Curtis Robinhold, Deputy Director, Port of Portland
Testimony
January 13, 2015
Planning and Sustainability Commission

Good afternoon, members of the Planning and Sustainability Commission, my name is Curtis Robinhold. I am the Deputy Executive Director of the Port of Portland, having joined one year ago after serving as Governor Kitzhaber's chief of staff. I have worked in both the public and private sector, as a natural resource policy advisor to Governor Kitzhaber in his first two terms, and for five years with BP Alternative Energy, where I was responsible for running a wind and gas-fired power company.

At the Port, I oversee our finance, public affairs, superfund, IT and engineering teams. I'm also a member of Governor Kitzhaber's Clean Fuels Task Force, where we are working on ways to integrate more alternative fuels like propane into Oregon's demand profile.

Let me briefly frame the decision that is in front of you today …

Based in Calgary, Pembina is one of Canada's leading providers of transportation and logistics for the North American energy sector. Last September, the Port entered into an agreement with Pembina to develop a rail-served propane export facility, using land that is already appropriately zoned as industrial, that could be up and running by early 2018. Getting to that point in roughly three years will be no small accomplishment, and time is of the essence. It all starts with this code amendment.

As you've already heard from City staff, what's on the table is an adjustment to make the code consistent with permitted rail and truck commodities crossing environmental zones in the harbor every day. We're talking about transferring cargo from one allowed mode of transport to another at a marine terminal on the Columbia River.

Under the City's current zoning code our tenant is allowed to transport propane across our dock to a ship by truck or train, but not by a delivery pipe. A limited text amendment is being sought to allow the safe transshipment of propane on sites that are already zoned industrial and have a primary river-dependent industrial use. This will allow for transportation of propane via piping, which does not introduce any additional risks to the currently approved methods of rail, or motor

vehicle. We're not talking about long distance shipment by "pipelines," only the system needed to move propane from the shore to the ship. Pembina would install facility pipe from the required holding tanks to the dock in order to load propane onto ships for export. The piping would be installed on above-ground supports.

Pembina's $500 million investment represents a significant potential influx of city, county and state tax revenue. In fact, it would be the largest single private capital investment in the city's history. It is estimated that the project will generate between 600 and 800 construction jobs and approximately 35 to 40 new, permanent positions to operate the terminal. This employment is valued at approximately $7 million in wages and benefits annually. Additionally, an estimated $3 million in annual tax revenues would go to the City of Portland, as well as $2 million to Multnomah County and $3 million to Portland Public Schools annually.

This project is a great match for our community and propane has a long and safe history of being transported and used throughout the region. Most of the busses in the Portland Public Schools fleet run on propane. And most of the propane in your backyard barbeque, stove, lantern, boat or trailer already arrives here by rail as it has for decades. The safety record was one of the determining factors in our go/no go decision with this project. For as much time and effort that the Port has put into the decision to move ahead with propane, we have also put a lot of time and effort into considering other energy cargo types and whether they are compatible with our highest and best use standard … as well as our community at large.

The Port of Portland has been extremely discerning when considering energy sector cargo opportunities, and after deciding not to pursue coal or crude by rail opportunities, we are confident that we are saying 'yes' to the right partner at the right time. Propane has an excellent track record as a clean and safe alternative fuel, with a good climate story, displacing many dirtier traditional fuels like coal and oil. The Port already handles exports of potash and wheat from Canada, and we're excited to serve as the gateway for this new cargo type from our neighbors to the north.

The EPA classifies propane as a clean, alternative fuel source[1], and it is viewed as a transition fuel for many applications. It is non-toxic, and it is not harmful to air, soil or water. Combustion of propane produces 13% less CO2 than burning oil and 34% less CO2 than burning coal. When propane is used in manufacturing of plastics, it does not generate CO2 emissions. Propane is

well aligned with the tenets of President Obama's "Climate Action Plan" and it can be a key asset as the U.S. seeks to achieve its clean energy and climate change goals.

