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# Reducing Drayage Emissions in Port Areas

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U.S. EPA SmartWay Partnership Program

EPA, Region 2

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# Introduction

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- SmartWay Summary
- Drayage Background
- SmartWay Drayage Program
- SmartWay Drayage Calculator
- Financial Assistance
- Technical Assistance

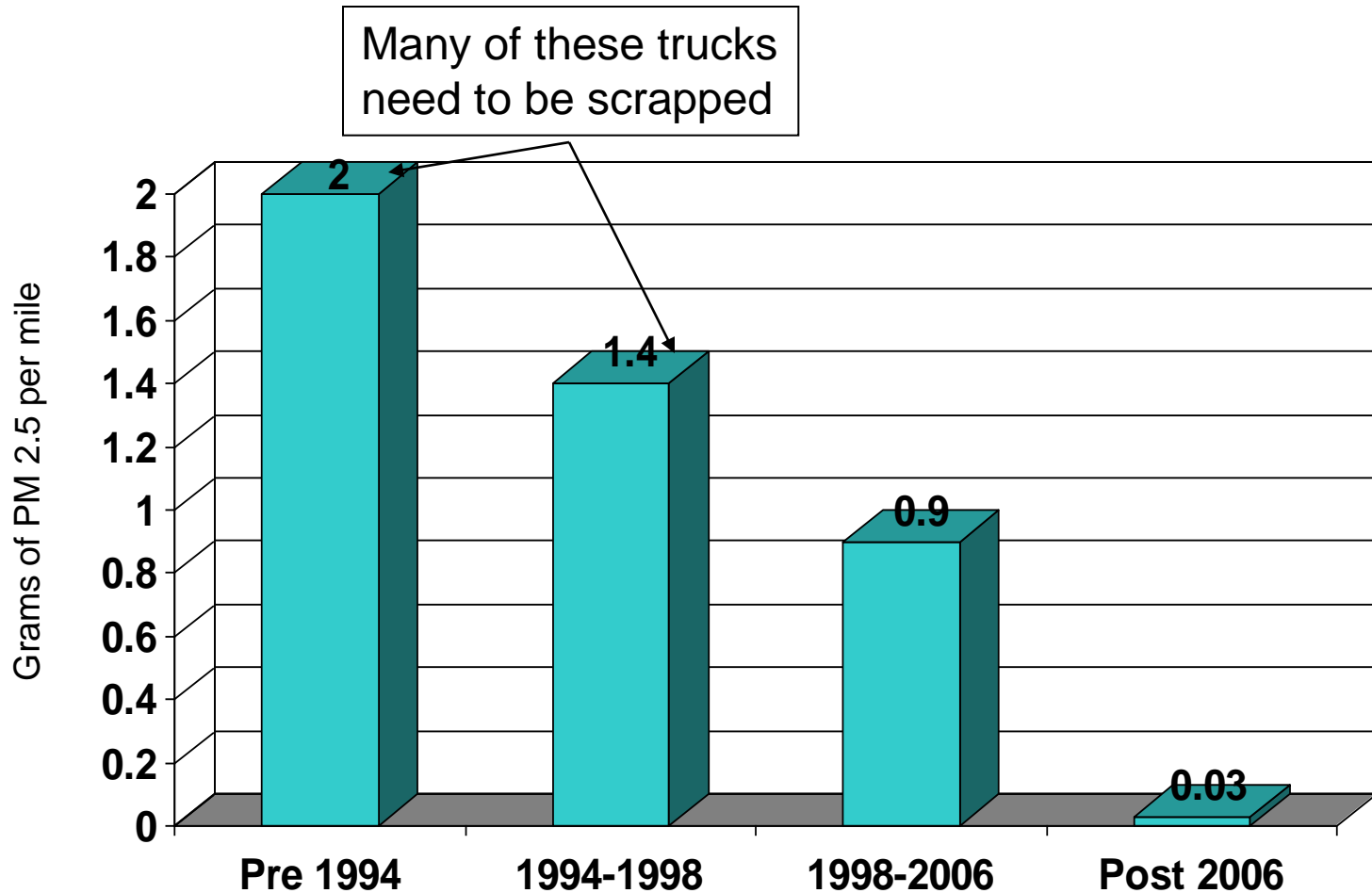
# Addressing the Supply Chain

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- EPA's SmartWay Transport Partnership achieves emission reductions and energy efficiency in goods movement across the supply chain
  - Voluntary public-private initiative open to companies of any size
  - Objective, consistent methods and tools allow carriers to improve performance and shippers to find greener carriers
  - Finance programs expand access to cleaner technologies
  - Test program identifies lower carbon technologies
  - Partner recognition for top-performers
- SmartWay's 3,000 partners save money by reducing fuel use and emissions which protects the environment, supports greener jobs, promotes energy security and strengthens US economy
  - Since 2004, reduced 16.5 MMT CO<sub>2</sub>, 235,000 tons NO<sub>x</sub>, 9,000 tons PM, and 50 million barrels oil (\$6.1 billion fuel costs)
- Program enhancements this year
  - Port drayage initiative(Spring)
  - Web site enhancements to improve partner support (Summer)
  - Transition to improved partner tracking tools (Fall)



# Why Dray Matters: PM 2.5 from HD Diesel Trucks (Grams PM 2.5/mile)





## Dray Trucks: Unique, Challenging

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- Very old trucks
- Low income owner-operators
- Low cost of entry keeps rates low
- Limited benefits from fuel-saving equipment
- PM, ozone and toxics are the major priority, not GHG
- Special concern for vulnerable communities

# Addressing Drayage Emissions

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- Goal is to create SmartWay criteria that balance:
  - Superior environmental performance
  - Financial consideration
