

HAZARDOUS TO OUR HEALTH

The Human Impact of Port Truck Pollution on Truck Drivers and Residents in New York and New Jersey



Winter 2009



Report Overview

Port pollution has for years been perceived as a “California problem.” While the ports of Los Angeles, Long Beach and Oakland have struggled with the public health, legal and economic development consequences of diesel emissions from ocean vessels, port trucks, and dockside equipment, the shipping and goods movement industry has encouraged cargo traffic to head east as if it were immune from the same problems.

Mounting evidence demonstrates just the opposite. It is a port *industry* problem that plagues the urban areas adjacent to major ports around the country.

The Ports of New York and New Jersey handle the highest volume of shipping containers on the East Coast and the complex ranks as the third largest in the nation.¹ Annually, trade commerce generates an estimated \$15.5 billion to the regional economy and is considered one of New Jersey’s top growth industries.² However this economic prosperity comes with a huge cost to the health of residents throughout the region. The pollution stemming from goods movement, and port trucking in particular, is contributing to soaring rates of asthma, lung cancer, and cardiac and respiratory illness among truck drivers and residents that work and live in the shadows of the port.

The vast majority of the 7,000 trucks that make an estimated 10,000 trips in and out of the terminals each day are toxin-spewing rigs that are on average 11 years old.³ Diesel engines this antiquated pollute at least 10 times more than modern trucks.⁴ These

dirty trucks have a negative impact on air quality and put the lungs and livelihoods of thousands of truck drivers and residents throughout the New York metropolitan region at risk.

Although California, with the first, second, and fifth largest ports in the nation, handles more port truck traffic on a daily basis, New York and New Jersey’s ports – the consolidated third largest port complex in the country—cause a proportionally equivalent amount of diesel pollutants to its California counterparts. According to the Clean Air Task Force, while California ranks No. 1 nationally

for health risks associated with diesel pollution, including heart attack, strokes, cardiovascular death and lung cancer, New Jersey ranks fourth and New York sixth.⁵

Recognizing the seriousness of this situation, California’s ports have approved or enacted new environmental standards in order to dramatically reduce truck emissions, with the Port of Los Angeles taking the most aggressive approach.

Hazardous to Our Health

looks at the significant public health impact of goods that are moved from the ports to warehouses and eventually to the shelves of retailers throughout the region. Specifically, this report examines the environmental and social costs of the current port trucking system on workers and residents. It calls on political and corporate leaders to acknowledge the gravity of the problems described here, and to urgently seek solutions to both the environmental and labor issues that, together, have created a major public health complication for port-adjacent communities in both New Jersey and New York.



The Economics of Port Trucking

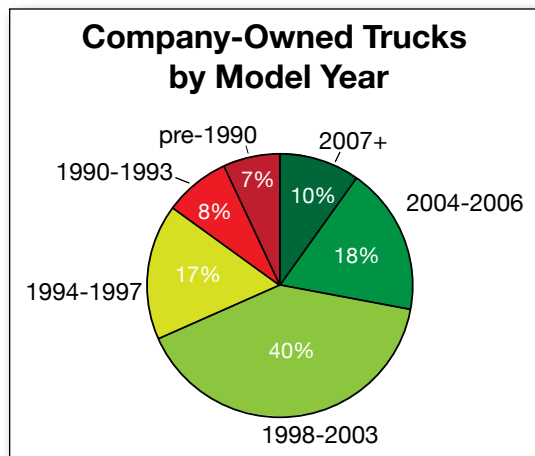
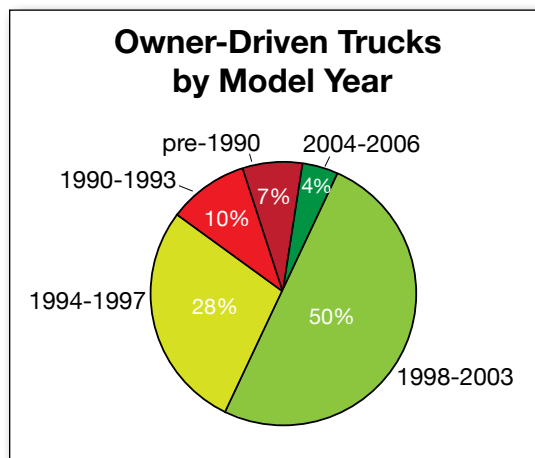
Academic studies and independent economic analyses are pointing to the culprit behind port truck pollution: fundamental market failure and a dependence on an independent contract system.⁶