Redevelopment of the site is consistent with the City's Comprehensive Plan, and leverages existing rail and marine terminal infrastructure. As the site design concept takes shape, ensuring safety and environmental protections are a critical part of the planning process. Pembina brings impressive experience and expertise to the table. It is a strong and stable company with a great history, and safety is ingrained in their culture.

Following the announcement of the project in September, Pembina's President and Chief Executive Officer, Mick Dilger, came to Portland to describe the project and introduce his company. Pembina has since met with neighborhood associations, environmental groups, tribal representatives, local businesses and elected officials, among others. Pembina has met with the Audubon Society of Portland and the Lower Columbia River Estuary Partnership, and it has also offered to meet with Columbia Riverkeeper, Willamette Riverkeeper, Northwest Environmental Defense Center, and the Oregon Chapter of the Sierra Club.

With a 2018 target date, it is still relatively early in the process, but we have found Pembina to be genuinely interested and actively engaged in connecting with the community. Just last week, the company announced it would create a community advisory committee. They welcome the opportunity to explain their project and share information about their company.

If you know the Port, you know we walk the talk when it comes to our environmental record and leadership in both development projects and day to day operations. We purchase 100% renewable power for our facilities, we have a fleet of hybrid vehicles and compressed natural gas buses (including all of our parking shuttles), we are one of the first consolidated ports to be ISO14001 certified, we are on target to meet a 90% waste diversion program goal, and we operate out of a LEED Platinum headquarters.

Bill Wyatt, executive director for the Port, is a member of the Oregon Global Warming Commission, which focuses on efforts to reduce Oregon's greenhouse gas emissions.
And it is worth noting that we met our goal of reducing our greenhouse gas emissions to 15% below 1990 levels – nine years ahead of schedule – and we're continuing to improve on that.

The bottom line is that we live here too, and it is important that our diverse cargo portfolio and the partners we do business with are compatible with our public mission and values. I wouldn't be sitting here today if we hadn't fully vetted this and determined that it was a match. We seek conditions for success so our tenants and the community can prosper, and we are committed to assuring implementation and continuation of high development and operating standards.

In closing, I strongly urge you to support this amendment and allow Pembina to proceed with this great private investment in our community. There are other members of staff with me here today with knowledge and expertise to address any interests or concerns you may want to explore, and we welcome your questions. Thank you for your time and consideration.

PORT OF PORTLAND

Environmental Management System
Program Activity Highlights

Air Quality Program

Dredge Oregon Repower Project

In 2014, the Port of Portland completed a two-phase process to repower the Dredge Oregon. The project replaced a WWII-era engine with more modern engines that meet EPA Tier III emission standards. The Port initiated an ambitious repower project in November 2012. The work was performed locally in two phases to replace the main engine and pump, generators, and a variety of other key components. The investment in upgrades will allow the Dredge Oregon to operate cleaner and more efficiently.

The new engines feature a recent design modification that is more efficient and resulted in even lower emissions than originally estimated. Typically, one of the smaller engines will run full time and a second engine will start and operate only when the power demand is sufficiently high. All three engines rotate in functioning as the primary auxiliary generator.

Prior to the repower, the dredge consumed between 600 to 750,000 gallons of fuel per year. Higher efficiency engines mean burning less fuel (about 250,000 gallons less per year), reducing greenhouse gas emissions. The project will reduce diesel particulate emissions by 88 percent and lower greenhouse gas emissions by 40 percent. The Dredge Oregon was previously the single largest source of diesel particulate and direct greenhouse gas emissions owned by the Port.

The Dredge Oregon went to dry dock in November 2012 for Phase I of the repower project. An opening was cut out of the hull of the vessel to remove the large, WWII era auxiliary engine and replace it with a smaller more efficient engine that meets EPA Tier III emissions standards.

