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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
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B E F O R E:

NEW JERSEY CLEAN AIR COUNCIL

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MICHAEL EGENTON, Hearing Officer
TOBY HANNA
JOHN MAXWELL
JORGE BERKOWITZ
JUNFENG ZHANG
JOYCE PAUL
KENNETH THOMAN
RICHARD LYNCH
IRWIN ZONIS
LEONARD BIELORY
JOHN ELSTON
PAM MOUNT
FERDOWS ALI
JOSEPH CONSTANCE

I N D E X

(The time is approximately 9:30 a.m.)

DR. BLANDO: Good morning, everyone, I'd like to welcome you to the public hearing. I am James Blando, the current chair council. Today, the topic of our public hearing is something that is very important to New Jersey, as I don't have to tell any of you, approving our quality at our ports and airports.

Before we go any further, I'd like to introduce our hearing subcommittee chair, Mike Egenton and he is going to introduce the council members and give us a little additional information.

Michael, why don't you come up.

MR. EGENTON: I was going to do it here if that is okay.

Thank you very much. Again, I'm the hearing chair for today. My name is Michael Egenton. I represent the New Jersey State Chamber of Commerce and this is the annual Clean Air Council public hearing. With that I am going to hand it over to the other Council members for brief introductions

DR. BLANDO: As I mentioned, my

name is Jim Blando. I am the current Chair of the Council and I work for the New Jersey Department of Health and Senior Services.

MR. HANNA: My name is Toby Hanna. I work for Environmental Resources Management and I represent the New Jersey Society of Professional Engineers.

MR. MAXWELL: My name is John Maxwell. I'm a public member of the Clean Air Council. In my spare time I am a lobbyist for the big oil companies, where we do the Lord's work.

MR. BERKOWITZ: My name is Jorge Berkowitz. I have the unfortunate situation to sit next to Mr. Maxwell. I work for Engineer and Environmental Services. I represent the New Jersey Business Associations.

MR. ZHANG: My name is Jim Zhang, professor at the School of Public Health, U.M.D.N.J. Rutgers. I'm representing Health Offices Association.

MS. PAUL: My name is Joyce Paul and I represent the New Jersey Department of Community Affairs.

MR. LYNCH: I'm Richard Lynch. I

work for Environmental Safety Management Corporation and I am representing the New Jersey section of the American Hydrogen Association.

MR. ZONIS: I am Irwin Zonis. I am a public member and I'm retired.

MR. BIELORY: I'm Leonard Bielory. I am a public member physician from U.M.D.N.J., director of the health and resource center.

MR. THOMAN: I am Ken Thoman and I represent New Jersey State Fellow CIO.

MR. CONSTANCE: Good morning, Joe Constance, New Jersey Commission of Small Business.

MR. ALI: My name is Ferdows Ali, New Jersey Department of Agriculture, a sinking ship of the state.

MS. MOUNT: I am Pam Mount, I am a Councilwoman from Lawrence Township and I'm representing the League of Municipality, but I am also a farmer and I will make sure that ship doesn't sink.

MR. ELSTON: Last and probably least, I am a public member. I am John Elston, public member, thank you.

MR. EGENTON: Thank you very much.

I'm going to take a moment to recognize an individual on this Council who I've termed a statesman. He served on this Council. It is his fortieth year at the creation of this Council. I am going to hand it over to our statesman, Irwin Zonis, for a few remarks about the history of the Clean Air Council and what we are all about.

Irwin.

MR. ZONIS: Thank you very much, Mike, and good morning all. That's right, I have been a member of the Clean Air Council since its first meeting in September of 1968. Which does seem like a long time ago.

The Council was formed by active legislature in 1967. It was set up as an advisory body. It replaced the old Air Pollution Control Commission which is a regulatory body. The legislature decided perhaps it was not a good idea for the regulated community to write the regulations.

There was some err in that there wouldn't be any problems, but there was merit in the way that air pollution regulation and air pollution control was becoming more difficult

and more sophisticated as the years went by. The legislature specified the powers and duties of the Council and as you would expect, many of them are standard obligations that you would predict for a group of this nature. The Council was to request information concerning air pollution control from the Commissioner of what was then the Department of Health because in 1967 there was no Department of Environmental Protection.

The department had to study the evolution control program and make recommendations to the Commissioner, study the codes, rules and regulations. Study and investigate a term that is very important in the State of New Jersey, study and investigate the state of the art and the technical capabilities and air pollution control and report their findings and at least hold public hearings at least once a year in regards to existing air pollution control statutes, codes, rules and regulations and upon the state of the art and so on and report recommendations there onto the Commissioner.

Council lived up to that

obligation and I have a list of the subjects of the annual public hearings over the decades. In some cases there were one shot hearings that were not repeated and in other cases the Council found reason to meet again and to discuss again a specific air pollution problem.

For example, particulate matter where the regulations changed and our knowledge changed. We study particulate matter in an earlier year and some ten years later came back and talked about fine particulate matter.

