

Air Impacts, Agency Efforts and What Individuals Can Do

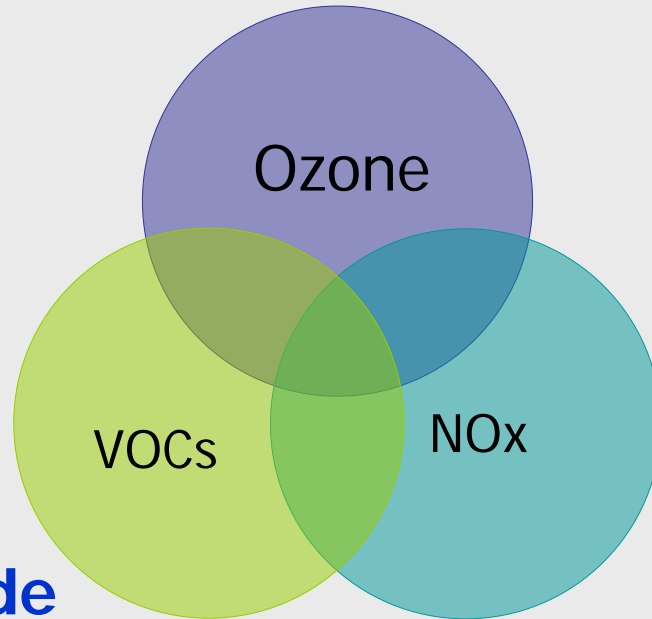


Maria L. Martinez
USEPA Region 6
Dallas, Texas

Air Pollutants

Sulfur Dioxide

Lead



Carbon Dioxide

Particulate Matter

Sulfur Dioxide

Air Toxics

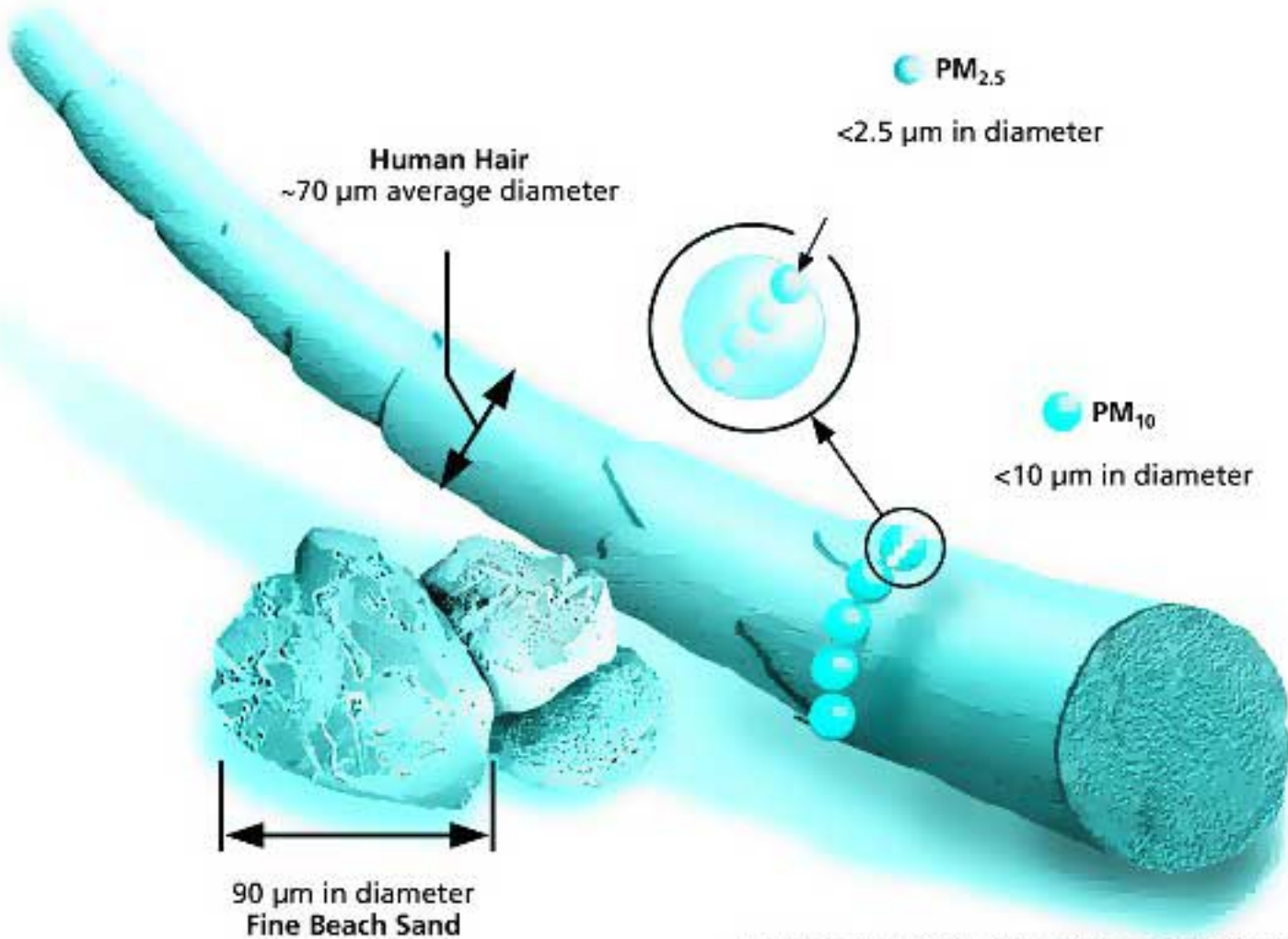
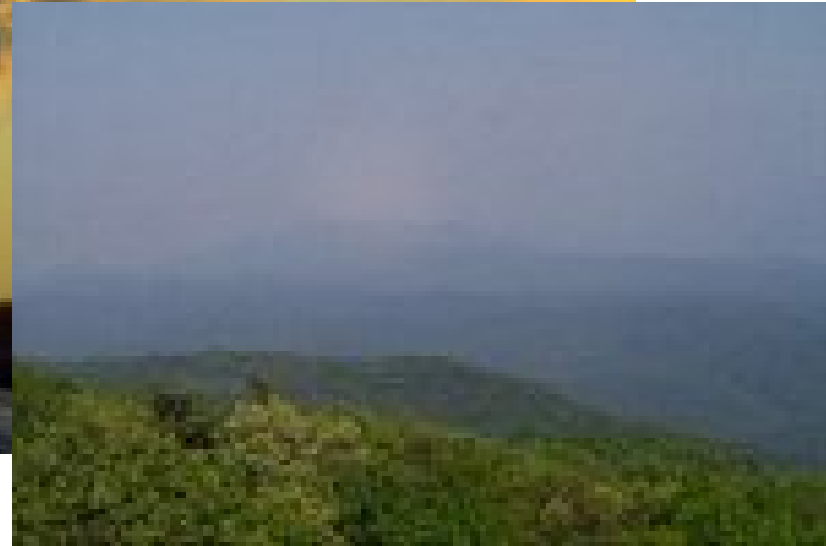