LESS WASTE MORE WORLD

Energy Management Program

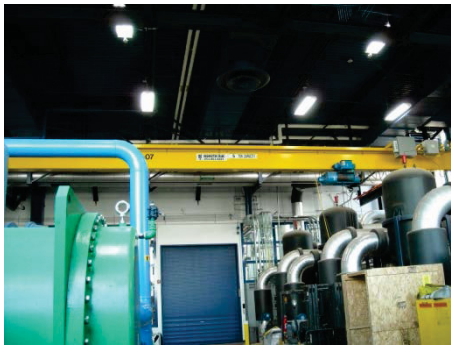
Carbon Footprint Reduction and Energy Management Strategy and Master Plan

The Port's Environmental Management Sytem includes a process for annual review by senior management of progress in meeting emissions and energy targets.

In 2013, the Port completed a long-range carbon footprint reduction and energy management master plan for Port-wide operations including aviation, marine, navigation dredging and industrial properties. The goal was to develop a strategy to reduce the Port's direct and indirect greenhouse gas (GHG) emissions to 15 percent below 1990 levels by 2020. The goal goes beyond the required standard for state agencies of a 10 percent reduction by 2020. The most recent annual review showed that the Port had far exceeded its greenhouse gas emissions reduction target, with Scope 1 and 2 greenhouse gas emissions approximately 60 percent below 1990 levels.

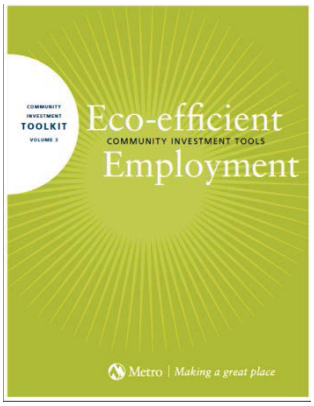
In conjunction with this plan, the Port had a software tool developed to standardize the prioritization of potential energy conservation and GHG reduction projects across the Port. This tool provides the ability to update the analysis on a regular basis and reassess the business case for projects as rates and other variables change.

The master plan creates a framework for the Port to assemble portfolios of the most cost effective energy conservation opportunities and sets the stage for planning and implementation.



PDX Maintenance has implemented a re-lamping program, replacing higher wattage lamps with lower wattage energy efficient LED type lamps that still provide the same amount of brightness. The lower wattage also extends the life of the fixtures because they generate less heat. In addition, there is labor savings because the LED bulbs require less frequent replacement. Payback on the project is estimated at less than one year.

Water Resources Program



Green Infrastructure/Eco-Industrial Development Reports

The Port worked with key stakeholders to assess sustainable development opportunities for the 220-acre Gresham Vista Business Park. Initial discussions were driven by a series of eco-industrial development (EID) design charrettes which identified opportunities to incorporate green infrastructure at the site. The Port responded by commissioning site and parcel level reports comparing the cost and ancillary benefits of green stormwater infrastructure versus traditional "grey" infrastructure for site development.

The parcel level report shows it is possible for green infrastructure to meet discharge requirements for the 100-year/24-hour storm (Gresham's standard for this area) at a significantly lower cost than the traditional design. While low impact development and green infrastructure has been successfully integrated into site design for other land uses, the Port needed to show that it could provide a more sustainable solution in a typical industrial layout. With the cooperation of the City, the Port may even be able to achieve a zero discharge scenario for this site which would also help address critical flooding issues in nearby Fairview Creek.

In addition, the Port participated with Metro, the City of Gresham, and other stakeholders in a process based on the Eco-efficient Employment Toolkit developed by Metro. The resulting report and recommendations quantified specific opportunities, strengthened the initial EID analysis, and incorporated critical stakeholder feedback to provide a more robust set of sustainability recommendations for the site.

