Green Port Policy

- Protect the community from negative Port impacts
- Distinguish Port as environmental leader
- Promote sustainability
- Employ best available technology
- Engage and educate the community
Green Port Policy Elements

- **Wildlife** – Protect, maintain or restore aquatic ecosystems and marine habitats.
- **Air** – Reduce harmful air emissions from Port activities.
- **Water** – Improve the quality of Long Beach Harbor waters.
- **Soils/Sediments** – Remove, treat, or render suitable for beneficial reuse contaminated soils and sediments in the Harbor District.
- **Community Engagement** – Interact with and educate the community regarding Port operations and environmental programs.
- **Sustainability** – Implement sustainable practices in design and construction, operations, and administrative practices throughout the Port.
Clean Air Action Plan (CAAP)

- Minimize health risk from port operations
- Build upon ports & tenants existing programs
- Set consistent project-specific & source-specific standards
- Enable port development
Clean Air Action Plan (CAAP)

- 5-year joint port (POLB/POLA) plan
  - minimize health risk, and
  - reduce emissions from port operations
- Prepared in cooperation with EPA, CARB and AQMD
- Sets standards for San Pedro Bay, individual projects, and individual sources (i.e. trucks, vessels, rail, harbor craft, cargo handling equipment)
- Expected to reduce 47% DPM, 45% NOx, and 52% SOx by 2011, when compared to no plan
2009 CAAP Success

- Green Flag Program – 95% compliance!
  - Expanded program out to 40nm
- Vessel Main Engine Fuel Incentive Program
- Shoreside power infrastructure – BP Berth 121 and ITS Pier G
- Clean Trucks Program
  - 80% 2007 or better Trucks
- PHL Tier 2 fleet replacement
- Technology Advancement Program (TAP)
  - AMECS Pilot Test - Pier Bulk Terminal
  - Foss hybrid tug
CTP Progressive Ban

Ban schedule:

- Ban pre-1989 trucks from Port service by 10/1/2008
- Ban 1989-1993 trucks from Port service by 1/1/2010
- Ban un-retrofitted 1994-2003 trucks from Port service by 1/1/2010
- Ban pre-2007 trucks from Port service by 1/1/2012
Clean Truck Program Tariff

Tariff requirements:

• A progressive truck ban
• Registration Agreement for drayage trucks accessing Port terminals
• RFID tags on all drayage trucks
• Installation of RFID readers at all Ports’ terminals
Current Status

- 8,000 old, polluting trucks were banned on Jan. 1, 2010
- Currently, more than 7,000 clean trucks in service
- Another ~1,000 clean trucks on order
- Truck pollution cut nearly 80% -- two years ahead of schedule
Progress Toward Achieving Original CAAP Goals

2011 goal: 47% DPM
2011 goal: 45% NOx
2011 goal: 52% SOx
Updates to the CAAP

- **CAAP is a “living” document:**
  - Review existing measures
  - Evaluate new measures and technologies
  - Incorporate new regulations
  - Incorporate new information

- Development of San Pedro Bay Standards
  - Emissions Reduction Standards
  - Health Risk Reduction Standard

- Update measure implementation
Proposed San Pedro Bay Standards

• Emissions Reduction Standards
  – By 2014, reduce emissions by:
    • 72% DPM
    • 22% NOx
    • 93% SOx
  – By 2023, reduce emissions by:
    • 77% DPM
    • 59% NOx
    • 92% SOx
Proposed San Pedro Bay Standards

- Health Risk Reduction Standard
  - By 2020, reduce the population-weighted residential cancer risk of port-related DPM emissions by 85%, in highly-impacted communities located proximate to port sources and throughout the residential areas in the port region
Health Risk Assessment Results

Legend

Percentage Reduction in Risk
- 75+
- 70 - 75
- 60 - 70
- 50 - 60
- 40 - 50
- 30 - 40
- 20 - 30

Area within Two Kilometers of Ports Boundary and Transportation Corridors

Landuse Zoning
- Residential
- Commercial/Industrial/Open Space
- Interstate 405
- Off-Port Roads Modeled
- Off-Port Rail Modeled
- Port Property

0 0.45 0.9 1.8 2.7 3.6 Miles
Tracking, Monitoring, and Reporting

- Expand Port-Area Real Time Air Monitoring Network
- Emissions Inventory-Regular Updates
- Monitor Progress on Clean Air Action Plan
- Report Progress on Clean Air Action Plan
Renewable Energy/GHG Program

- Multi-divisional working group—evaluates and implements renewable energy projects
- Completed “Solar Energy Technology and Siting Study”
- Developed framework for renewable projects
  - Capital projects
  - Development projects
  - Tenant incentive projects
- Tracks other types of renewable energy, such as wind, for eventual cost-effectiveness
- Development of a comprehensive GHG Emissions Reduction Program
Water Resources Action Plan

• Joint efforts with both the Port of Long Beach and Port of Los Angeles with U.S. EPA Regional Water Quality Control Board and other stakeholders
Water Resources Action Plan

• WRAP will improve water quality by:
  – Building upon existing port programs
  – Identifying innovative and proactive methods to meet current and upcoming regulatory requirements
  – Identifying pollution control measures to improve water quality

• Total Maximum Daily Loads (TMDLs)
• New Vessel Discharge Permit
• Sediment Management Plan
Sustainability at POLB

Minimize negative impacts on the community that result from port activities

Collect and re-invest user fees to provide maximum operational efficiencies

Comply with local, state and federal regulations

- Beyond compliance
- Healthy, thriving community
- Financially solvent
Integration of Sustainable Practices

**STRATEGIC PLAN**
- Performance Measures

- **reporting**

- **Green Port Policy**

- **Green Port Annual Report**

**WILDLIFE**
- Design
  - “Green” Building Criteria (LEED)

**AIR**
- Construction Management
  - Recycle
  - Construction Materials

**WATER QUALITY**
- Maintenance
  - Tire Recycling
  - Facilities Retrofit for Energy Conservation

**SOIL/SEDIMENT**
- Administration
  - “Green” Office Supplies
  - Procurement
  - Ride Share Program

**COMMUNITY ENGAGEMENT**
- **SUSTAINABILITY**
### CAAP Triple Bottom Line Features (TBL)

#### Social Responsibility
- Human health risk reductions
- Includes stakeholders in decision making
- Creates jobs
- Process is transparent
- Protects integrity of workers

#### Economic Responsibility
- Equitable distribution of financial burden
- Helps ports maintain "license to operate"

#### Environmental Responsibility
- Air quality improvements
- Energy/fuel efficiency improvements
- Advances new technologies
- Creates model for regulators and politicians
- Ecological health side benefits
Next Steps for Sustainability

• New programs and projects
• Assign goals, targets, and metrics for all sustainability programs
• Collaborate with City on sustainability initiatives and reporting
• Share what we’ve learned with our tenants and provide incentives for sustainable operations
Middle Harbor Redevelopment

- Modernize Piers D, E & F
- Cut pollution by 50%
- Create 14,000 jobs
- 1000 trucks off the road
- LEED Certified Bldgs.
- “Green” terminal
Middle Harbor Mitigation Funds

- $15 million to start
  - $5 million for Schools and Related Sites
  - $5 million for Health Care and Senior Facilities
  - $5 million for Greenhouse Gas Emission Reductions
What are the goals?

Offset impacts of port-related pollution to the community

Fund projects that provide the greatest benefits to the largest number of sensitive receptors
Thank You!

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