  - Available emission reduction technologies
- Key considerations
  - Consistency with SmartWay's Truck Carrier Model
  - Minimal reporting and record keeping requirements for carriers/3PLs, shippers and SmartWay
  - Performance-oriented (not technology focused)

# SmartWay Drayage Announcement

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- Location: Port of Charleston
- Date: June 28, 2011
- Speakers
  - Jim Newsome, South Carolina State Ports Authority
  - Gwendolyn Keyes Fleming, Regional Administrator for EPA Region 4
  - Gina McCarthy, EPA Assistant Administrator
  - Rick Gabrielson, Coalition for Responsible Transportation/Target Corp
  - Marcia Aronoff, Environmental Defense Fund
  - Myra Reese, Bureau Chief, Bureau of Air Quality, South Carolina Department of Health & Environmental Control
  - Rahim Karriem, Lowcountry Alliance for Model Communities
- SmartWay Charter Shipper Partners
  - Best Buy, JC Penney, Target, Lowe's, Home Depot, Wal-Mart, HP and Nike
  - 22 drayage carriers also joined as charter partners

# SmartWay Drayage Program

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- Carriers participating in the SmartWay drayage program agree to:
  - Use the Drayage Calculator to measure and report to EPA your emissions performance on annual basis
  - Achieve a “Very Good” or “Outstanding” Environmental Performance within 3 years of joining SmartWay
    - This is equivalent to a 50% reduction in Particulate Matter emissions below the industry average
  - EPA will list SmartWay Port Drayage Partners and performance on its website
  
- SmartWay commits to support our drayage partners by:
  - Publicize the name of participating carriers through educational, promotional and other media materials
  - Help drayage truck partners achieve their goals by providing assessment tools and technical assistance
  - Encourage SmartWay shippers to commit to use greener drayage trucks at ports
  
- For complete details on the SmartWay Drayage Agreement see the SmartWay Drayage website
  
- EPA revised its SmartWay Partner Agreement to recognize Shippers that agree to move 75% of their port cargo with SmartWay Port Drayage Truck Carriers