Water Resources Program

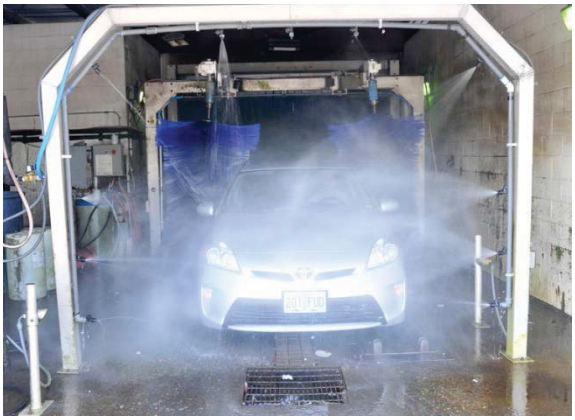
Water Conservation Strategy Development

Water conservation is a key element of the Port's Water Resources Program and is required by the Port's Water Management and Conservation Plan to support the Port's municipal water rights.

The Port has implemented a number of projects to reduce potable water use for irrigation and tenant operations. To prioritize the project selection process, the Port is engaged in the implementation of an organization-wide Water Conservation Strategy completed in 2014.

The Water Conservation Strategy provides a framework for comparison of water conservation opportunities across the different operating areas of the Port. The strategy development included a data gap analysis, facility-specific water audits, data collection, development of a prioritization tool, and finalization of the strategy based on the most sustainable opportunities. These opportunities are practices, programs and projects that will be incorporated into future operations and capital projects.

The Living Machine™ is an onsite water treatment system that accepts all wastewater generated by the building's 500 employees and produces water that is reused to flush toilets and supply the cooling towers in the building. The building has demonstrated a 75 percent reduction in water use.



The rental car Quick Turnaround (QTA) Facility, a wash facility used by the PDX terminal rental car companies, is one of the largest water users at PDX. The Port partnered with airport rental car companies to implement water conservation measures. In phase 1, improvements reduced water use by 49 percent per vehicle and provided a gross savings of $41,000 in water/sewer billings over a six month period, saving an estimated $330,000 over the term of the lease. Phase 2 improvements, implemented in 2014, will reduce water use by an additional 5 million gallons per year.

Water Resources Program

Port-Wide Stormwater Master Plan

The Port is in the final stages of a Port-wide stormwater master planning process. This proactive approach will evaluate hydraulic capacity and water quality requirements and develop Port-specific stormwater design standards. The effort is important because it will allow the Port to more efficiently coordinate stormwater management efforts amid necessary infrastructure replacements and upgrades, asset management, future operational needs and regulatory requirements.

At PDX, it will build on the master planning effort started during the Airport Futures process to pursue the goal of achieving a sustainable stormwater approach. The process included input from a wide variety of internal and external stakeholders through a coordinated outreach process including the PDX Community Advisory Committee, City of Portland and environmental advocacy groups.

The project resulted in a new stormwater design standards manual for PDX, which includes sustainable stormwater management designs that work within the unique aviation environment. The final product of the entire effort is expected in mid-2015.

Waste Minimization Program

Five Year Zero Waste Plan

The Port continues to strive for a Zero Waste headquarters facility and has created a five-year plan to achieve Zero Waste at all Port facilities. Zero Waste requires a 90 percent or greater diversion of waste from landfills. At the end of 2014, the Port acheived 84 percent landfill waste diversion at its headquarters. Outreach and signage to employees and a durable cup awareness and promotion campaign contributed to the increase in the diversion rate.

Food Waste Program at PDX

The food waste collection program began in 2003 to get organics out of the landfill waste stream. In 2012, the Port initiated a food waste recycling campaign focusing on concessions tenants at PDX to improve program performance. In 2013, the Port expanded the program to include a food donation program which has been highly successful. This program is now reaching out to food-producing commercial operations in the area surrounding PDX. In the past year (December 2013 – November 2014), the program sent 38,059 pounds of food nutritious, ready-to-eat foods, or about 25,373 meals to food distribution programs in the local community.

The Port also implemented a program in 2014 to reduce construction-related waste for tenant improvement projects.

Natural Resources Program

Mitigation Site Management

The Port works in areas with abundant wildlife as well as critical waterways and wetlands. Therefore, how the Port manages industrial areas, marine facilities, and airports is important. The Port focuses on protecting native species, controlling non-native species and promoting habitat connectivity.

