

Improving Air Quality for Port Communities

World Ports Summit
March 11-12, 2008
Hong Kong Convention and Exhibition Centre

Good afternoon. My name is Tay Yoshitani. I am the CEO of the Port of Seattle.

It is an honor for me to be here today and to join other colleagues in this international forum of world class ports. And it's a pleasure to be back in Hong Kong again...one of the world's most beautiful cities... and largest ports! Many thanks to Mr. Tupper, Director of Marine, for hosting this important gathering.

I'd like to talk about the environment this afternoon, and more specifically, about ways we all can maintain or improve air quality in ports and surrounding communities around the world.

In order to do this, I'd like to give some examples of what we've accomplished in the Pacific Northwest on a solely **voluntary** basis. I'll then describe some of our current and future initiatives.

The Pacific Northwest is a very scenic part of our country, as many of you may know, with beautiful mountains, sea and clean air. But over the past few years, as the population in our area has increased, we have come to realize that preserving this natural environment will require time, money and effort.

Port activity in the Puget Sound region is expanding and projected to grow significantly during the next few years, due to increased trade with Asia and the expanding cruise business.

The Port of Seattle has the advantage - and some may say the disadvantage - of being directly adjacent to and surrounded by heavily populated areas. We constantly strive to maintain or improve the quality of life for those living nearby while expanding our maritime operations.

With the increasingly global economy, ports on the West Coast, Canada and Mexico are all competing for cargo. We in Seattle are trying to find new ways to distinguish ourselves....to find a way to leverage our strength and differentiate ourselves from other ports.

I believe we can accomplish this best by becoming the “cleanest, greenest, most energy-efficient Port” in the country. This is will be our competitive edge.

We will manage our green effort by applying sound cost/benefit principals. We are not going to spend our limited resources on programs that are not proven or certified.

The Port of Seattle has the unique strength of operating in a region that is already well-known for its environmental stewardship.

In 2004 the Port of Seattle led the development of the Puget Sound Maritime Air Forum. This was a **voluntary** partnership with the Ports of Tacoma and Everett, the American Lung Association, BNSF Railway, US Environmental Protection Agency and many others to proactively address maritime emissions.

The Forum's central undertaking was the development of a maritime-related air emissions inventory. This inventory collected key data on the kind, quantity and sources of air pollution released from all maritime sources, not just those from the ports. It was the first comprehensive inventory of its kind in the United States.

We know that three quarters of health risks from air pollution in our region are the result of diesel exhaust. Studies have shown that marine diesel engines were significant sources of fine particulates and toxic emissions, not only a growing concern for public health but a top priority of regional clean air agencies and other regulators.

The results of this comprehensive inventory were released in April 2007. Its scope was unprecedented. It encompassed the US portion of Puget Sound. At the same time, a similar study was done in the Georgia Basin International Airshed in British Columbia by Environment Canada, the BC Chamber of Shipping and their partners. The total area for both encompassed more than 22,000 square miles.

And this is the first emissions inventory in the United States to include a detailed, activity-based inventory of greenhouse gases for maritime related sources.

The source categories inventoried include a wide range of vessels and shore-side equipment.

The inventory detailed the specific types of air emissions which enabled us to develop a Northwest Ports Clean Air Strategy.

The Ports of Seattle, Tacoma and Vancouver, Canada have adopted this Strategy which will reduce particulate matter from diesel engines in the short term by 2010, and long term by 2015. Our focus was and continues to be to encourage **voluntary** and ongoing innovation instead of mandated solutions. We also wanted to have defined measurable performance goals that set clear targets but do not prescribe the methods of reaching those targets.

Both short term (by 2010) and long term (by 2015) goals for each business sector were established. However these targets allow businesses the freedom to figure out methods they will use to reach them.

The issues presently faced by Southern California's ports, with the new stringent government regulations, is encouraging our Seattle customers and partners to proceed with **voluntary** and innovative ways of reducing emissions. For example, all terminal cargo handling equipment in our port is now run on electricity, such the cranes, or ultra-low sulfur diesel and bio-diesel blends, like top-picks, forklifts, hostlers etc.

I'd like to acknowledge American President Lines for being the first to step up and agree to burn low-sulfur fuel in their container ships while loading and unloading in our Port. We are hopeful that other shipping companies will follow their fine example.

Here in Seattle we also have a growing cruise industry and expect 211 ship calls this summer. We are the only port in the world with two berths where cruise ships use the City's electrical system during their stay in port.

And speaking of cruise, we have also played a significant role in developing a **voluntary** Memorandum of Understanding regarding the discharge of wastewater. On an international level, environmental processes are governed by the International Maritime Organization policies and procedures for the maritime industry. In the US, the Federal government ensures compliance with IMO rules through the US Coast Guard.

