

# Long Beach Harbor Department Green Port Policy - “White Paper”

The Port of Long Beach (Port) has a strong, long-standing commitment to the environment. In 2003, the Port brought its existing environmental programs under one umbrella known as the “**Healthy Harbor Program**,” consolidating various initiatives into four key areas of emphasis:

- ***Air***
- ***Water***
- ***Wildlife***
- ***Soil/Sediment***

In November 2004, the Board of Harbor Commissioners (BHC) directed the Port to develop a comprehensive environmental policy for BHC consideration. The intended end product was an overall plan that embraces the Port’s environmentally driven (e.g., green) goals and procedures. The new policy would be used as a guide to facilitate present and future decisions and would serve as a framework within which the Port could operate in a “green” manner.

In response to the BHC’s request, nearly fifty of the Port’s Development Bureau personnel dedicated an entire day in November 2004 to discussing the optimization of existing environmental programs and the development of new programs each with specific, measurable goals. Incentives to promote Port-tenant participation in these programs were also discussed. Lastly, the “momentum” of the Healthy Harbor Program should be maximized and as such, it was concluded that, in addition to the four original elements of the program as listed above, the current Healthy Harbor Program should be expanded to include two new elements - ***Sustainability and Community Engagement***.

In late December 2004, the Port submitted a draft Green Port Policy for BHC consideration. The draft policy recognized that there were significant environmental programs in place but that programs, in themselves, did not constitute a policy and could not be considered the guidance or ethic with which the Port is developed and operated. The proposed framework for the new policy includes:

- Specific environmental ***principles***, which, once adopted, will govern all Port activities
- A series of ***goals*** – for each element of the policy
- Specific ***metrics*** to measure progress toward meeting the goals
- Some ***new aggressive environmental programs*** designed to achieve progress toward the goals
- Specific ***incentives*** to promote program participation among tenants
- Specific ***legislative proposals*** that would support the program

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The **guiding principles of the new Green Port Policy**, formally adopted by the BHC in January 2005, include:

- Distinguish the Port as a leader in environmental stewardship and compliance
- Protect the community from harmful side effects of Port operations
- Promote sustainability
- Employ best available technology to avoid/reduce environmental impacts
- Engage and educate the community

The **fundamental goals of the new Green Port Policy**, by program element, include:

- **Air** - Reduce air emissions from Port activities
- **Water** - Improve the quality of Long Beach Harbor waters
- **Wildlife** - Protect, maintain or restore aquatic ecosystems and marine habitats
- **Soil/Sediment** - Remove, treat, or render suitable for beneficial reuse Port-contaminated soils and sediments in the Harbor District
- **Sustainability** – Implement sustainable practices in marine terminal design, development and operations as well as training, operations and practices within the Port Administration and Maintenance Centers
- **Community Engagement** – Interact with and educate the community regarding Port environmental programs

Regarding an **implementation schedule**, many of the programs are in-place and currently generating “green” benefits. A fully integrated, resource-loaded master schedule is being developed and will continue to evolve as the number of environmental programs expands. **Periodic progress reporting** (e.g., quarterly) to the Long Beach City Council and the BHC is underway and is fundamental to the successful implementation and enhancement of the Green Port Policy. Progress reporting would include graphical demonstrations of metric tracking.

In order to ensure that the policy is implemented throughout the terminals, it will be necessary to make changes to the Port’s leasing policy. Negotiating with tenants requires flexibility; however, the leasing policy must have as a key agenda the “greening” of the Port.

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## Representative Listing of Goals (Metrics) and Programs Designed to Accomplish the Goals

