May 5th, 2010
The Pledge for Growth: Responsible Growth

Growth can mean great things for our community, including quality jobs along with a cleaner, healthier environment.
Traditional Mitigation Measures

Tidal Marsh Restoration:
22 acres on Drum Island, more than doubling the current ecosystem

Morris Island:
126-acre tract preservation of historic Charleston site

Cooper River Initiative:
15,000 acres in the East & West Branches
Traditional Mitigation Measures

Oyster Reefs:
More than 5 miles of reefs, erosion reduction

Right Whales:
5-year support to track the endangered Northern right whale
Community Mitigation

Long-Term Community Partnership: More than $4 million for community enhancement, working with LAMC and North Charleston leadership

Initiatives:
• Housing trust
• Educational resources
• Community centers
• Job training and career center
• Environmental receptors
• Community master plan
Air Initiatives

In March 2007, the SPA signed an agreement with the South Carolina Department of Health and Environmental Control (DHEC)

- Created a partnership to reduce port-related air impacts
- Voluntary, proactive agreement is separate from the mitigation activities specifically tied to the new terminal
Improving our Productivity
In the Gates

More cargo delivered per gallon of fuel, less idling, less port equipment run hours, etc.
Improving our Productivity

More containers moved per hour of crane operation, shorter vessel dwell/hotelining, fewer yard tractor run hours, etc.
Air Initiatives

Switch to Ultra-low Sulfur Diesel:
Three years ahead of federal mandate

Education/Anti-idling Initiatives:
20 minutes average “turn time,” switch to ULSD, ongoing emissions reductions

Equipment Replacement:
Meet or exceed Tier 2 Federal Standards

Construction Standards:
All off-road equipment Tier II or higher and ULSD

First-in-the-Southeast Air Emissions Inventory:
Released September 2008
# Regional, Port Emissions

<table>
<thead>
<tr>
<th>County</th>
<th>VOC (tpy)</th>
<th>NOx (tpy)</th>
<th>SO2 (tpy)</th>
<th>PM-10 (tpy)</th>
<th>PM-2.5 (tpy)</th>
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<tbody>
<tr>
<td>Berkeley County</td>
<td>46,937</td>
<td>40,869</td>
<td>67,281</td>
<td>16,902</td>
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<td>Charleston County</td>
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<td>Dorchester County</td>
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<tr>
<td>Three County Total</td>
<td>140,383</td>
<td>71,894</td>
<td>77,389</td>
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<tr>
<td>Port Air Emissions Inventory</td>
<td>197.9</td>
<td>3,476.8</td>
<td>1,157.9</td>
<td>192.8</td>
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</table>

**Port-Related Emissions as a Percent of Total in Tri-County Area**

|                  | 0.14% | 4.84% | 1.50% | 0.60% | 1.21% |
Received 2008 DERA grant

In partnership with DHEC, the Charleston Metro Chamber of Commerce, the American Lung Association, the Charleston Motor Carriers Association, and the South Carolina Trucking Association.

2008 EPA Diesel Emission Reduction (DERA) grant has 2 components:

- On-terminal cargo handling equipment
- Trucking Rebate Program
2008 DERA grant

On-terminal cargo handling equipment:

repowering 21 Rubber Tire Gantry cranes (more than half of the modern fleet) from Tier 0 to Tier III engines
Trucking Rebate Program

- 50% rebate for EPA or CARB certified idle-reduction technology
  - Funding for 50 trucks

- 75% rebate for EPA or CARB certified retrofit technology
  - Funding for 20 trucks

- Funding for both trucking companies and owner/operators
Trucking Rebate Program

- Applications were solicited in early 2009

- Received ten times more applications than the available funding

- Trucking companies and owner/operators were notified of their selection in April and given through the end of 2009 to install the technology

- Money that was not utilized by the end of 2009 was reallocated to other applicants to have the work performed by March 31st, 2010

- Idle-reduction technology has now been installed on 49 trucks and retrofit technology on 36 trucks

- More than originally planned due to lower than expected costs
DHEC DERA Funds

Assisted a local tug company Moran Towing of Charleston in applying for State DERA funds to switch half of its local tug fleet to cleaner fuels
DHEC DERA Funds

Switching the Cape May to biodiesel (subject to availability)

Switching the Elizabeth Turecamo to Ultra Low Sulfur Diesel (ULSD)
Awarded a 2009 ARRA DERA Grant