# SmartWay Drayage Calculator

| Drayage Fleet Score and Emission Reductions for Generic Port |                      |           |                     |           |           |           |              |                   |                  |                   |                       |                              |  |
|--|----------------------|-----------|---------------------|-----------|-----------|-----------|--------------|-------------------|------------------|-------------------|-----------------------|------------------------------|--|
| Company Name   | ABC Trucking Company |           |                     |           |           |           |              |                   |                  |                   |                       |                              |  |
| Year   |                      |           |                     |           |           |           | Total Trucks | CO2<br>Short tons | PM<br>Short tons | NOx<br>Short tons | SmartWay<br>SIF Score | Environmental<br>Performance |  |
| 2011   | Pre-1988             | 1988-1993 | 1994-2002           | 2003-2006 | 2007-2009 | Post 2009 |              |                   |                  |                   |                       |                              |  |
| Baseline Emissions From Average Dray Truck Fleet             |                      |           |                     |           |           |           | 40           | 2,891             | 2.5              | 53.8              |                       |                              |  |
| Untreated  | 10                   | 10        | 10                  | 10        |           |           | 40           | 2,892             | 2.5              | 51.1              |                       |                              |  |
| DOC & CCVS   |                      |           |                     |           |           |           | 0            | 0                 | 0.0              | 0.0               |                       |                              |  |
| Flow Through Filter  |                      |           |                     |           |           |           | 0            | 0                 | 0.0              | 0.0               |                       |                              |  |
| Diesel Particulate Filter/LNG                                |                      |           |                     |           |           |           | 0            | 0                 | 0.0              | 0.0               |                       |                              |  |
| Total Trucks Equipped with:                                  | APUs                 |           | SW Tires            |           | LNG       |           |              | 0                 | 0.0              | 0.0               |                       |                              |  |
| 2008 Total Fleet Emissions                                   |                      |           |                     |           |           |           |              | 2,892             | 2.5              | 51.1              |                       |                              |  |
| Change in Emissions from Baseline                            |                      |           |                     |           |           |           |              | 1.0               | 0.1              | -2.7              |                       |                              |  |
| % Change in Emissions  |                      |           |                     |           |           |           |              | 0%                | 3%               | -5%               |                       |                              |  |
| Avg. Miles Per Truck   | 38960                |           | Fuel Consumed (gal) |           |           |           |              |                   |                  |                   |                       |                              |  |
| SmartWay FLEET Score and Environmental Performance for:      |                      |           |                     |           |           |           | 2011         |                   |                  |                   | 0.75                  | Average                      |  |

Source: [www.epa.gov/smartway/transport/documents/drayage/swdrayagecalculator.xls](http://www.epa.gov/smartway/transport/documents/drayage/swdrayagecalculator.xls)

# Financial Assistance for Drayage Carriers

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- SmartWay Financing (from DERA)
  - Houston Galveston Area Council--\$9 million
  - Cascade Sierra Solutions--\$12.1 million
  - Community Development Transportation Lending Services, Inc.--\$3.7 million
  - Owner-Operator Independent Drivers Association Foundation – \$1.1 million
  - *Mid-Atlantic Regional Air Management Association--\$3.9 million*
  - *Southern Alliance for Clean Energy--\$5 million*
- Additional DERA Grants (non-SmartWay)
  - \$7 million PANY/NJ
  - Clean Air Council, Philadelphia \$350K
  - Virginia Port Authority
  - Port of Baltimore
  - South Carolina State Ports Authority

### Grants and Loans to Support Clean Drayage Trucks

The following list provides contact information for various grant and loan programs available to drayage carriers that can be used to help purchase lower emission drayage trucks. Please contact each program for details on grant amounts, loan rates and eligibility criteria.