One of the subjects on the minds of the Council and certainly the citizens of New Jersey and DEP was mobile sources of air pollution and the Council has specifically had automobiles and other mobile sources in mind in a number of public hearings. For example, in 1970 the subject of our hearing was status of air pollution in mobile sources with recommendations for further action. 1973, clean air and transportation alternatives to the automobile. 1980, ride share and car and van pooling and later on in this same period, trucks, buses and car emissions and inspections, enhanced automobile inspection and maintenance

procedures in 1993. 2003, moving transportation in the right direction and again today obviously part of our concern about the subject of ports and airports is mobile sources one more time.

So the Council has had some influence in informing the Commissioner and the rest of the department and, in fact, the citizens and the administration of the state in matters of air pollution control and I think that anybody that's been closely connected to the Council would recognize that dedication over the years. It's been a pleasure for me to be here for this long period. How much longer it will last, we shall see in the near future.

MR. EGENTON: You are not going anywhere.

MR. ZONIS: But in the meantime, citizens are invited to attend the monthly meetings of the Clean Air Council. We meet on the second Wednesday of the month each month except for August and you can find out from our website where the meetings are going to be. This meeting I think, this annual public hearing will join the list of those that have significant impact.

I hold here the 2006 public hearing on indoor air quality and the 2007 public hearing on improving air quality through energy efficiency and conservation. Copies of this report are available from the department or Council itself.

Thank you very much.

MR. EGENTON: Thank you, Irwin, and congratulations.

I just want to remind everyone too that we have a number of speakers that are scheduled to speak today. We have time allocations set for them. I would ask you if you're one of those speakers, to be respectful of your other speakers and try to keep to the time allocation because we have a number of people that want to talk to us today so please keep that in mind.

Secondly, I want to let everyone know, the public know, that the written comment period is open for another month so you can provide written comments if you do not have the ability or the time today to submit those comments.

I also want to just take a moment

to offer my thanks and appreciation to the subcommittee members who helped make this hearing possible and put the speakers together today. Obviously, the chairman, Jim Blando, Toby Hanna, John Maxwell and Jorge Berkowitz. Obviously, without their work every day, every week looking into this, we wouldn't have been able to organize such a meeting today. So I do appreciate it and also I'd like to give kudos to the DEP here, to the Commissioner and her fine staff, particularly Bill Sullivan and Sonia Evans who keep us on target month after month. Bill is our liaison to the Council. We appreciate the guidance that the department offers to us and just wanted to duly note their involvement.

With that, I saw the Commissioner so I think we will get right into it and I will do very brief introductions although she probably doesn't need to be introduced by many of us on the Council.

Commissioner Lisa Jackson leads a staff of over three thousand professionals dedicated to protecting, sustaining and enhancing New Jersey water, air and land and

preserving its wealth of nature and historic resources. Prior to joining DEP, Commissioner Jackson served for sixteen years with the USEPA initially at its headquarters in Washington and more recently at its regional office in New York City. Commissioner Jackson in addition serves as the chair of the ozone transport commission and is vice chair of the environmental council of the state's compliance committee. She's a native of New Orleans and the Commissioner earned her master's degree in chemical engineering from not only a New Jersey University, but Princeton University.

With that, please join me in welcoming Commissioner Lisa Jackson.

MS. JACKSON: Good morning. Thank you, Mr. Chairman, Mr. Co-Chairman, welcome Council and thank you for another -- for what I know will be today another forward thinking and progressive examination of the topic that's very important to the health of our state.

I have to start by making two important announcements related to my agenda. The first I understand it's Mike's birthday.

MR. EGENTON: Who told you that?

MS. JACKSON: I never give up my sources, but no, it wasn't John Maxwell. It was a related interest. So let's all join me in wishing Mike a very happy birthday and thank him on this day for all the services given.

The second very important Mike Egenton related announcement apparently he is driving around with a check engine light flashing on his car.

MR. EGENTON: Somebody's giving me up.

MS. JACKSON: Having never been in said vehicle, all I can say that engine light is there for a reason, sir, and what we ask you to do as quickly as possible to take your vehicle to be serviced.

MR. EGENTON: I am in the market for a Toyota.

MS. JACKSON: So are we. Today you are here to talk about the ports on a more serious topic so welcome to DEP. Since Jeff is here and not for you to put on TV at some department of elimination of parks, but we are trying to get past that today, but as we work through very important issues that affect the

green side of our department I commend you for being here today to understand an issue that affects the other side, the pollution focus side of our department and that is the ports and their impact, not only on our economy, but on the health of residents near and far, particularly those who live in and around our ports.

As you all know, New Jersey is the most densely populated state in the nation and home to the two of the busiest ports on the eastern seaboard. If the governor was here, he would say we'd like to have more and love to grow in the logistics area which is a merging and well-developed with developing business for our state.

So with that backdrop and with the realization and I think a realistic assumption that our ports are thriving and will continue to thrive, your hearing today is especially timely because it is getting in front of and on top of an issue that will either through its growth make environmental progress or contribute to environmental degradation and I hope it's the former.

