

Summary testimony of John A. Charles, Jr.
President & CEO

Before the Joint Ways and Means Subcommittee on Natural Resources
Regarding the proposed DEQ budget
April 15, 2009

Overview

- Environmental trends over *long periods of time* matter more than measurements at any given moment. Also, pollution per unit of economic output is the key to measuring economic sustainability. Having DEQ express trends in terms of “pollution intensity” (total air and water emissions per unit of state GDP) would provide a useful way of determining whether or not we are making progress.
- Total emissions can be deceiving; not all releases or waste products pose threats to the ambient environment or public health.
- Allocation of scarce dollars should be prioritized on the basis of localized benefits relative to localized costs. Projects or programs whose benefits are speculative, long-term and/or diffuse should be at the bottom of the list.
- Overall, we do not have a crisis. By virtually any objective measure, Oregonians have *safer air, water and food today than at any time in the state’s history*. Nonetheless, the agency’s budget and staffing levels tend to grow each biennium. This is largely the result of “mission creep” (both agency-wide and within the legislative body) and the failure to separate “wants” from “needs”.
- To the extent that we have “problems” today, in many cases it is only because we’ve increased our expectations by tightening regulations (*e.g.*, moving from the original CAA TSP standard to PM-10, and then to a PM 2.5 standard over time). Very few Oregonians are actually at risk of chronic exposure to toxic or hazardous pollutants that would lead to health problems.

Comments on Key Performance Measures

It’s questionable how relevant these are to the real world. Some are tied to internal bureaucratic objectives, which may be important for measuring worker productivity but don’t have much to do with the ambient environment. Others are misleading in terms of how they



characterize public health or environmental threats (e.g., KPM 8 (mercury) and KPMs 10a and 10b (water quality trends). KPM 13a (cancer risks from toxic air pollutants) relies almost entirely on computer models using very old data. It would be better to eliminate this KPM altogether.

Policy Option Packages that should be eliminated or put at the bottom of the list

Package 116: Clean Air Transportation Collaborative. With regard to improving transportation efficiency, planning is the problem, not the solution (Exhibit A: Metro). The two things we haven't yet tried to reduce transportation-related emissions are the two policies most necessary: *market-based road pricing and deregulation of the monopolized transit industry*. If we implemented these two policies, we could probably repeal the DEQ vehicle I/M program.

Package 132: Mandatory take-back of consumer waste products. Consumers should be held accountable for the proper disposal of the products they buy, and those who do behave responsibly (the majority) should not be punished with back-door taxes imposed at the time of product purchase. Mandatory programs also squelch the evolution of innovative recycling pilot projects in the marketplace.

Package 110: Greenhouse gas reductions. This suffers from a very low benefit/cost ratio. To the extent there are any social benefits (questionable given that CO₂ is nature's great ambient fertilizer), they are long-term and global in nature. Yet the costs will be immediate and local. Oregonians should not be forced to "take one for the world team", especially since Oregon is already a very low-carbon state.

Comments on 30% GF reduction options

#5 - Eliminate Oregon Plan Biomonitoring: Salmon recovery already consumes vast levels of financial resources through other state/federal programs. It seems like this is one area where an \$860,000 cut could be absorbed without too much damage.

#7 - Reduce Clean Diesel Outreach: Business trade associations should step up to do this outreach, since their members stand to benefit from generous subsidies.

#19 – Communications and Outreach: Desirable but not essential.

#20, 25 and 26 – Orphan Site Cleanups: Hazardous waste sites tend to be over-rated as threats. Few people are typically exposed, which makes these low-risk items to cut.

#21 – Hazardous Waste TA: I'm not sure regulated entities need these services.

#29 – Outreach on Toxic Air Pollutants: Desirable but not essential.

#30 – WQ Monitoring Support for Toxic Pollutants: Desirable but not essential.