Our partners for this landmark Memorandum of Understanding were the Washington State Department of Ecology, the cruise lines and the Port. This agreement stipulates that discharge of untreated wastewater is prohibited within Washington State waters; only wastewater treated by advance treatment systems can be discharged. And in fact, none has been discharged in Puget Sound.

This agreement is one of the most stringent in the industry, and proves that a collaborative **voluntary** approach can produce high standards and stringent monitoring without government regulation.

The Port of Seattle has partnered with Holland America Line and others to test a seawater scrubber on the MS Zaandam, which has the potential to significantly reduce emissions of particulate matter. This pilot test is scheduled to be completed at the end of this year.

Today I hope I've demonstrated that ports can be proactive and accomplish a great deal through **voluntary** cooperation, rather than by regulation, supporting business and the environment simultaneously.

All of our reports and initiatives can be found on our website. And if there are specific questions, I'd be happy to address them.

Thank you for the opportunity to address this Summit.

*Improving Air Quality for
Port Communities*

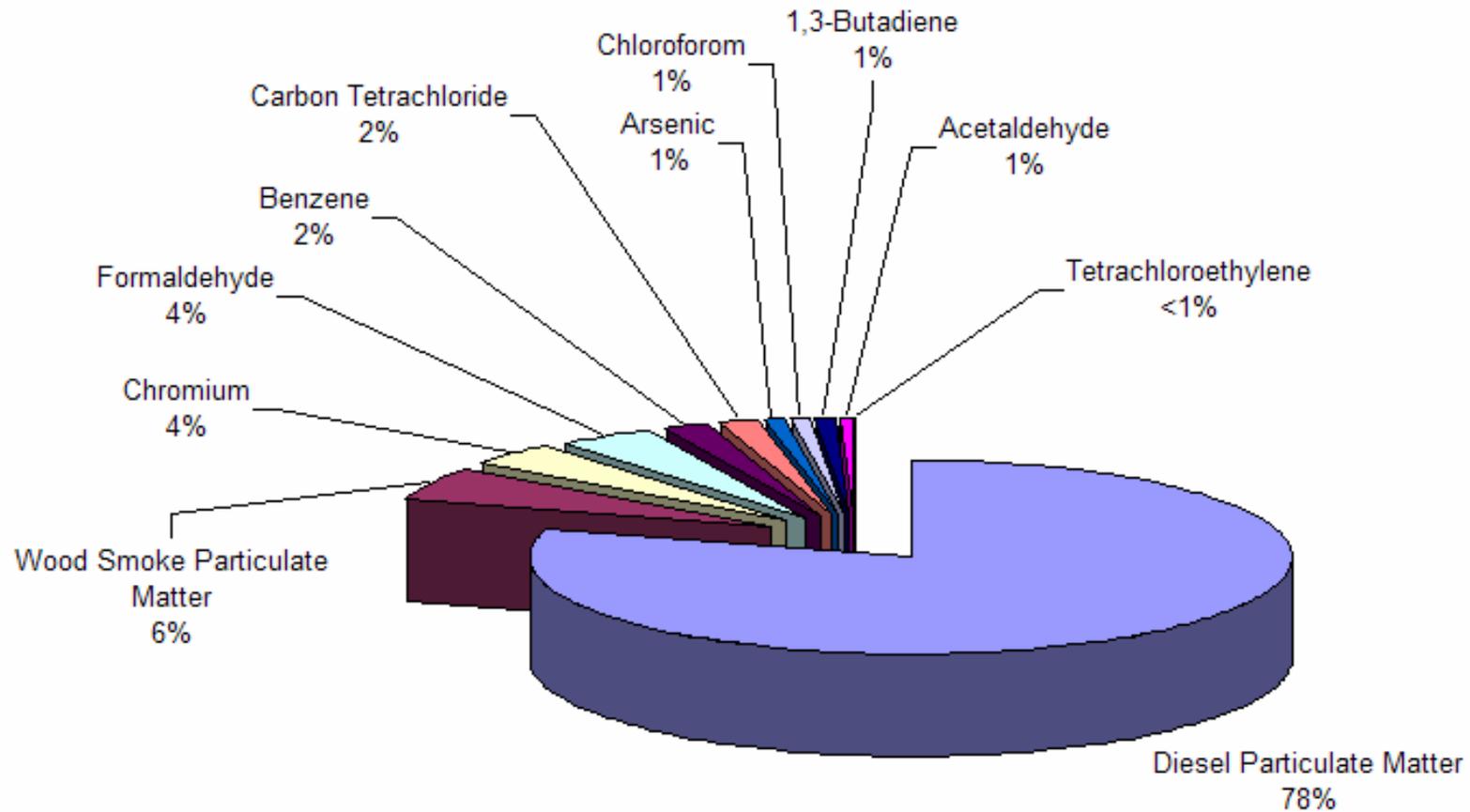
Tay Yoshitani
Chief Executive Officer



Port of Seattle surrounding area



Greatest Air Toxics Contributors to Potential Cancer Risk Puget Sound Air Toxics Evaluation (2003)