In 2009, Rutgers University published a survey of port drivers funded by the New Jersey Department of Labor. It found that the majority of the estimated 7,000 trucks that operate out of the Ports of New York and New Jersey were built in the previous century,⁷ similar to trucks in most major trade hubs around the country – excluding Los Angeles and Long Beach, where phased-in truck bans went into effect in 2008.

Deregulation enacted in 1980 permitted trucking companies to downsize their fleets and employees and instead contract out to thousands of individual haulers who operate their own rigs. These independent contractors comprise 75 percent of the driver workforce and earn an average of \$28,000 a year, or a shade less than \$10 an hour, and lack health insurance.⁸ These low wages explain why New York and New Jersey port drivers can only afford decaying, diesel-spewing trucks built before 1998 that expose them and residents throughout the region to deadly toxins.

Port trucking companies that rely on “independent contractors” – independent in name only – do so as a deliberately deceptive business practice designed to drive down haul rates. These drivers are distinct

from legitimate long-haul owner/operators. Port drivers sit at the very bottom of the global supply chain because unlike small business owners as the classification implies, they are unable to negotiate fees for their service, are paid by the load and not their time in traffic or idling in line, and many are forced into leases that explicitly prohibit them from hauling for more than one company at a time.



Source: Port Authority of New York and New Jersey, prepared by Starcrest Consulting Group, LLC

The average port truck payment is \$967 a month for New York and New Jersey drivers who are still paying off their vehicles, or just shy of \$12,000 annually.⁹ The total cost for an individual to own, maintain, and insure a port truck can run as high as \$5,000 each month – exceeding the income of most workers behind the wheel.¹⁰

As a result, the nation’s ports have earned the notorious reputation as the place “where old trucks go to die.”

Disease and death related to truck emissions and poor air quality were barely understood threats thirty years ago when trucking was deregulated, absolving trucking companies of their responsibility to own trucks, to directly employ truck

drivers, and almost all liability for truck safety and maintenance. Not surprisingly, the Port Authority estimates that more than 96 percent of the trucks that now service the ports fail to meet EPA 2007 engine standards.¹¹

In short, trucking companies are allowed to pad profits by externalizing the cost and liabilities of owning and operating trucks onto low-wage port truck drivers. The drivers, the weakest actors in the port economy, can only survive by driving old, toxin-belching vehicles.

Because it is financially prohibitive for port drivers to properly maintain their trucks, their rigs can be hazardous on the roads. The exploitative market structure that allows drivers to be treated as “independent” contract workers has led to an environmental and public health crisis. As a result, these grievously underpaid drivers cannot

afford to purchase and then maintain clean, new and efficient trucks.



Port Pollution’s Impact on Communities and Residents Throughout the Region

Diesel exhaust is a toxic combination of carbon, sulfur, nitrogen, particulate matter compounds, and related gases created from the combustion of diesel fuel, burning lubricating oil commonly containing minute metallic engine particles.¹² The human health impacts of this toxic recipe have been well documented. Exposure to diesel particulate matter causes hypertension, asthma, heart disease, lung cancer and a host of other respiratory illnesses – and can often be deadly.



Seaports are widely recognized as generators of large amounts of diesel pollution. A combination of industrial factors come together at major ports to make them venues of pollution: massive cargo ships powered by diesel fuels; sophisticated equipment used to offload cargo from the ships to the dock;

and diesel-powered trucks that take the cargo to warehouses, docking stations, and other inland destinations.