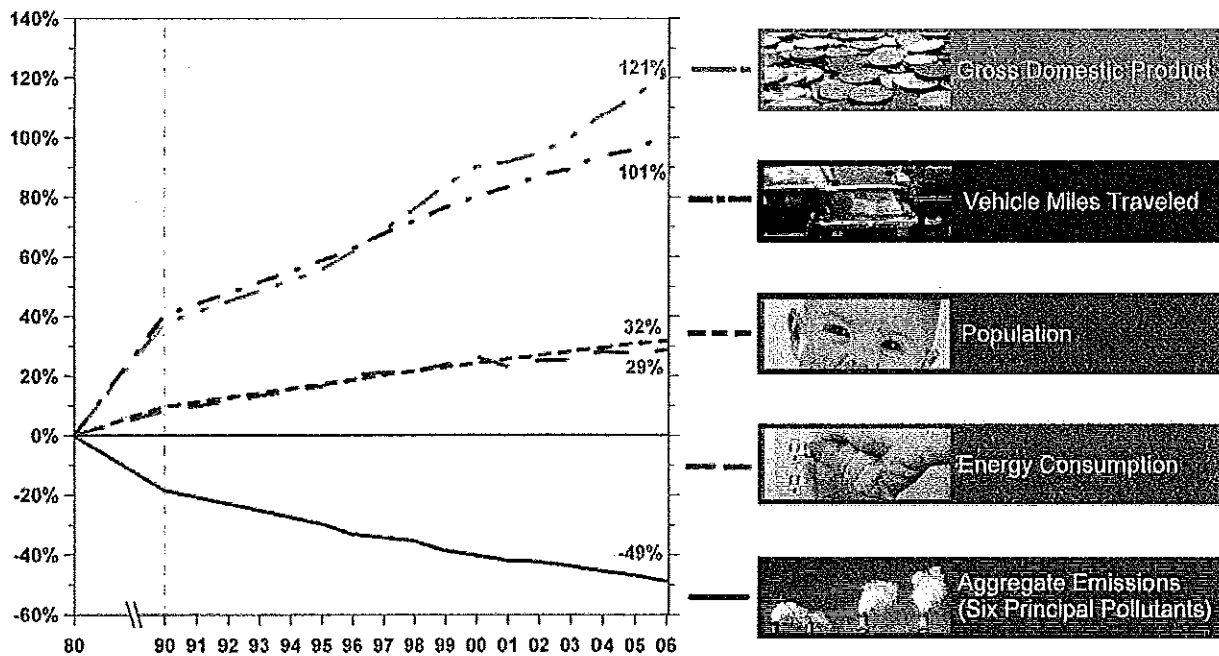


Figure 5. Comparison of growth measures and emissions, 1980-2006.

New National Monitoring Network

Location of candidate NCore sites.

The National Core Monitoring Network (NCore) will provide a network of monitoring sites (owned and operated by cities and states) that measure the principal pollutants (ozone, particles, NO_x, CO, SO₂, and lead), related gases (like VOCs and NO_x), and basic meteorology. NCore is primarily designed to measure very low-level concentrations to support air quality analyses and health effects studies. Sites will be placed in urban (about 55 sites) and rural (about 20 sites) locations throughout the country to help characterize regional and urban air pollution. Information provided by this network will improve our understanding of the relationships among air quality pollutants and meteorology. For information about the NCore network, visit <http://www.epa.gov/ttn/amtic/files/ambient/monitorstrat/naamsrat2005.pdf>.

Greenhouse Gas Emissions Overview

U.S. Greenhouse Gas Intensity

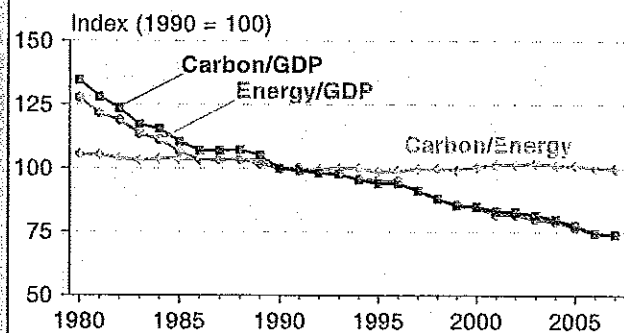
Summary

- From 2006 to 2007, the greenhouse gas intensity of the U.S. economy—measured as metric tons carbon dioxide equivalent (MTCO₂e) emitted per million dollars of gross domestic product (GDP)—fell by 0.6 percent, the smallest annual decrease since 2002.
- Economic growth of 2.0 percent in 2007, coupled with a 1.4-percent increase in total greenhouse gas emissions, accounted for the relatively slow rate of decrease (improvement) in U.S. greenhouse gas intensity from 2006 to 2007 (Table 2).
- Since 2002, the base year for the Bush Administration's emissions intensity reduction goal of 18 percent in a decade, U.S. greenhouse gas intensity has fallen by an average of 2.1 percent per year, resulting in a total reduction of 9.8 percent from 2002 to 2007.
- The steady decrease in carbon intensity (carbon/GDP) has resulted mainly from reductions in energy use per unit of GDP (energy/GDP) rather than increased use of low-carbon fuels, as indicated by the carbon/energy ratio shown in Figure 2.