| Program   | Location                            | Contact                           | Email  | Web Address  |
|---|-------------------------------------|-----------------------------------|--|--|
| Cascade Sierra Solutions (CSS)                                      | National                            | Angelique Dodaro<br>541-302-0900  | <a href="mailto:angelique@cascadesierrasolutions.org">angelique@cascadesierrasolutions.org</a><br><a href="mailto:info@cascadesierrasolutions.org">info@cascadesierrasolutions.org</a> | <a href="http://www.cascadesierrasolutions.org">www.cascadesierrasolutions.org</a>   |
| Community Development Transportation Lending Services               | National                            | Dale Marsico<br>(202) 247-1922    | <a href="mailto:marsico@ctaa.org">marsico@ctaa.org</a>   | <a href="http://web1.ctaa.org/webmodules/webarticles/anmvie wer.asp?a=53">http://web1.ctaa.org/webmodules/webarticles/anmvie wer.asp?a=53</a>  |
| Cascades Sierra Solutions<br><i>Great SmartWay Rebate Program</i>   | ME, NH, VT, MA, RI, CT              | Josh Capps<br>541-852-4316        | <a href="mailto:jcapps@cascadesierrasolutions.org">jcapps@cascadesierrasolutions.org</a>   | <a href="https://csswebform.org/WebForm/RebateIntro.aspx">https://csswebform.org/WebForm/RebateIntro.aspx</a>  |
| Mid-Atlantic Dray Truck Replacement Program                         | VA, MD, DE, PA                      | Joanne Throwe<br>301-405-5036     | <a href="mailto:JThrowe@umd.edu">JThrowe@umd.edu</a>   | <a href="http://www.efc.umd.edu">www.efc.umd.edu</a>   |
| Southern Alliance for Clean Energy                                  | NC, SC, GA, FL                      | Anne Blair<br>404-373-5832        | <a href="mailto:anne@cleanenergy.org">anne@cleanenergy.org</a>   | <a href="http://www.cleanenergy.org/index.php?/Learn-About-Details.html?form_id=52&amp;item_id=110">www.cleanenergy.org/index.php?/Learn-About-Details.html?form_id=52&amp;item_id=110</a> |
| Port Authority of New York and New Jersey Truck Replacement Program | Port of NY/NJ                       | 877-309-1680                      | <a href="mailto:info@replacemytruck.org">info@replacemytruck.org</a><br><a href="mailto:info@cambiamicamion.org">info@cambiamicamion.org</a>   | <a href="http://www.replacemytruck.org">www.replacemytruck.org</a><br><a href="http://www.cambiamicamion.org">www.cambiamicamion.org</a>   |
| Clean Air Council Drayage Trucks Project                            | Philadelphia and Wilmington         | Nick Rogers<br>215.567.4004, x110 | <a href="mailto:nrogers@cleanair.org">nrogers@cleanair.org</a>   | <a href="http://www.cleanair.org">www.cleanair.org</a>   |
| The Port of Virginia, Green Operator "GO" Program                   | Port of Virginia                    | Megan Hughes<br>301-405-4035      | <a href="mailto:mhughes3@umd.edu">mhughes3@umd.edu</a>   | <a href="http://www.portofvirginia.com/corporate/environment/go-program.aspx">www.portofvirginia.com/corporate/environment/go-program.aspx</a>   |
| South Carolina State Ports Authority                                | South Carolina                      | Jeannie Adame<br>(843) 577-8175   | <a href="mailto:jadame@scspa.com">jadame@scspa.com</a>   | <a href="http://www.pledgeforgrowth.com/PFG_Trucking_Rebate_Program.asp">www.pledgeforgrowth.com/PFG_Trucking_Rebate_Program.asp</a>   |
| Florida Clean Diesel Rebate Program                                 | Florida                             | Robert Wang<br>850-717-9036       | <a href="mailto:Robert.wang@dep.state.fl.us">Robert.wang@dep.state.fl.us</a>   | <a href="http://www.dep.state.fl.us/Air/emission/msc/diesel_emission.htm">http://www.dep.state.fl.us/Air/emission/msc/diesel_emission.htm</a>  |
| North Carolina Diesel Emission Reduction Grant Program              | North Carolina                      | Anne Galamb<br>(919) 715-6296     | <a href="mailto:anne.galamb@ncdenr.gov">anne.galamb@ncdenr.gov</a>   | <a href="http://daq.state.nc.us/motor/DERG/">http://daq.state.nc.us/motor/DERG/</a><br><a href="http://www.ncair.org/motor/Rebates">www.ncair.org/motor/Rebates</a>                        |
| Houston-Galveston Area Council Drayage Loan Program                 | Houston and Galveston               | (832) 681-2588                    | <a href="mailto:drayageloan@h-gac.com">drayageloan@h-gac.com</a>   | <a href="http://www.hgacdrayageloan.com">www.hgacdrayageloan.com</a>   |
| Scrappage and Retrofits for Air in Puget Sound (ScRAPs) Program     | Port of Seattle                     | 866-345-3390<br>x238 or x240      |  | <a href="http://www.CascadeSierraSolutions.org">www.CascadeSierraSolutions.org</a>   |
| San Pedro Bay Ports Clean Air Action Plan                           | Ports of Long Beach and Los Angeles |                                   |  | <a href="http://www.cleanairactionplan.org/grants/default.asp">www.cleanairactionplan.org/grants/default.asp</a>   |
| Meadowbrook Leasing   | Charleston, Savannah                | Jason Ugolini<br>866-826-2258     | <a href="mailto:Jason.ugolini@meadowbrookinc.com">Jason.ugolini@meadowbrookinc.com</a>   |  |

If you have updates for this table, please contact Ken Adler at: [adler.ken@epa.gov](mailto:adler.ken@epa.gov)

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# SmartWay Drayage Resources

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- Web Page:  
[www.epa.gov/smartway/partnership/drayage.htm](http://www.epa.gov/smartway/partnership/drayage.htm)
  - June 28, 2011 Announcement Press Release
  - SmartWay Drayage Fact Sheet (PDF)
  - SmartWay Drayage Shipper Addendum (PDF)
  - SmartWay Drayage Partnership Agreement and Calculator Version 3.1 (XLS)
  - Technical fact sheets for lowering port emissions
- SmartWay helpline
  - 1-734-214-4767
  - smartway\_transport@epa.gov

# Contact Information

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