Success Accelerated
Virginia Terminal Creates A Roadmap To The Future
- Largest privately owned marine terminal in North America
- A marriage of technological innovation and environmental stewardship
- A partnership with local, state and federal agencies along with surrounding communities
- Will bring an estimated $6.4 billion dollars into Portsmouth and surrounding communities over next 15 years
Engineering Highlights

- 291-acre facility sits along Virginia’s historic Elizabeth River
- 1 million TEUs per year, expandable to 2 million
- Crane fleet features 6 post-panamax; can support up to 12
- 30 rail-mounted, remote-controlled gantry cranes
- On-site rail yard has six tracks; also expandable to 12
- Direct access from main highway (no impact to neighborhoods)
Here’s a closer look at some of the innovative and energy-efficient uses of technology in Virginia.
How We Reduced Emissions

- Electrification of ship-to-shore cranes
- Automation and electrification of RMGs
- Improved container management and logistics
- Use of yard trucks that meet 2010 emission standards
- Use of low sulfur diesel fuel for container handling equipment
- 40-acre, on-dock rail yard
- Use of RFID to reduce queue and idle time on terminal
Reduced PM Emissions

Norfolk and Portsmouth Terminals - Particulate Matter Emissions

- 2005 Norfolk
- 2006 Norfolk
- 2007 Portsmouth

PM (tpy)
Reduced NOx Emissions

Norfolk and Portsmouth Terminals - NOx Emissions

- 2005 Norfolk
- 2006 Norfolk
- 2007 Portsmouth
Key collaborations with local, state and federal agencies helped to “fast track” our environmental protection plan

- Army Corps of Engineers
- Virginia’s Department of Game and Inland Fisheries
- U.S. Coast Guard
- Virginia’s Department of Environmental Quality
- Governor of Virginia
- Mayor of Portsmouth
- Local Communities
- Elizabeth River Project
- Regional Native American Leaders
Elizabeth River Project identified restoring healthy river bottom habitats as their highest priority.
Our Commitment To The Environment

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- Trust created a 13-acre oyster reef.
- Created 17 acres of tidal wetlands and purchased 13 acres of non-tidal wetland credits.
Our Commitment To The Environment

- Elizabeth River Project identified restoring healthy river bottom habitats as their highest priority
- Voluntarily established the $5 million dollar “Living River Restoration Trust” to clean and repair endangered sections of the river
- Trust created a 13-acre oyster reef
- Created 17 acres of tidal wetlands and purchased 13 acres of non-tidal wetland credits
- Permanently conserving 110-acre green belt around the facility
Portsmouth

- Environmental Permits
- Secure Environmental Permits
- Business Plan Approval
- Design And Construction
- Terminal Opens

2002 | 2003 | 2004 | 2005 | 2006 | 2007
The image depicts a timeline of events for two locations: Portsmouth and TraPac.

**Portsmouth**
- **2002**: Terminal Opens
- **2003**: Secure Environmental Permits
- **2004**: Business Plan Approval
- **2005**: Design And Construction
- **2006**: Expansion Approved
- **2007**: Phase I Complete
- **2015**: Phase II Complete
- **2025**: Phase III Complete

**TraPac**
- **1997**: First Draft EIS
- **1999**: Lawsuits over expansion of China Shipping Lanes
- **2000**: Terminal, public hearings and various EIS drafts
- **2003**: Final EIS
- **2004**: Expansion Approved
- **2005**: Phase I Complete
- **2006**: Phase II Complete
- **2015**: Phase III Complete
- **2025**: Phase IV Complete
Portsmouth

Terminal Opens 2007
Environmental Permits 2002
Business Construction

5 yrs = 1MM TEU Capacity (Phase 2 = 2MM TEU Capacity)

TraPac

First Draft EIS 1997
Lawsuits over expansion of China Shipping Lanes
Terminal, public hearings and various EIS drafts

27 yrs = 0.7 MM TEU Capacity Increase

Final EIS Expansion Approved
Phase I Complete

Phase II Complete 2015

2015 2025
On the opening day of APM Terminals Virginia, EPA Regional Administrator, Don Welch, assessed our impact on the Elizabeth River and the industry…
“It’s not the big that eat the small...

...it’s the fast that eat the slow.”