### *Reduce Air Emissions from Port Activities (Emissions per Ton of Cargo Handled)*

- Vessel Speed Reduction (Green Flag Program) – voluntary, incentivised program requiring ships to slow to 12 knots at a distance of 20 miles from Point Fermin.
- Shore Power – the Port has committed to a goal of providing shore power to all new and existing container terminals; The Port’s ultimate goal is to have 100% of vessels plug in once all container terminals have been retrofitted and the worlds fleet has been made shore power capable; in the interim, shore power is being incorporated into new leases that specify targets for vessel compliance and selected existing berths are being retrofitted with shore power.
- Retrofit/Re-power Requirements for Infrequent Callers – Port lease language will require the use exhaust controls or clean fuels in the auxiliary engines of vessels that do not use shore power.
- Main Engine Fuel Improvement – the Port is considering incentives as part of the Green Flag Program for the use of low-sulfur (initially 1.5%) diesel or equivalent.
- Auxiliary Engine Fuel Improvement – lease language will require the use of fuel with 0.2% or lower sulfur content or equivalent, or exhaust gas treatment, in auxiliary engines while ships are at berth.
- Harbor Craft Measures – the Port will replace or re-power, or convert to cleaner fuels, survey boats and other Port-owned harbor craft.
- Yard Tractor Modernization & Alternative Diesel Fuel Programs – lease language will commit tenants to meet contemporary CARB and EPA emission standards in new equipment, use clean fuels in existing equipment and retire older equipment.
- Enhanced Cargo Handling Modernization – lease language will require accelerated replacement of terminal equipment with equipment meeting future off-road standards for diesel engines.
- Diesel Emissions Reduction Program – container terminal cargo handling equipment has been converted to exhaust controls and clean diesel fuel.
- PHL Switcher Locomotive Modernization & Emulsified Diesel Program – PHL rail locomotives being replaced in 2005 and 2006; use idle limiting devices; test DOC’s.
- Ultra-Low Emission Switcher Locomotives – requires PHL to deploy Green Goat and LNG switchers.

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- Idling Controls on Switcher & Line Haul Locomotives – install controls on PHL equipment; Ports cannot install equipment on Class 1 line haul locomotives.
- Gateway Cities Truck Modernization – for future terminals, subsidies are being considered by POLB to commercial truck owners that trade in their diesel trucks with older engines for models with newer, cleaner-burning engines.
- ARB Diesel Fuel for Class 1 Locomotives - support of this measure would be part of the Green Port legislative agenda.
- Retrofit Heavy-Duty Diesel Vehicles with Diesel Oxidation Catalysts (DOCs) or Diesel Particulate Filters (DPFs) – for future container terminal projects, the Port will require installation of exhaust controls on older trucks serving the terminal
- Truck Idling Reduction Measures – the Port will require truck idling limits for on-road trucks within Port boundaries.
- Petroleum Coke Dust Control – the Port will continue to implement the Rule 1158 program aimed at reducing fugitive dust from petroleum coke operations.
- Vessel Smoke Stack Emission Reduction – POLB Security will continue to issue warnings and citations to vessels in order to eliminate excess smoke and reduce vessels emissions while at berth.
- Electric Dredging – additional electrical receptacles will be placed around the Port to facilitate the switch to electric dredging; beginning in 2008, the Port will require all non-maintenance dredging to be conducted with electric equipment.
- Port Ride Share Program – the SCAQMD, under Rule 2202, requires employers of 250 or more employees to establish rideshare programs; the City of Long Beach developed a program in response to this requirement and the Port participated in the program; the City, as a result of budget issues, eliminated their program in 2003; since then, approximately 20 Port employees have continued to rideshare in an informal program; the Port is now exploring the formal re-establishment of its own rideshare program.
- West Coast Sulfur Emissions Control Area (SECA) – in January 2005, the BHC adopted a resolution urging the United States to ratify Annex VI of the International Convention for the Prevention of Marine Pollution From Ships (MARPOL); Annex VI, adopted in 1997, enters into force on May 19, 2005 and will set limits on sulfur oxide and nitrogen oxide emissions from ship exhausts and prohibit deliberate emissions of ozone depleting substances; Annex VI calls for a global cap of 4.5% m/m on the sulfur content of fuel oil and calls on IMO to monitor the worldwide sulfur content of fuel once the Protocol comes into force.

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## ***Improve Quality of Harbor Waters (Maintain Dissolved Oxygen Levels and Water Clarity at or Above 1985 Baseline)***

- Dredge Monitoring/Assessment – the Port monitors every dredging project to ensure that the project does not adversely affect water quality in accordance with the RWQCB’s standards.
- Master Storm Water Program – the Port’s award-winning storm water control program includes regular inspection of all facilities, educating and assisting program participants with development and implementation of the program, incorporation of the latest Best Management Practices into the design, construction, and operation of Port facilities, and regular sampling of storm water runoff and harbor water quality. The program also ensures compliance with the Port’s General Industrial and Construction permits and the City of Long Beach Municipal Storm Water Permit.

## ***Promote Increased Wildlife Utilization of Harbor Lands and Waters (Reduce or Eliminate the % of Non-Indigenous Species Using 2000 as a Baseline)***

- Ballast Water Management Program – the Port helped to develop the national program and works closely with the state and federal government.
- Black-Crowned Night Heron Habitat Restoration - the Port continues to monitor and protect the nesting colony that it transplanted from the former Naval Station in 1998.
- Invasive Species Education/Outreach – the Port continues to support state and federal invasive species prevention programs, including providing Vessel Masters with information about those programs and conducting pre-dredge surveys for the presence of invasive species.
- Kelp and Eelgrass Protection - the Port conducts pre-construction surveys to ensure that dredging and in-water construction will not adversely affect established kelp and eelgrass beds.
- Training – educate Port workers involved with land management in biodiversity issues.