A multi-faceted project designed to reduce port related diesel emissions with extensive public/private partnerships. Project components, include:

- On-terminal cargo handling equipment
- Privately owned and operated tugs
- A privately owned and operated dredge
- 40 privately owned local drayage trucks
2009 ARRA DERA project

On-terminal cargo handling equipment: Repowering of 36 full container handlers from Tier 0 to Tier III engines
2009 ARRA DERA project

Partnership with Stevens Towing: Repower two twin-screw tugs, both propulsion and both auxiliary engines on each for a total of 8 engines from Tier 0 to Tier II engines.
2009 ARRA DERA project

Partnership with Marinex Construction: Repower their dredge the *Hampton Roads*, from a Tier 0 engine to a Tier II engine.
2009 ARRA DERA project

Partnership with Evans Trucking: Company has leases with 40 local owner/operator drayage trucks, which will be retrofitted with Diesel Multi-stage Filters.
Numbers for the 2009 DERA grant:

- Total Project Cost: $3,566,102
- Matching Funds: $1,566,202
- This represents a 44% local contribution
- Total Economic Impact estimated at $6.6 million
- Will create a total of 37 new jobs

Project overall will reduce:
- Total Annual NOx emissions by 176.25 tons
- Total Annual PM emissions by 9.88 tons
- Total Annual CO emissions by 29.31 tons
To give you some numbers overall:

For these two grant projects alone, total emissions reductions over the life of the projects will be:

- 2,135.68 tons of NOx
- 97.8 tons of PM
- 52.28 tons of HC
- 309.56 tons of CO
Our overall strategy:

- Continue to maintain and further cultivate excellent working relationships with environmental regulators.

- Proactively work with the regulators, the business community and other non-profit groups to find programs and solutions that make sense both from a financial and an environmental standpoint.
Another example: Our Environmental Management System (EMS)

- We are currently in the process of developing an EMS for the Wando Welch Terminal.

- Once it is implemented, we expect to replicate it for our other terminals.

- The significant aspects we are addressing have been identified, and they include:
  - Air Emissions (further voluntary reduction programs)
  - Stormwater/water quality
  - Spills from cargo
Our Environmental Management System (EMS)

As a first step in implementing the EMS we developed an Environmental Stewardship Policy which states as our vision:

“It is our environmental stewardship vision that fiscally sound environmental practices enhance our primary function of promoting economic development.”
www.PledgeForGrowth.com

There's more to the Port of Charleston than just cargo, ships, trucks and trains. In fact, the Port has taken on one of the state's largest environmental efforts to date – and was one of the first in the nation to consider “people” impacts. Among its efforts, the Port is restoring and adding 22 acres of tidal marshes, reducing port-related air emissions and funding an air monitoring station, partnering with Wildlife Trust to protect the Northern Right Whale and much more.

Take a look for yourself.
people: One of our most important resources. Of their own accord, the Port is working hand in hand with North Charleston leadership and the Lowcountry Alliance for Model Communities (LAMC) to benefit those communities in the long term - through greater access to affordable housing, job opportunities, community resources and more. The partnership is one of the only port-related mitigation plans nationwide to include these “people” impacts. The Port also has committed $250,000 to address traffic issues within those communities and additional funds to study and improve air quality.

How is the Port thinking beyond its own growth? *click here.*
TAKE the PLEDGE

Please complete the form below and Take the Pledge for Growth!

Contact Name

Company

E-Mail

Our Pledge

Take the Pledge  Reset

Responsible growth. That's the Port's pledge.
Why?

Because the Port understands that growth can mean even greater things for the entire community. Opportunities for better jobs along with a cleaner, healthier environment.

But the Port can't do it alone. To truly enhance our communities, it needs responsible executives and companies each willing to do their own part.

How about committing to a company-wide recycling program, or switching to cleaner fuel? Or offering incentives for taking mass transit, riding a bike or car-pooling to work?

You could commit to switching company vehicles to hybrid or higher gas mileage per gallon...conduct energy audits in your company's buildings or convert all light bulbs to CFLs...support local conservation groups in their efforts—by volunteering or committing critical funds for projects...and much more.

The Port challenges you, as individuals and as company leaders, to make your own Pledge for Growth.
TAKE the PLEDGE

www.PledgeForGrowth.com
Thank You