The Port Mitigation Management Program encompasses almost 800 acres, including high-quality wildlife habitat that is ecologically connected to other open spaces in the metropolitan area; 207 of those acres are within Portland city limits.

Over 160 species of wildlife and more than 80 species of native plants, trees and shrubs on its mix of wetland and upland habitat, show the success of the Port's restoration efforts at the Vanport Wetlands site.

Vanport Wetlands

The Port purchased the Vanport Wetlands site in 1999 as compensatory mitigation for wetland impacts from development on Port-owned property.

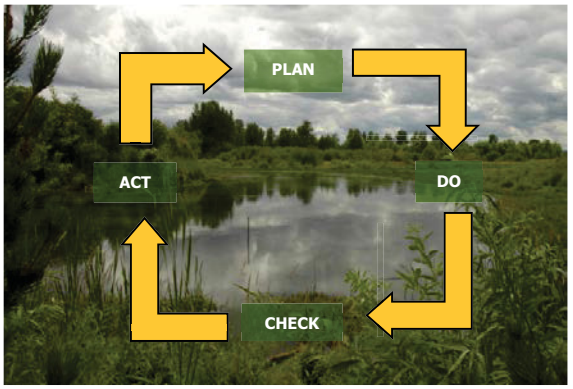
Restoration enhancements at the 90.5-acre award-winning mitigation site reflect the Port's environmental policy of responsible environmental stewardship. Work at the site was completed to fulfill regulatory requirements, but the way the work was done has created a permanent natural resource. The Port demonstrates environmental stewardship through ongoing management of the site, above and beyond regulatory requirements.

Restoring this urban wetland complex is important not only for the wildlife and vegetation found here, but also for its ability to absorb and filter pollutants before they reach the nearby Columbia River. Upon purchase, the site was dominated by invasive reed canary grass. The Port has now increased the diversity of plants and wildlife and succeeded in establishing a native-dominated wetland community surrounded by a vegetative buffer.

LESS WASTE MORE WORLD

Environmental Management System
Program Activity Highlights

Environmental Management System



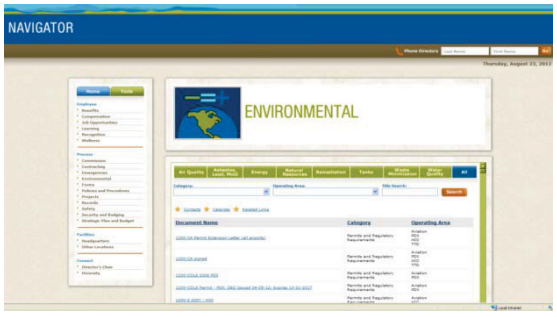
The Port's Environmental Management System, or EMS, is the approach used to manage the Port's environmental compliance, responsibilities and commitments both in day-to-day work and in mid- and long-range planning. The EMS is not something that sits on a shelf for reference, but an integrated cycle with tools and processes that requires the Port to plan before implementing and drives the organization to improve on lessons learned.

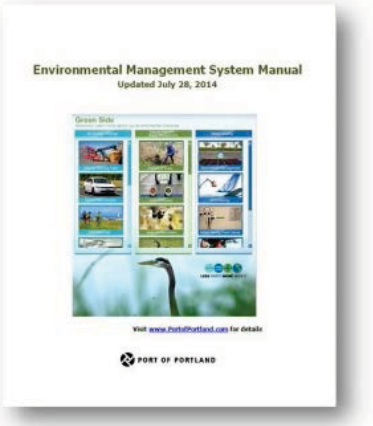
The central purpose of the EMS is to systematically reduce the environmental impacts of the Port's work while protecting and conserving environmental resources, and it also makes good business sense.

In 2014, after 14 years with an Environmental Management System in place, the Port sought and successfully achieved certification to the international EMS standard, ISO 14001, through an independent third-party certification body.

