

# C. A. R. E. Program

## Community Air Risk Evaluation



BAY AREA  
AIRQUALITY  
MANAGEMENT  
DISTRICT

# C. A. R. E. Program Community Air Risk Evaluation

## Program Goals

- **Evaluate health risk from air toxins in Bay Area neighborhoods**
- **Provide health risk information to the communities**
- **Plan & implement risk reduction measures based on health risk**

# C. A. R. E. Program Community Air Risk Evaluation

## Technical Goals

- **Estimate air toxic emissions from mobile, area, & stationary sources**
- **Develop a gridded inventory map of air toxic emissions for entire Bay Area**
- **Focus additional air monitoring on areas with highest emissions**
- **Complete pilot cumulative risk assessment**

# C. A. R. E. Program

## Community Air Risk Evaluation

### Background

- **Monitoring the air for toxic compounds since 1985**
- **Monitoring network includes 22 sites**
- **Toxic compounds monitored include:**
  - **Benzene**
  - **1,3 - Butadiene**
  - **Perchloroethylene**
  - **Toluene**
  - **Metals**

# C. A. R. E. Program

## Community Air Risk Evaluation

### Background

- **Mobile sources ~ 90% of total cancer risk in ambient air**
- **Diesel Particulate Matter (PM) ~ 75% of total air cancer risk**
- **Bay Area cancer risk from air toxins\* down ~ 50% from 1994 to 2002 (\*excluding diesel PM)**
- **Statewide cancer risk from diesel PM down ~ 60% in the last decade**

# C. A. R. E. Program Community Air Risk Evaluation

## Successful Risk Reduction Measures

- **New vehicle emission standards**
- **Clean diesel fuel '92**
- **Cleaner burning gasoline '96**
- **Mobile, stationary & area source control measures**

# C. A. R. E. Program

## Community Air Risk Evaluation

### District Toxic Programs

- **Air Toxic Control Measures: e.g., chrome plating, medical waste incinerators, diesel engines (new)**
- **Air Toxics “Hot Spots” Program: e.g., iron foundries, chrome plating**
- **Toxics New Source Review (NSR): e.g., diesel engines, dry cleaners**

# C. A. R. E. Program Community Air Risk Evaluation

## CARE Program Elements

- **Public Outreach**
- **Technical Foundation**
- **Additional Air Monitoring**
- **Risk Assessment**
- **Targeted Action Plans**
- **Legislative/Regulatory Agenda**

# C. A. R. E. Program Community Air Risk Evaluation

## Public Outreach

- **Community meetings**
- **Advisory committee (including community members)**
- **Web site**
- **News releases**
- **Informational updates**

# C. A. R. E. Program

## Community Air Risk Evaluation

### Technical Foundation

- **Develop carbon emissions inventory**
- **Develop gridded emissions inventories from mobile, area & stationary sources**
  - **Diesel PM**
  - **All other toxic compounds**

# C. A. R. E. Program Community Air Risk Evaluation

## Additional Air Monitoring

- **Ongoing monitoring of diesel PM indicators**
- **Based on gridded emissions inventory one or two additional community sites for monitoring PM indicators & other toxic compounds**

# C. A. R. E. Program

## Community Air Risk Evaluation

### Risk Assessment

- **Conduct pilot cumulative risk assessment for a selected community based on toxics emissions inventory and input from Advisory Committee**
- **Perform additional risk assessment based on initial results and neighborhood air monitoring data**

# C. A. R. E. Program

## Community Air Risk Evaluation

### Targeted Action Plans

- **Develop & implement risk reduction measures for higher risk communities**
  - **New regulations**
  - **Incentive/voluntary programs**
    - **Grants (Carl Moyer, Transportation Fund for Clean Air (TFCA))**
    - **Alternative fuels**
    - **Cooperative efforts with businesses and governmental agencies (including local planning agencies)**

# C. A. R. E. Program Community Air Risk Evaluation

## Legislative/Regulatory Agenda

### Future EPA/CARB

- **Ultra low sulfur diesel fuel**
- **Additional heavy duty diesel exhaust emission standards**
- **Additional limits on stationary & mobile diesel PM emissions**

# C. A. R. E. Program Community Air Risk Evaluation

## Legislative/Regulatory Agenda

### Air District

- **Enhance Toxic New Source Review Program**
- **Adopt new rules to reduce toxic emissions**
- **Seek legislative authority to regulate heavy duty diesel fleets & other mobile sources**

# C. A. R. E. Program Community Air Risk Evaluation

## District Contacts

**Scott Lutz**

**Air Quality Engineering Manager**

**Email - [slutz@baaqmd.gov](mailto:slutz@baaqmd.gov)**

**Telephone - 415-749-4676**

**Eric Stevenson**

**Air Monitoring Manager**

**Email - [ESTevenson@baaqmd.gov](mailto:ESTevenson@baaqmd.gov)**

**Telephone - 415-749-4695**

**Bay Area Air Quality Management District**

**939 Ellis Street**

**San Francisco, CA 94109**