## ***Remove, Treat or Render Suitable for Beneficial Reuse Contaminated Soils/Sediments (Acres of Contaminated Land Returned to Productive Use)***

- Remediation of Contaminated (“Brownfields”) Sites (Pier A & Pier S) – the Port purchased and remediated approximately 350 acres of land that had been contaminated by illegal dumping and past oil-field activities, turning the land to productive Port uses; another 100 acres will be remediated by 2009.

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- Long Beach Naval Complex Cleanup - the Port removed over one-and-a-half million cubic yards of sediment contaminated by 50 years of U.S. Military activity; the sediments were sequestered safely away from the environment, at the same time creating new land for Port uses; over 300 acres of upland property contaminated by solvents, heavy metals, and other pollutants were also returned to productive use on the former Long Beach Naval complex through the joint efforts of the Port and the Navy.
- Dredge Sediment Reuse – sediments from a variety of Port and non-Port areas, such as Marina del Rey, the City of Long beach and the Los Angeles River, have been sequestered into Port fill areas, creating new land for Port uses; construction of a dedicated regional facility for treatment and reuse, including beach nourishment, of contaminated sediments is currently under consideration.

## ***Implement Sustainable Practices in Terminal Design, Development, and Operations (Increase % of Sustainable Programs From 2004 Baseline)***

- Sustainable Design, Construction, and Operational Practices – encourage principles of sustainable development in Port terminals and facilities; LEED® building standards; recovery and on-site reuse of construction waste; changes to standard specifications for construction contracts to enhance and enforce sustainable practices; use of locally available “green” materials and supplies; alternative or “green” energy sources such as solar, wind, ocean and/or biogas energy Resource Conservation – decrease overall resource consumption and encourage sustainable procurement and consumption practices through waste reduction, energy and water conservation programs.
- Solid Waste Reduction – Port implemented recycling programs; recycled-content paper and other recycled products in work products (e.g., deliverables); reuse of Port-generated construction, landscaping and maintenance waste; CD-ROM bid documents to replace printed plans & specifications.
- Recycled Water Program –use of recycled water for street sweeping, street flushing, fire fighting, irrigation, terminal wash-down operations and dust mitigation.
- Energy Conservation – decrease fossil fuel dependence; maximize hybrid and other near-zero polluting vehicle fleets; use of alternative energy sources; audit and assist tenants to achieve energy reductions in terminal operations.
- Transportation Programs – increase level of service in Port and other affected corridors through capital development projects; support development of rail master plan projects; Port and tenant carpool and public transportation programs.

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- “Cutting Edge” Technology - research and testing of new “green” technologies.
- Training – establish training programs for Port staff on principles of sustainable development and operations in the Port community.
- Community Outreach – develop web site for Port users and tenants; community participation in planning and monitoring Port sustainability initiatives.
- Program and Community Support – measure and report Port programs to community; support Port green initiatives with research and program development.

## ***Engage and Educate the Community Regarding Port Development Projects & Environmental Programs (Increase # of Outreach Programs, Opportunities, and Community Participation Levels From 2004 Baseline)***

- Open House – the Port will hold an employee open house and a community open house in July 2005 emphasizing the Green Port Policy.
- More Meaningful Mitigation Measures (4M Program) & I-710 Trees - the Port is in the strategy and planning phase of developing and implementing a program to plant trees along the I-710 corridor. The Port is presently collaborating with Caltrans, City Parks & Recreation, and City Public Works. The Port is also soliciting interest from landscape architects to assist the Port with the development and design of the program. It is expected that a landscape architect will be on board by June 2005, the program development will be completed by September 2005, and the program will be designed by December 2005. The goal is to implement the program, at least partially, by March 2006 (Arbor Day).
- Jobs Initiatives – the Port will co-sponsor a Port jobs fair with the City; include unions, tenants, and other Port-related businesses.
- Community-Based Scoping – the Port will hold CEQA scoping and public meetings in the neighborhoods.
- Goods Movement Academy and/or Environmental Engineering & Science Academy - by educating LBUSD students grades 9 – 12, and CSULB students about the goods movement industry and careers within it, we will prepare the next generation of employees in multiple areas, expose students to life choices they may not have otherwise considered, and create a sense of appreciation within those students and their families.