Integrated Tools and Resources

The Port's Environmental Department has built an integrated online resource to ensure Port-wide access to current policies, objectives, targets, procedures, best practices, performance updates, regulatory documents and more. An environmental management calendar links these documents with key dates and the individuals responsible for carrying out important actions so we successfully meet our environmental goals and commitments.





Port of Portland

Environmental Programs Backgrounder

Winter 2015

Mission
The Port of Portland's mission to provide worldwide transportation access is only complete if it also enhances the region's quality of life.

The Port's Environmental Policy challenges all staff to integrate environmental stewardship into the business of operating marine, aviation and industrial facilities.

The Port uses an ISO 14001 certified Environmental Management System to continually track and improve its environmental performance. The Port pursues annual objectives and targets aimed at reducing the Port's environmental footprint by going beyond compliance and integrating sustainable measures into business operations.

The Port's environmental programs are one part of an organization-wide, triple-bottom line focus on sustainability that also addresses social and economic performance.

Preserving Natural Resources
Port properties are planned and operated with an emphasis on protecting natural resources, drawing from the best available science and research in the field. The PDX Wildlife Hazard Management Program uses a variety of non-lethal tools to control native species around the airfield. The Port manages almost 800 acres of mitigation and enhancement sites, including Government Island and the award-winning Vanport Wetlands in Northeast Portland.

Water Conservation and Protection
The Port focuses on reducing water use and protecting water quality. At Terminal 6, the Port installed porous pavement and bioswales to infiltrate stormwater. At Portland International Airport, an on-site, state-of-the-art biological treatment plant uses microorganisms to break down deicing solution in stormwater. Landscaping irrigation systems use real-time meteorological data to conserve water. At the PDX terminal, low-flush toilets and conservation measures at the rental car wash facility cut water use by millions of gallons each year.

Reducing Energy Use and Emissions
The Port has reported its greenhouse gas emissions to The Climate Registry for five years and purchases renewable energy certificates for 100 percent of electricity use. Port Executive Director Bill Wyatt is a member of the Governor's Commission on Global Warming. Alternative fuel and hybrid vehicles are increasingly becoming part of the Port's fleet, and all shuttle buses at PDX run on compressed natural gas. The Dredge *Oregon*, which maintains the Columbia River Navigation Channel, recently had more efficient engines installed which will reduce diesel particulate matter emissions by 88 percent.

Reduce, Reuse, Recycle
The Port is developing a five-year plan to achieve 90 percent or greater landfill diversion rates at its facilities. The Port's robust waste minimization program provides outreach and technical assistance to help airport tenants and airlines reduce waste and recycle a wide array of materials. At PDX, a composting program has diverted over1,600 tons of food waste from the landfill since it began in 2003. Three-quarters of PDX tenants currently participate in a food donation program, which contributed 35,000 meals to a local nonprofit in its first year.

Leadership in Green Building
In 2010, the Port completed a new consolidated headquarters office building and parking garage at Portland International Airport. The LEED Platinum-certified facility showcases innovative green building techniques designed to reduce water and energy use, improve indoor air quality, and minimize waste. The building reflects the Port's deep and broad commitment to sustainable practices.

Portland Harbor Cleanup
The Port participates in an effort to study historically contaminated sediment in the Willamette River, a portion of which was declared a Superfund site in 2000. The investigation is led by the U.S. Environmental Protection Agency, which is currently reviewing the site's draft feasibility study describes cleanup alternatives.

Recent Awards

- **Ranked 25th nationally among 100% green power purchasers**, Green Power Partner Program, U.S. Environmental Protection Agency (EPA), 2015
- **Environmental Improvement Award – Stakeholder Awareness, Education, and Involvement**, American Association of Port Authorities, 2014
- **Environmental Achievement Award**, Portland International Airport Deicing System Enhancements, Columbia Slough Watershed Council, 2013

Contact:
Lisa Timmerman | **Environmental Outreach Manager** | **503.415.6047**
lisa.timmerman@portofportland.com | www.portofportland.com