	1990	2006	2007
Estimated Intensity (MTCO ₂ e/GDP*)	877.6	635.7	631.9
Change from 1990 (MTCO ₂ e/GDP*)		-241.9	-245.6
(Percent)		-27.6%	-28.0%
Average Annual Change from 1990 (Percent)		-2.0%	-1.9%
Change from 2006 (MTCO ₂ e/GDP*)			-3.7
(Percent)			-0.6%

*U.S. gross domestic product (million 2000 dollars).

Figure 2. Intensity Ratios: Carbon/Energy, Energy/GDP, and Carbon/GDP, 1980-2007



Source: EIA estimates.

Table 2. U.S. Greenhouse Gas Intensity and Related Factors, 1990, 1995, and 2000-2007

	1990	1995	2000	2001	2002	2003	2004	2005	2006	P2007
Gross Domestic Product (Billion 2000 Dollars)	7,112.5	8,031.7	9,817.0	9,890.7	10,048.8	10,301.0	10,675.8	10,989.5	11,294.8	11,523.9
Greenhouse Gas Emissions (MMTCO ₂ e)	6,241.8	6,575.2	7,074.9	6,957.7	7,043.7	7,098.8	7,230.1	7,257.0	7,179.8	7,282.5
Greenhouse Gas Intensity (MTCO ₂ e per Million 2000 Dollars)	877.6	818.7	720.7	703.5	701.0	689.1	677.2	660.4	635.7	631.9
Change from Previous Year (Percent)										
Gross Domestic Product	—	2.5	3.7	0.8	1.6	2.5	3.6	2.9	2.8	2.0
Greenhouse Gas Emissions	—	0.8	2.6	-1.7	1.2	0.8	1.8	0.4	-1.1	1.4
Greenhouse Gas Intensity	—	-1.7	-1.0	-2.4	-0.4	-1.7	-1.7	-2.5	-3.7	-0.6
Change from 2002 (Percent)^a										
Cumulative	—	—	—	—	—	-1.7	-3.4	-5.8	-9.3	-9.8
Annual Average	—	—	—	—	—	-1.7	-1.7	-2.0	-2.4	-2.1

^aThe Bush Administration's emissions intensity goal calls for an 18-percent reduction between 2002 and 2012; achieving that goal would require an average annual reduction of slightly less than 2 percent over the entire period.

P = preliminary data.

Note: Data in this table are revised from the data contained in the previous EIA report, *Emissions of Greenhouse Gases in the United States 2006*, DOE/EIA-0573(2006) (Washington, DC, November 2007).

Sources: Emissions: EIA estimates. GDP: U.S. Department of Commerce, Bureau of Economic Analysis, web site www.bea.gov.

