

Working together for clean air



Puget Sound
Clean Air Agency
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New Rules & Guidelines Relevant to Puget Sound Region Transportation Projects



Paul Carr

**MOVING DOWN THE ROAD TO CLEANER AIR:
Diesel Emissions Reductions Funding Forum
March 27, 2006**

Maintaining air quality – a multi-pollutant challenge

● Historical Focus

- ground-level ozone
- carbon monoxide
- fugitive dust (PM10)

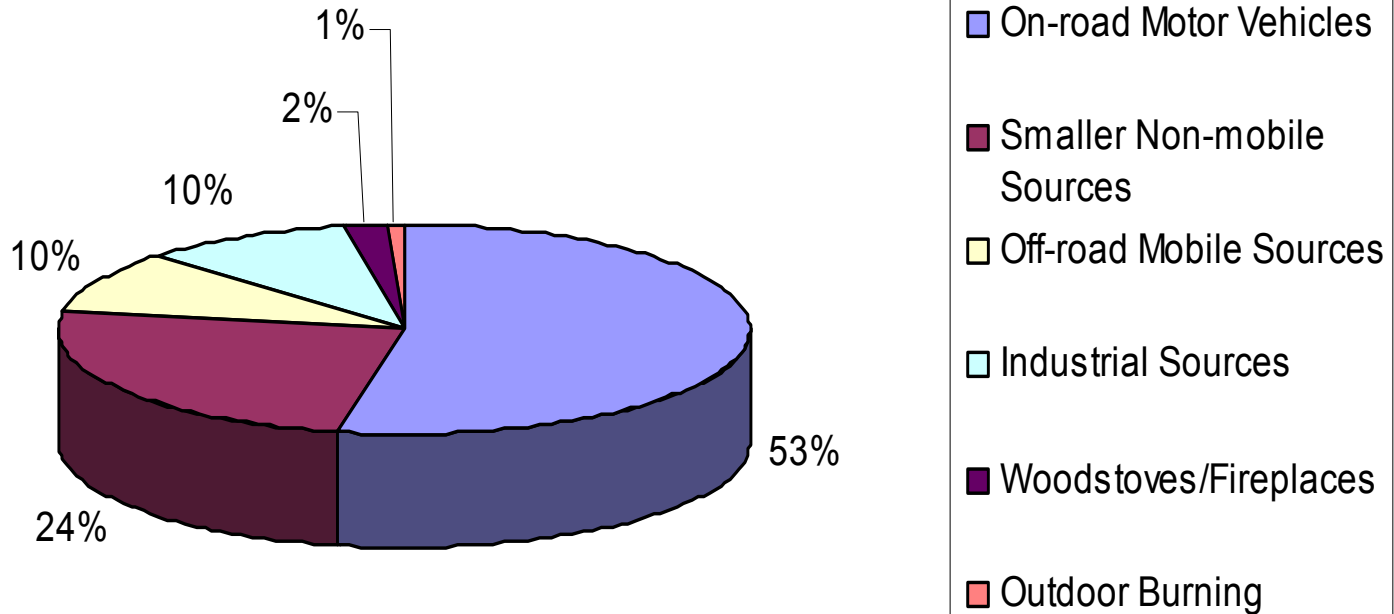
● Recent Focus

- ground-level ozone
- fine particles (PM2.5)
- toxics
- visibility
- climate change



Sources of emissions

Puget Sound Annual Air Emissions*

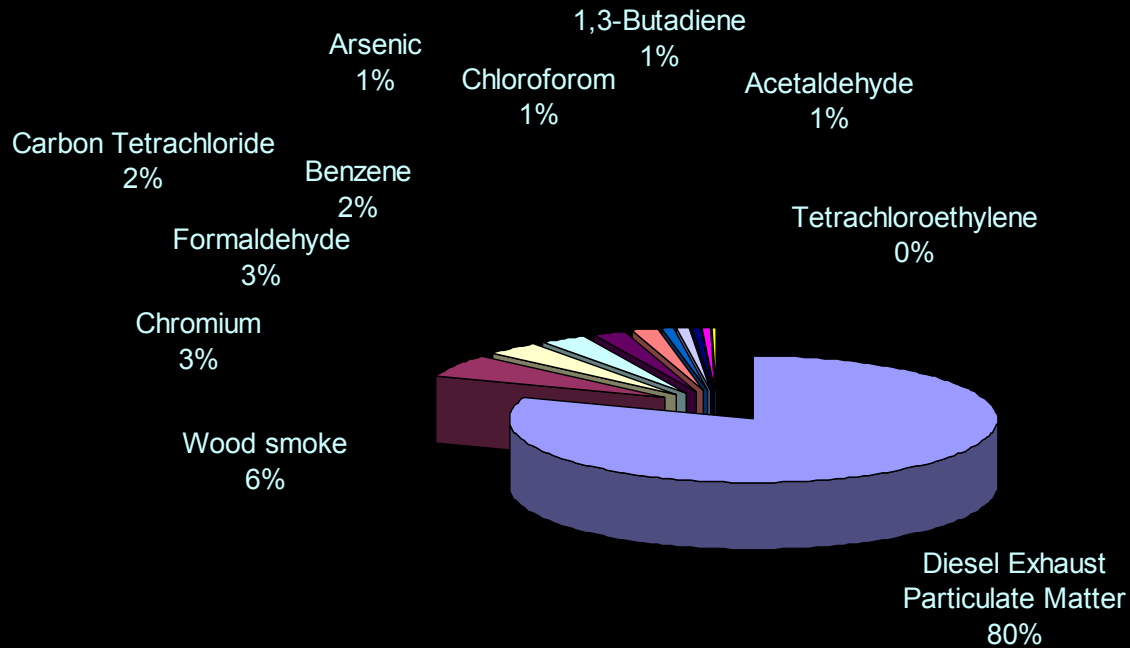


*Composite of volatile organic compounds, fine particulates, sulfur dioxide, nitrogen oxides and carbon dioxide

