geq 10 \) in a million
  – Chronic risk HI \( > 1 \)
  – Acute risk HI \( > 1 \)
New Source Review Health Risk Program

• Health risk evaluated during permitting
• Goal: Prevent a new/modified facility from creating a significant risk to community
• Uses significance criteria established by the AB 2588 program
Accomplishments

• AB 2588: 100% reduction of significant risk facilities
  – 1991: 51 significant risk facilities
  – 2015: 0 significant risk facilities

• New Source Review Health Risk Program: No additional significant risk facilities created since 1991
Work In Progress

- Dedicated resources to Air Toxics Program
- Formed South Central Coast air toxics team
- Evaluating impacts of revised Guidance Manual for health risk assessments
- Updating air toxics webpage
Next Steps

• Ascertain how best to execute revised Guidance Manual
• Work with:
  – South Central Coast air toxics team
  – California Air Pollution Control Officers Association (CAPCOA)
• Return to your Board with findings at a future date
Questions?