PM₁₀ Trends

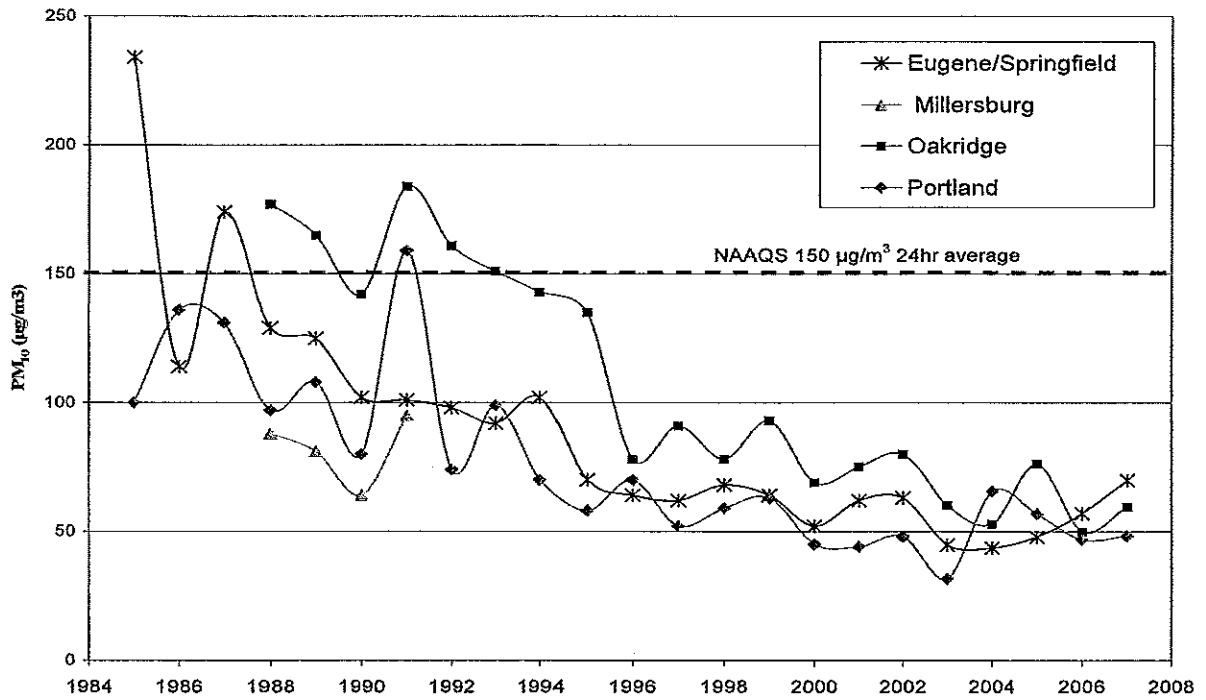


Figure 29a. PM₁₀ trend for NW Oregon cities using the second highest 24 hour average.

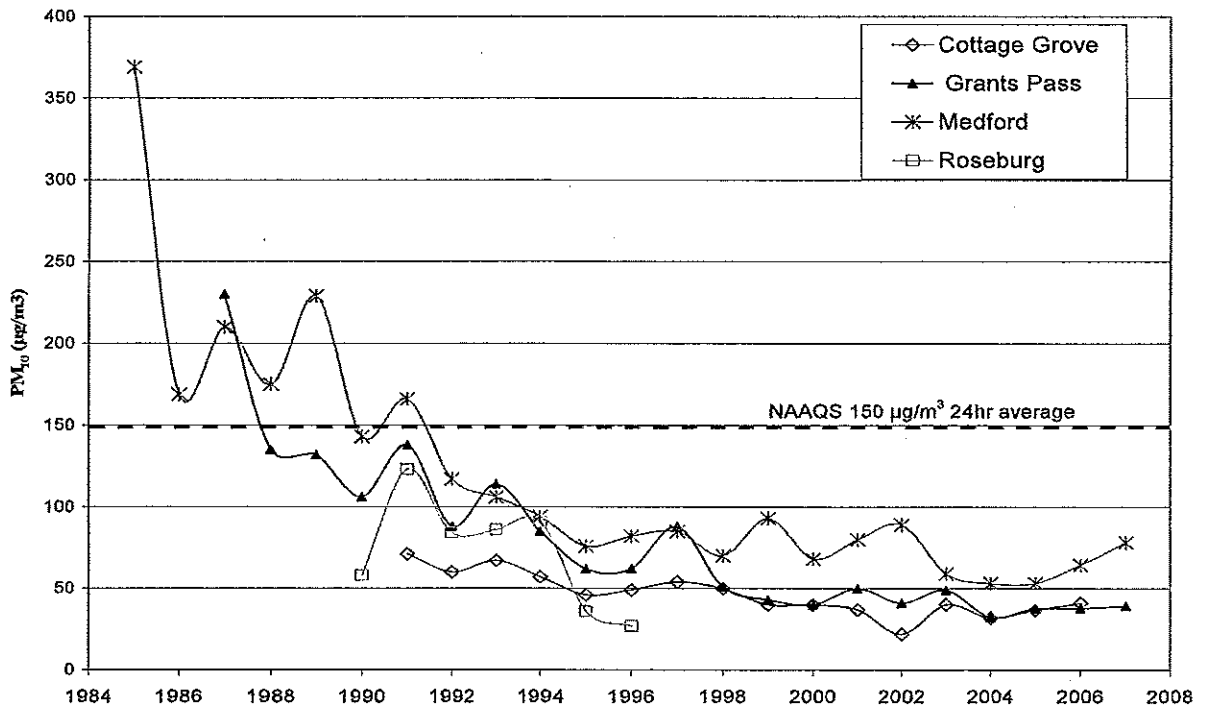


Figure 29b. PM₁₀ trend for SW Oregon cities using the second highest 24 hour average.