Image courtesy of EPA, Office of Research and Development

Sources of Air Pollutants



Air Pollutants

Carbon Monoxide – generated by fuels not burned completely

Sources: (60%) motor vehicle exhaust (90% motor vehicle exhaust in cities)

Lead – lead smelters, gasoline (legacy), waste incinerator, utilities, lead-acid battery manufacturing

Air Pollutants

NO_x – burning of fuel

Sources: motor vehicles (40%), electric utilities, and other industrial, commercial, and residential sources that burn fuels

Particulate Matter – fine (combustion from motor vehicles and power plants, coarse (dust from paved and unpaved roads)

Sulfur Dioxide – sulfur fuels (coal and oil), metal smelting and other industrial processes; power plants, petroleum refineries, iron/steel mills

Volatile Organic Carbon Compounds – motor vehicles (30%), solvents, paints, lacquers, paint strippers and cleaning supplies

Toxics – all above plus dry cleaning, gasoline station (loading/unloading)

Benzene (gasoline)

Perchloroethylene (dry cleaning)

Methylene chloride (solvents/paints strippers)

Agency Efforts

Regulatory

- Permits
- State Implementation Plans

Special Efforts

- Beyond Translation
- Environmental Justice and Tribal Office
- Special Projects

Special Air Monitoring Projects

Air Toxics Community Based Projects

Houston Exposure to Air Toxics Study

Purpose: Better understand how air toxic compound concentrations compare to concentrations measured in stationary monitors



Contributors and Funding Levels for the HEATS Project

Contributor	Current Funding Amount*
TCEQ	\$476,585
EPA Region 6 Grant to TCEQ	\$400,000
Mickey Leland National Urban Air Toxics Research Center (NUATRC)	\$275,000
Houston Advanced Research Center–Texas Environmental Research Consortium (HARC-TERC)	\$50,000
Harris County	\$50,000
East Harris County Manufacturers' Association (EHCMA)	\$50,000
City of Houston	Consultant / Project Adviser
TOTAL =	\$1,301,585

What Individuals Can Do

Public Participation and Comment

- Permits
- State Implementation Plans
- Standards

Special Projects and Collaboration

- Houston Exposure to Air Toxics Study
- City of Houston Mobil Air Toxics Monitoring Project