Source = PSCAA

Air Toxics in Puget Sound

Contribution to potential cancer health risk, Seattle 2001



Diesel particulate matter, wood smoke based on concentrations at Beacon Hill (PMF model)
 All other air toxics based on Seattle 6-site averages
 Puget Sound Air Toxics Evaluation, October 2003

Curbing mobile sources pollution: a multi-solution response

- **Cleaner vehicles & fuels**
- **Alternatives to auto travel**
- **Growth management**



Congestion Mitigation Air Quality Program (CMAQ)

● UNDER TEA-21

- **Primary purpose remains the same: to fund transportation projects and programs in nonattainment and maintenance areas which reduce transportation-related emissions.** (Program Guidance April 1999 The CMAQ Program under TEA-21 p.1)
- **Highest priority for funding is for the implementation of Transportation Control Measures, (TCMs) in State Implementation Plans, (SIPs) for air quality** (Program Guidance April 1999 The CMAQ Program under TEA-21 p.2)

Existing CMAQ Eligible Projects & Programs

- **Transportation activities in SIPs, e.g. the HOV system**
- **Inspection & Maintenance programs**
- **Capital Investment: for new or expanded transportation projects & programs to help reduce emissions**
- **Operating Assistance, provided**
 - **to help start viable new transportation services which can demonstrate air quality benefits**
 - **Limited to new transit services and new or expanded transportation demand management strategies**

Existing CMAQ Eligible Activities & Projects

- **TCMs** – air quality benefits must be determined & documented before projects can be considered eligible
 - Programs for improved public transit
 - Bus or HOV only roads or lanes
 - Employer based transportation management plans, (includes incentives)
 - Traffic flow improvement programs that achieve emission reductions
 - Parking facilities serving multiple-occupancy vehicle programs or transit service
 - Programs to restrict vehicle use in downtowns during peak hours
 - Bicycle & pedestrian facilities & programs
 - No idling programs
 - Flexible work schedule programs
 - Programs to promote non automobile and transit use

More Existing Eligible Activities & Projects

- **Alternative Fuels**
- **Traffic Flow Improvements** – that are likely to reduce emissions
- **Transit Projects**
- **Bicycle & Pedestrian Facilities & Programs**
- **Travel Demand Management**
- **Outreach & Rideshare Activities**
- **Telecommuting**
- **Fare/Fee Subsidy Programs**
- **Intermodal Freight**
- **Planning & Project Development**
- **Magnetic Levitation Transportation Technology
Deployment programs**

CMAQ PROGRAM UNDER SAFETEA-LU

- **The purpose is still the same.**
- **BIG CHANGE: States & MPOs must give priority in distributing CMAQ funds to**
 - diesel retrofits,
 - other cost-effective emission reduction activities
 - cost-effective congestion mitigation activities that provide air quality benefits. (AMPO's Guide to Deciphering SAFETEA-LU's Changes to TEA-21)

Newly Eligible CMAQ Projects & Programs

- **Diesel retrofits for vehicles or non-road vehicles and non-road engines used in construction projects**
- **Outreach activities regarding purchase & installation of diesel retrofits**
- **Truck stop electrification systems**
- **Transportation management systems & operations that mitigate congestion and improve air quality** (AMPO's Guide to Deciphering SAFETA-LU's Changes to TEA-21)

Evaluating CMAQ Projects

– Air Quality Criteria

- **The objective of the air quality criterion is to evaluate projects with the highest potential to reduce emissions**
- **Emissions reductions can occur through the following:**
 - **Eliminating vehicle trips**
 - **Inducing a mode shift away from single occupant vehicles**
 - **Reducing vehicle miles traveled**
 - **Improving traffic flow**
 - **Converting to cleaner fuels, equipment, fuel systems &/or vehicles**

NEW FOCUS IN CMAQ AIR QUALITY CRITERIA IN CENTRAL PUGET SOUND

- **The magnitude of the emissions reductions will be a determining factor**
- **The type of emissions reduced is important**
- **The timing of the air quality benefits, i.e. when the full potential emissions reductions will occur will be an important factor**

More Detail on CMAQ Project Ratings

- **High:** A project will rate high if:
 - It will substantially reduce fine particulates from diesel exhaust, or otherwise results in a substantial reduction in emissions
 - The air quality benefits will occur by **2010**
- **Medium:** A project will rate medium if:
 - It will moderately reduce fine particulates from diesel exhaust, or otherwise results in a moderate reduction in emissions, e.g. it reduces VMT by shortening a vehicle trip rather than eliminating a vehicle trip
 - The air quality benefits will occur between **2010** and **2015**
- **Low:** A project will rate low if:
 - It results in a low amount of emissions reductions
 - The air quality benefits will occur after **2015**

THANKS