Carbon Monoxide Trends

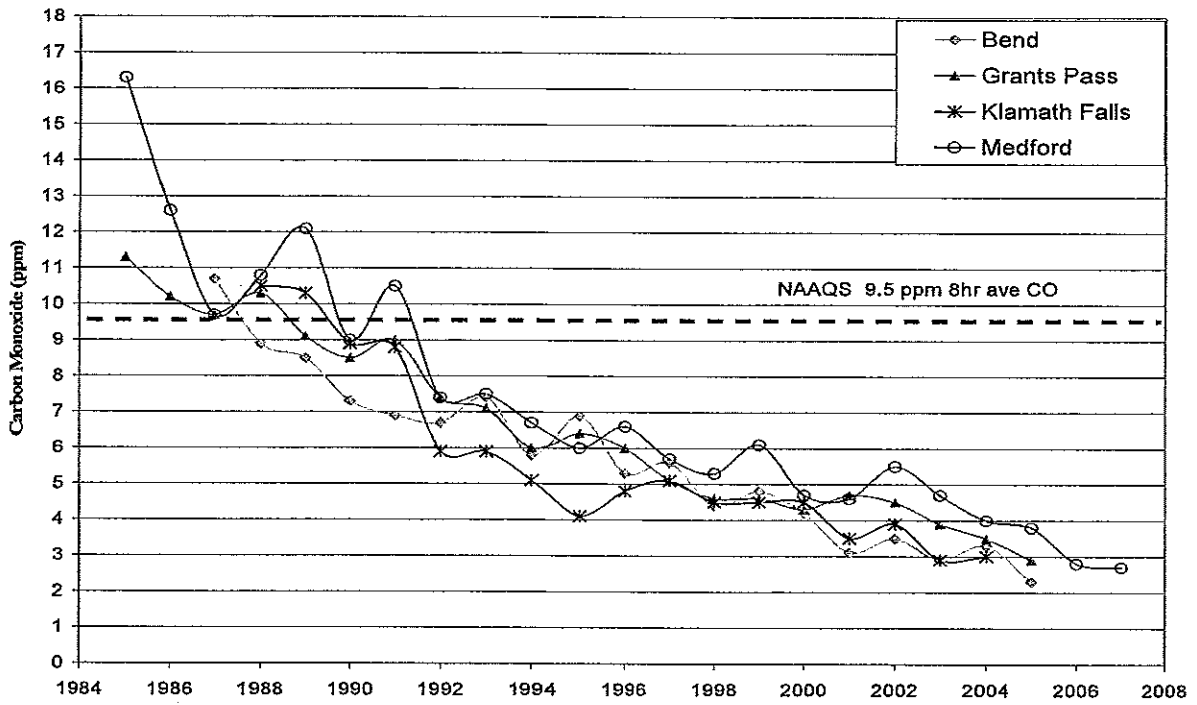


Figure 30a. CO trend for Bend, Klamath Falls, Medford, and Grants Pass using second highest eight hour average.