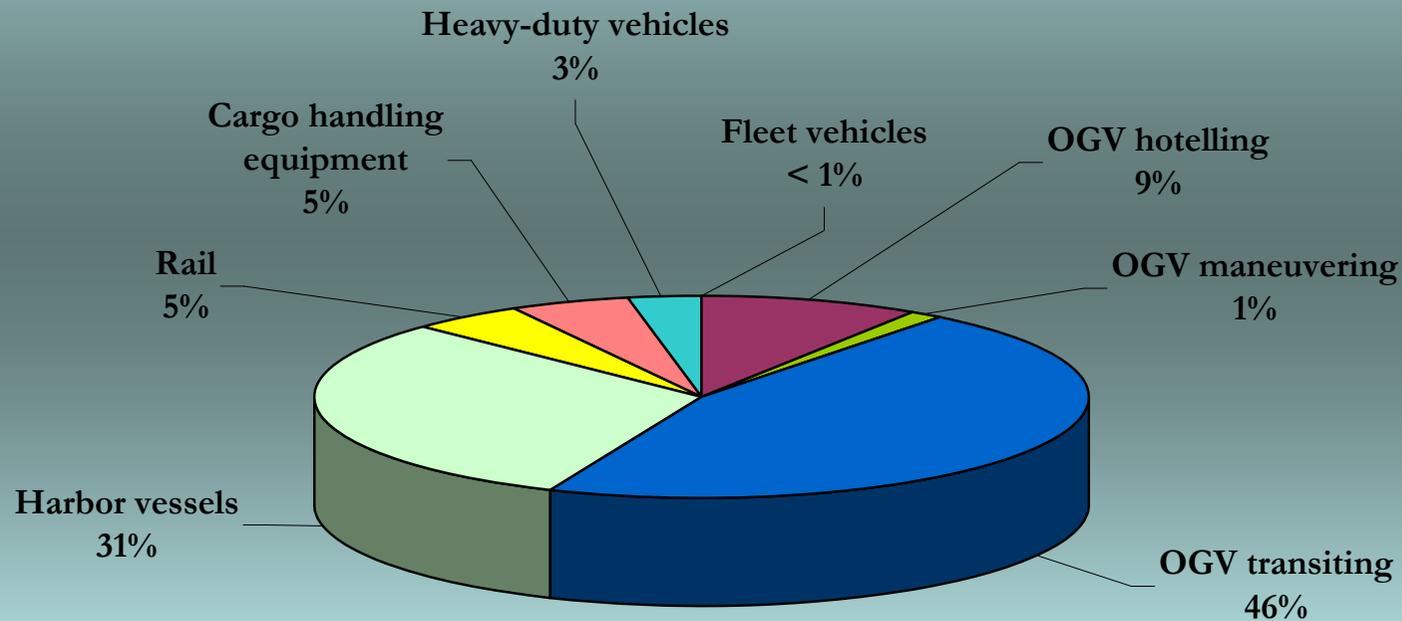
Source: Puget Sound Air Toxics Evaluation (2003) by Puget Sound Clean Air Agency

Geographic Boundaries of the Survey

- U.S. portion of the Puget Sound / Georgia Basin Airshed
- Spans more than 22,000 square miles
- Close coordination with similar inventory for Georgia Basin



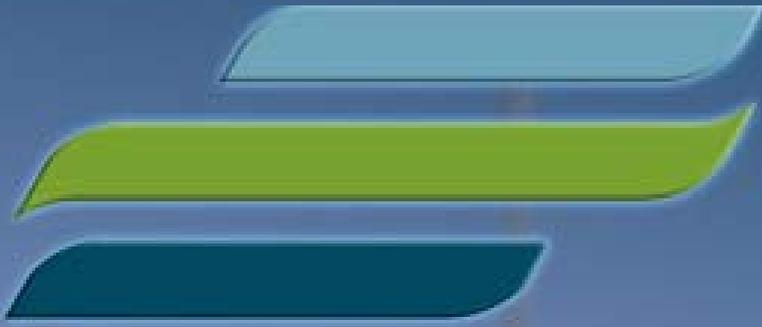
Diesel particulate matter from maritime sources Puget Sound Region



Source: Puget Sound 2005 Maritime PM2.5 Emissions by Source Category, tpy







Port of Seattle

Where a Sustainable World is Headed

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