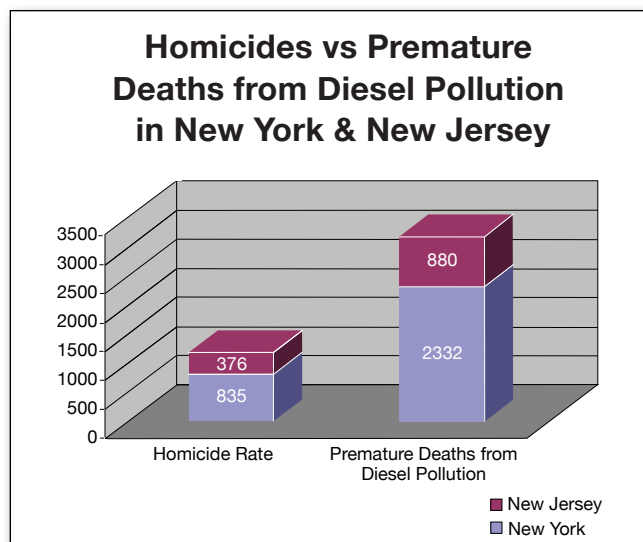
A 2004 Natural Resources Defense Council report estimated that toxins emitted from the New York and New Jersey ports each day are the equivalent to that of over 400,000 cars.¹³ That same study found that truck emissions account for 40 percent of port pollution in America’s ten major ports.¹⁴ Other government and academic analysts have made varying estimates of the percentage of port-related diesel emissions that come from trucks, but all believe that the industry is a significant contributor to the deadly problem of port pollution.

In New York and New Jersey, there is mounting evidence that suggests residents of communities near ports are suffering from preventable diseases and premature deaths related to diesel pollution from port trucks. Children are extremely vulnerable to the impacts of diesel pollution, including increased prevalence of asthma, cough and bronchitis and

incidents related to these conditions, including increased risk of upper and lower respiratory infections.¹⁵ Other health risks include:

- New Jersey residents face the nation’s second greatest cancer risk from diesel soot in the nation.¹⁶ While the State of New Jersey operates several air quality monitors to keep track of air pollutants throughout the state, they do not track diesel particulates in Newark, home to a seaport and an airport.¹⁷
- The Clean Air Task Force projects that the number of premature deaths attributed to diesel pollution in New York and New Jersey will reach more than 3,100 in 2010,¹⁸ five-and-a-half times the number of homicides in Newark and New York City combined in 2008, and over two-and-a-half times more than the murder rate across both states in the same year.¹⁹
- School children in Newark experience a 27 percent asthma rate,²⁰ nearly double the rate in the state overall.²¹ The inescapable conclusion is that, for children in particular, living near the ports of New Jersey and New York increases their risk of contracting serious respiratory illnesses.
- Asthma is the leading cause of absenteeism from school nationwide. Newark students are particularly affected, with one out of every four children diagnosed with the illness.²²
- The death rate attributable to asthma in Newark is twice the rate of that in suburban and rural areas of the county. Hospital admissions in Newark for the treatment of asthma were more than double the rate for areas far removed from the ports.²³

Those who make their homes in port-adjacent communities, like Newark, Bayonne and Staten Island, live with severely degraded air quality. In fact, the American Lung Association gave Essex, Hudson, and Union Counties in New Jersey, home to the bulk of the region’s ports, an “F” grade for air quality.²⁴



Source: Federal Bureau of Investigation 2008 Crime Statistics, and The Clean Air Task Force, 2009

While asthma and hypertension are serious problems for port-adjacent communities, cancer rates are also elevated in these areas. Cancer risk for residents of Essex County, home to the ports of Elizabeth and Newark, is 496 times greater than the Environmental Protection Agency’s acceptable cancer level of one in a million.²⁵ Out of 3,109 counties nationwide, Essex County ranks 39th in regard to health risks from diesel soot.²⁶

Richmond County on Staten Island in New York, not only boasts high asthma rates in communities adjacent to the Howland Hook port,²⁷ but also ranks 20th in the country with regard to health risks from diesel soot.²⁸ One study indicates that the risk for cancer for those in Staten Island is 703 times greater than the Environmental Protection Agency’s acceptable cancer risk level.²⁹