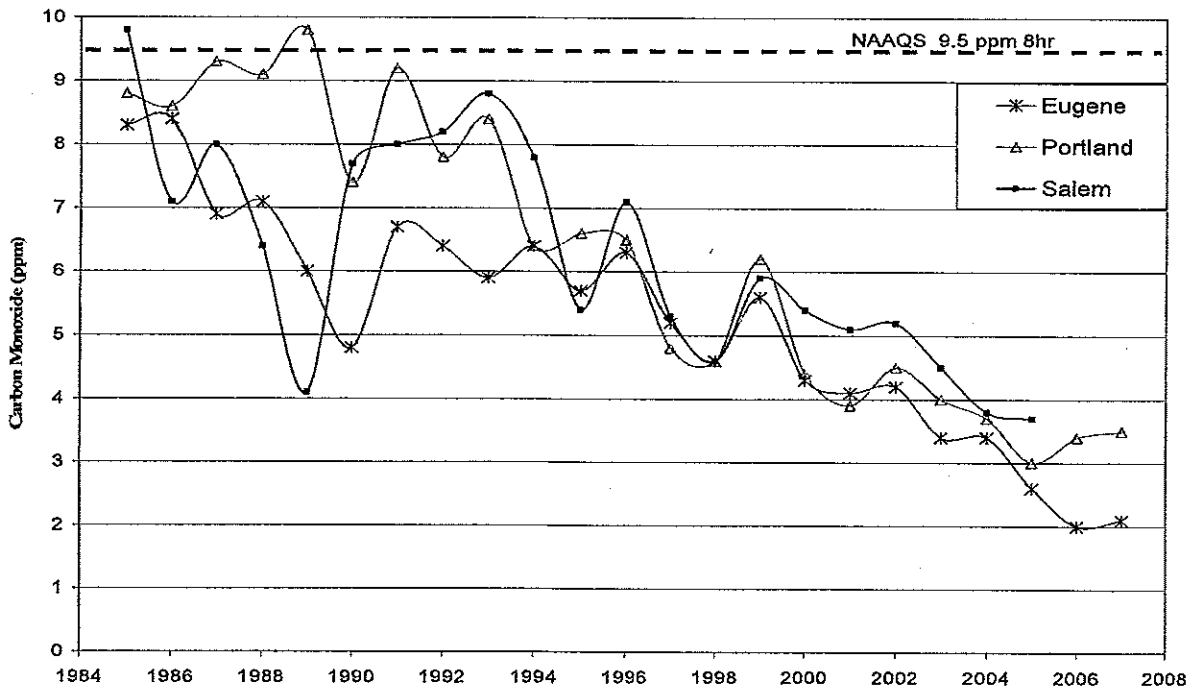


Figure 30b. CO trend for Portland, Eugene, and Salem using second highest eight hour average.

Oregon DEQ began sampling for air toxics in Portland in 1999 and La Grande in 2005. The Lane Regional Air Pollution Authority (LRAPA) began sampling for air toxics in Eugene in 2000. Figures 34 through 36 illustrate some trends for the Portland sites for select air toxics. More air toxic information can be found in Appendix H.