“ Cancer risk for residents of Essex County, home to the ports of Elizabeth and Newark, is 496 times greater than the Environmental Protection Agency’s acceptable cancer level of one in a million. ”

Impacts of Diesel Pollution Along Major Truck Routes

The impacts of diesel pollution extend far beyond the ports and the communities located next to the ports. As port trucks go about their daily business of distributing goods to warehouses and retailers throughout the region, they also distribute significant amounts of diesel pollution. While not alone in their proximity to major truck routes, Jersey City and the Bronx are clear examples of how communities throughout the region are plagued by diesel pollution linked to port trucking.

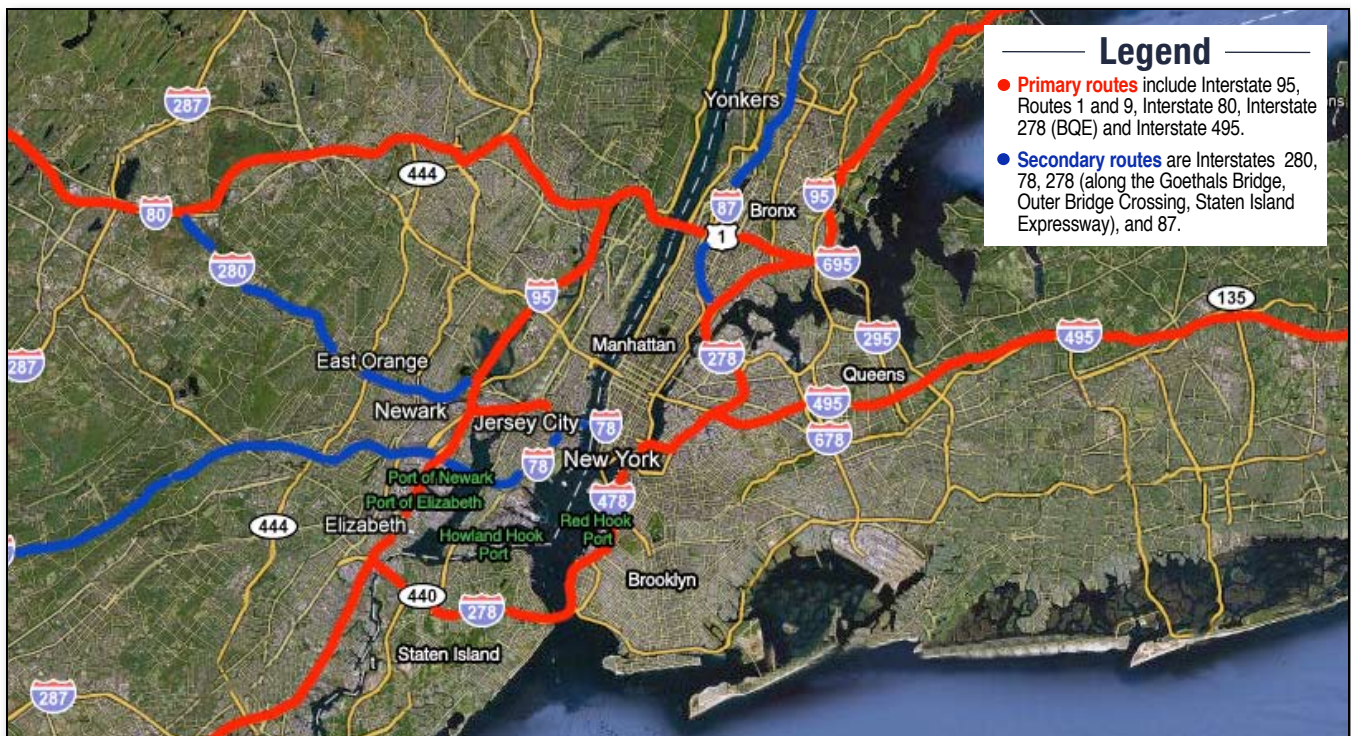
The Cross Bronx Expressway, a major piece of Interstate 95, is the most congested bottleneck in the United States and is the major roadway used to bring freight from the terminals to Long Island, upstate New York and areas throughout New England.³⁰ As a result, neighborhoods throughout the Bronx have some of the worst diesel pollution in New York City

and the borough ranks 3rd in the state of New York for health risks related to diesel soot.³¹

Because Routes 1 and 9 are not toll roads, many port drivers travel these corridors in order to reduce their out-of-pocket costs. It has had significant impact on congestion and pollution, particularly in Hudson County which ranks No. 1 in the state with regard to health risks associated with diesel soot and 9th among counties nationwide.³²

Some have advocated for port trucks to be replaced by cleaner and more efficient railroad systems that would reduce the number of trucks on the roads. However, New Jersey is the predominant origin and destination of trucks arriving and leaving the container terminals.³³

Primary and Secondary Port Truck Routes in New York & New Jersey



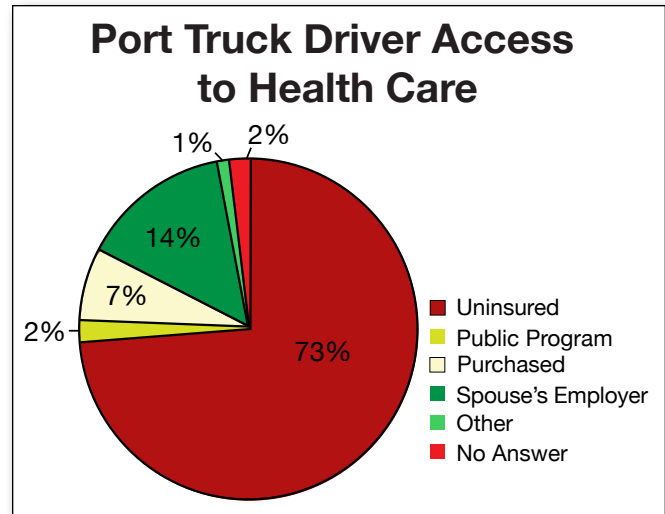
Source: www.nymtc.org

Impacts of Diesel Pollution on Port Truck Drivers

Every working day, port drivers are subjected to dangerous levels of diesel particulate matter multiple times: in their truck cabs, waiting in long terminal lines with hundreds of other dirty engines idling, and in nearby communities where they reside.

- A recent analysis from the New Jersey Department of Environmental Protection has shown that the estimated cancer risk from diesel pollution for workers at the port is 1000 times greater than the EPA's acceptable risk level.³⁴
- A study published in *Environmental Health Perspectives* states that "trucking industry workers who have had regular exposure to vehicle exhaust from diesel and other types of vehicles on highways, city streets and loading docks have an elevated risk of lung cancer with increasing years of work."³⁵ Other diseases related to diesel particulates are heart and cardiopulmonary problems.³⁶
- In the 2009 Rutgers University study, port drivers reported asthma, heart disease, hypertension and high blood pressure as common health problems.³⁷

For port drivers, exposure to toxic emissions doesn't end with the last load of the workday. According to the Rutgers University survey, the largest concentration of port drivers reside in communities like Elizabeth, Newark, and Jersey City – all of which are located next to the ports or along major truck routes.³⁸ Health studies indicate that port drivers are at increased risk for heart and lung conditions and elevated mortality rates due to this constant exposure to vehicle exhaust at work and at home.³⁹



Source: Bensman and Bromberg, 2009

Unfortunately for port drivers, overexposure to diesel pollution isn't the only health concern. Most drivers lack basic access to affordable health care. Most drivers lack basic access to affordable health care. Few port trucking companies offer health care benefits to employee drivers and a full 75 percent of independent contractors are uninsured.⁴⁰ As a collective, port drivers lack basic access to health care and this exacerbates the health issues they face while working and at home.



Port Trucking is Everyone's Business

The public health crisis attributed to port trucking can be seen and felt throughout the region and in major port cities across the country. The current system has brought deadly, dirty air and dead-end jobs to New York and New Jersey and has spiked public health risks from port pollution to crisis proportions in communities near the port and along goods movement corridors.