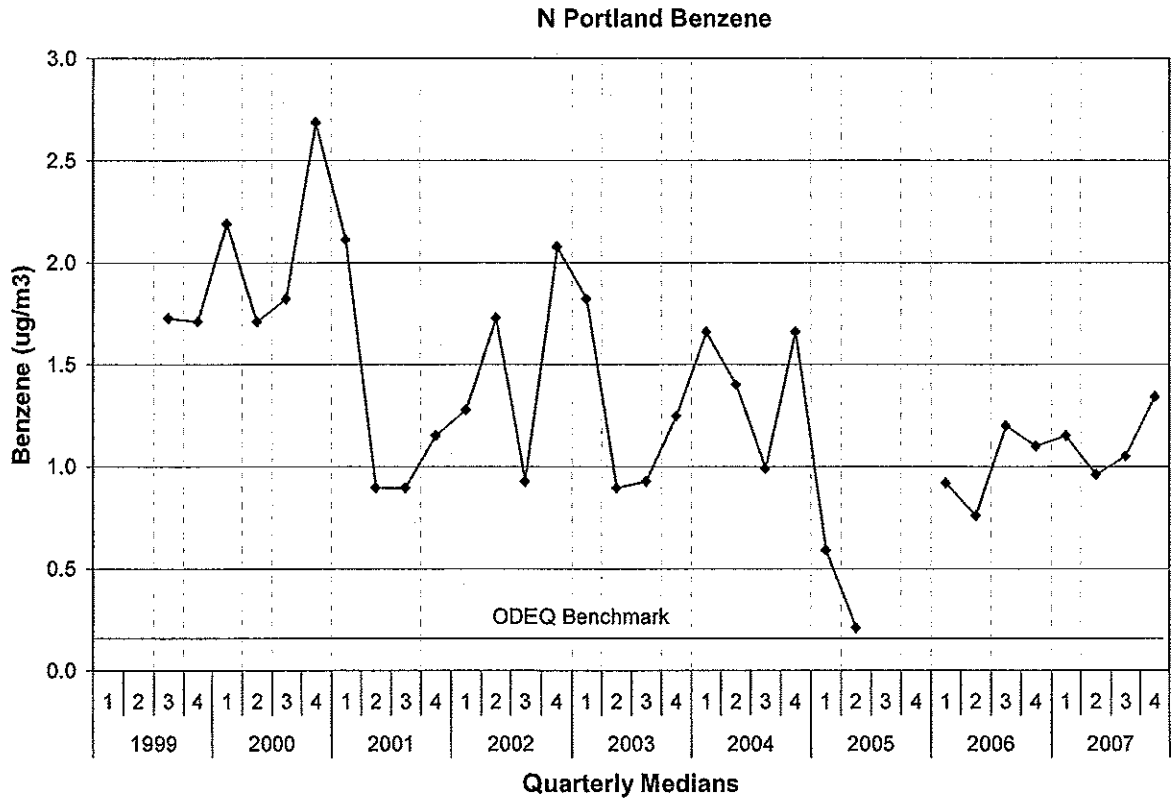


Figure 34. Median quarterly Benzene concentrations in N Portland. (1999-2007)

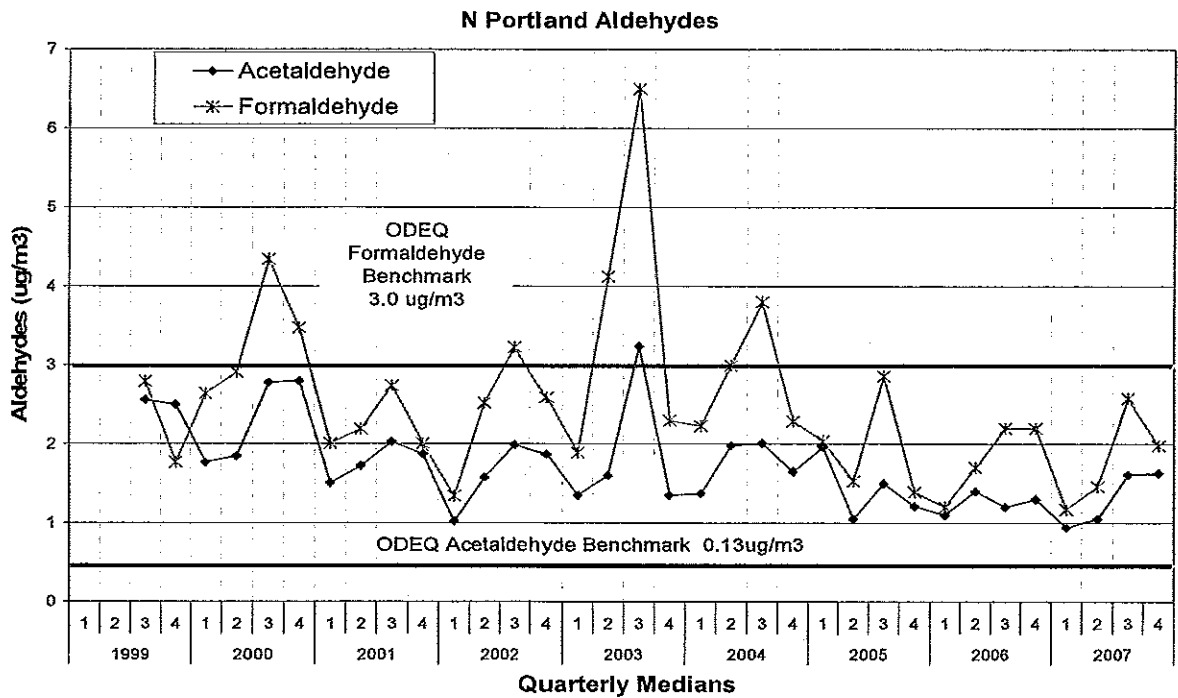


Figure 35. Median quarterly Aldehyde concentrations in N. Portland. (1999-2007)