In response to this crisis, a broad coalition of community groups, public health and environmental organizations, labor unions and local officials in other port cities like Los Angeles, Long Beach and Oakland, have advocated for a new business model for port trucking that recognizes the undeniable link between poverty and pollution. Some of those efforts have already resulted in significant decreases in toxic diesel emissions.

On October 1, 2008, the Port of Los Angeles was the first in the nation to take bold action to fix the broken port trucking system by implementing the landmark Clean Truck Program, a sweeping policy to permanently replace dirty diesel trucks with newer, clean-burning and alternative fuel models, with the aim of reducing diesel truck emissions at the nation's busiest cargo container complex by 80 percent.

This program is dramatically ahead of its original five-year schedule. Within twelve months of its inception, the Port of Los Angeles had already



attained a 70 percent reduction in emissions. The most comprehensive version of this program would reward trucking companies for environmental compliance, but requires that these businesses assume the critical task of purchasing and maintaining clean, environmentally efficient trucks for long-term sustainability. Special interests — principally the trucking industry, backed by major retail shippers — have erected legal roadblocks in the path of full implementation. But the short-term gains demonstrate what creative public policy can do to address the serious public health, environmental, and economic issues that affect America's largest ports.



As New York and New Jersey officials begin to grapple with the region's own port pollution problem, the success of the Clean Truck Program at the Port of Los Angeles has drawn the attention of elected leaders at the local, state and federal level. In October of



2009, Mayor Michael Bloomberg of New York City and Mayor Cory Booker of Newark jointly called on Congress to amend outdated federal law to allow the Port Authority to implement strict environmental and operational standards on its property without the

fear or the price tag of industry legal roadblocks.

Unable to wait for Congressional intervention to take action, the Port Authority of New York and New Jersey has recently adopted a limited voluntary measure to remove a tiny fraction of the dirty rigs operating out of the ports and replace them with cleaner models. However, along with Mayors Bloomberg and Booker, the Port Authority recognizes that a long-term and sustainable solution is necessary to permanently replace and properly maintain the fleet of 7,000 vehicles. Officials have thus reached out to Members of Congress to educate them on the need for explicit



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legal authority that would allow local jurisdictions to implement comprehensive programs on port property to protect our environment, improve public health and safety, increase efficiency, and create good, green jobs.

As this report demonstrates, there is a growing body of evidence that the current port trucking system is hazardous to our health. Residents and workers throughout the region are suffering from preventable diseases caused by port pollution. While limited efforts are underway around the country, Congress has the power to greatly assist local authorities to implement policies, like the Los Angeles Clean Truck Program, which will permanently repair the structural problems and lead the ports of New York and New Jersey into the 21st century.

Footnotes

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ENOUGH
IS ENOUGH!

Make the Trucking Industry
Responsible for Clean Air.

Coalition for Healthy Ports

The Coalition for Healthy Ports is the sister alliance of the Coalition for Clean & Safe Ports in LA, Oakland, and Seattle and is a broad coalition of environmental, labor, faith, community, environmental justice, and business organizations that seek to create sustainable ports in New York and New Jersey. The Coalition is committed to a lasting solution to clean the air and stimulate good, middle-class jobs for surrounding port communities, and includes the following organizations:

- Environment New Jersey • For A Better Bronx • Garden State Alliance for a New Economy (GANE) • GreenFaith • Haiti Solidarity Network of the North East (HSNNE)
- International Brotherhood of Teamsters • Ironbound Community Corporation
- Jubilee Immigrants' Rights Task Force • Newark Presbytery Work Group on Globalization • NJ Environmental Federation • NJ Environmental Justice Alliance
- NJ Sierra Club • NJ Work Environment Council • North Shore Water Conservancy
- The Globe in the Port Project, United Nations Association, New Jersey Division
- Clean Water Fund • Urban Environmental Institute • Change to Win



Coalition for Healthy Ports

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