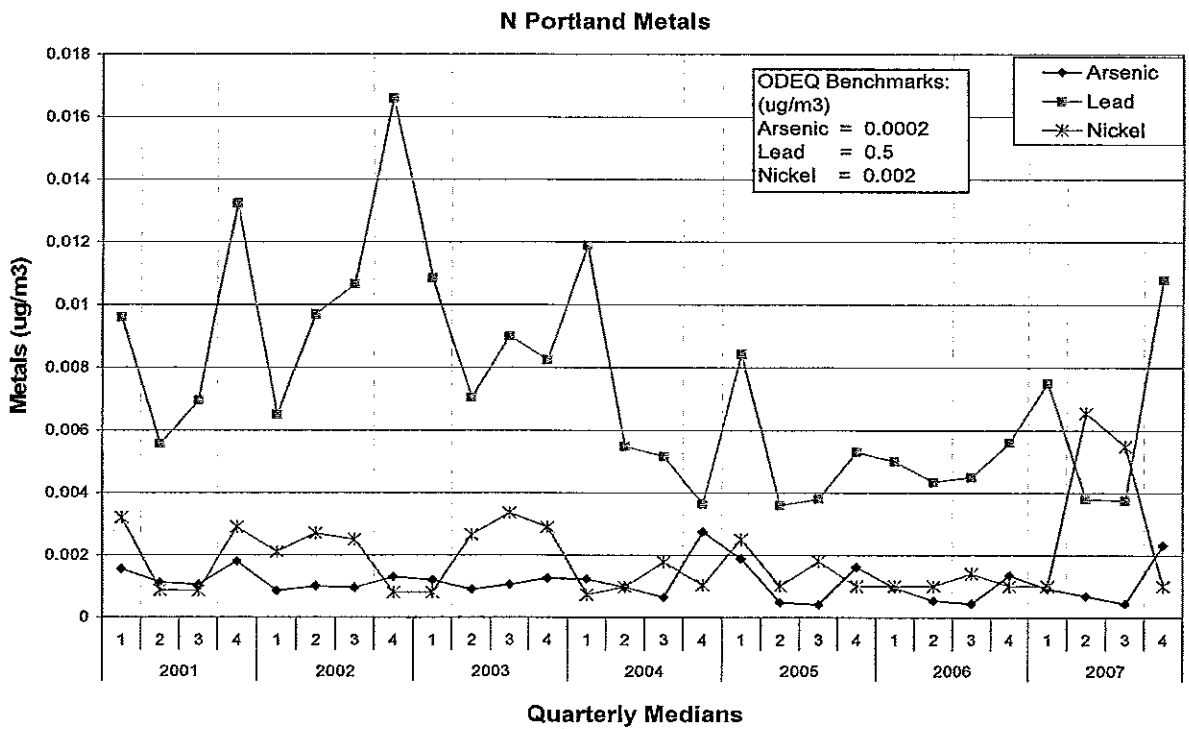


Figure 36. Median quarterly metals concentrations in N. Portland. (2001-2007)

John A. Charles, Jr.

Professional experience related to DEQ program areas

Employment

2004 – Cascade Policy Institute, President & CEO
1997 - 2004 Cascade Policy Institute, Environmental Analyst
1980 – 1996 Oregon Environmental Council, Executive Director
1977 – 1979 Environmental Defense Fund, Executive Assistant

Service on Task Forces and Advisory Boards

1980 - 1982 DEQ 208 Non-point Source Water Quality Advisory committee
1982 – 1985 DEQ Portland Air Quality Advisory Committee
1985 – 1986 Metro Diesel Emissions Task Force
1986 – 1987 EPA Regulatory Negotiations, Development of NSPS for Residential Woodstoves
1988 – 1989 Member and co-chair, Oregon Indoor Clean Air Task Force
1990 – 1994 Public Policy Committee, American Lung Association of Oregon
1990 – 1991 DEQ Visibility Advisory Committee
1991 – 1994 Grand Canyon Visibility Transport Commission, Public Advisory Committee
1992 – 1993 Governor's Task Force on Reducing Motor Vehicle Pollution in Portland
1996 – 2000 Metro Traffic Relief Options Study, Policy Advisory Committee
2001 – 2009 Oregon Road User Fee Task Force

Key Legislation (Co-author/advocate)

Oregon Safe Drinking Water Act (1981), Oregon Recycling Opportunity Act (1983), Oregon Woodstove Control Act (1983), Oregon Watershed Enhancement Board (1987), Oregon Groundwater Protection Act (1989)