Ports are not without their potential health impacts and obviously the health impacts are not simply from the ships that visit those ports, but the ancillary services, the so-called logistics business that grows up in order to support the delivery of goods and then the reception of goods by those who are clamoring for them in our area and beyond. So that means just like the movie Trains, Planes and Automobiles to a degree, but certainly trucks if not automobiles and the economic activities that they generate as well.

As ports grow and as we at the same time continually work to reduce emissions from point sources like power plants, like motor vehicles, like heating oil. Port emissions will, unless they are addressed, continue to grow and those we hope will continue to decline so that means the impact and the percentage of problems caused by our ports can potentially increase and that is the trend which we must first try to stem and then hopefully reverse.

The bigger concern, of course, is local pollution impacts. We can talk about the aggregate, but I think the beauty of today's

schedule is that you focus on both the aggregate as well as the local impacts which sometimes make the aggregate meaningless or at least not meaningful to the people who are most affected by an issue.

Let's remember first and foremost the health impacts that we are here to address. Fine particulate matter is a problem across many areas of our state, but the matter associated with diesel emissions, diesel fuel are particularly troublesome depending on local weather conditions. We know that particulates can stay in a community for long percent of time. Those emissions are linked to cancer and premature death and other adverse affects including visibility effects. Health studies have shown that there is no clear threshold below which you don't see impacts when it comes to diesel emissions.

Based on our national data, air toxic data, mobile sources in New Jersey are estimated to contribute two-thirds of the average cancer risk to the residents of our state and New Jersey is determined that diesel emissions result in the greater cancer risk of

all air pollution sources in New Jersey.

In addition, oxides of nitrogen from combustion and disproportionately from diesel also contributes in the forms of ozone. The Federal Government recently did a minor lowering of the ozone standard, but whether they had or not, in our area remains challenged even at the old standard although we were on course to meet our ozone standards for 2010. We certainly won't meet the new standard certainly without significant action with respect to diesel.

Environmental justice is part of the agenda today. I touched a little bit on local impacts, but I think it is important to know where the ports you are talking about are. They are in Newark and Camden and those two areas are clearly environmental justice communities and communities that are already overburdened in terms of pollution that they face. Because of that, they are already disproportionately impacted by diesel exhaust.

Newark is a transportation hub so we have a port, but we also have an airport and some train lines that go through, major highway

lines as well and Camden has pollution both within its borders and at its ports.

According to the New Jersey Environmental Federation in June 2006, it studied diesel hot spots, a snapshot of Newark, New Jersey, the County of Essex County around in which Newark is located as the highest asthma related mortality rates in the state. A doubling of rates within minority populations and furthermore short-term monitoring studies found that levels of diesel exhaust at parks and playgrounds along several Newark streets were two to five times higher than in a similar residential or quieter residential area in the same state in our state. At one location an average of two hundred fifty to three hundred trucks passed by in an hour. These are the kinds of impacts that the industry that I hope you will focus on in your report with respect to ports.

Regional impacts, we already know that there is local, but there is also transport impacts and the cumulative affects of the air that passes over us. About a third of our pollution comes from outside of our state, but

we are not the end of the line in terms of transporting it past and so the direct emissions of particulates can be blown by winds along many miles that impact New York, Connecticut, Rhode Island, Massachusetts and beyond. The ports of Philadelphia, Baltimore and upwind and others upwind of New Jersey also form our air quality.

DEP has taken action and I am proud of those. That doesn't mean that we can't take more. We have an incredibly determined and focused and productive mobile source group and they have done a lot of work and I think they look to you to give them additional marching orders.

We have passed a law in this state that has comprehensive and aggressive statewide diesel retrofit program. We have a link outreach program and education campaign and stringent rules that phase out trucks that have sleeper births by 2010. We require heavy duty diesel trucks in our state to undergo an annual inspection for opacity smoke essentially. We were the first state in the nation to impose that requirement. We sponsor demonstration projects for particular control auxillary power

units and cab heating and cooling systems at truck stops. The idle air projects come to mind.

Last month many of you know I was in Washington providing testimony to the senate environmental public works committee in support of a bill sponsored by the White House to lower the sulfur content of fuel used by ocean going vessels when they get within about twenty miles of our shore. It is modeled on work that California has already done and I think I hope will continue to push forward the aggressive national and international talks to reduce the level of sulphur and the oil that is used in fuels.

We have been active in efforts to reduce NOx, VOCs, particulates and greenhouse gasses to obtain ozone standards, those on the implementation has been finalized and rules that are in that plan are in various stages of proposal, review and adoption. We have a regional haze plan and we have a greenhouse reduction plan that's due out for public comment within the next several months.

So in conclusion, all I say is we

have a lot of work to do here today. I thank you again for taking up this very important charge. I look forward to the recommendations that you produce and the strategies that will come out of the meeting, not because of the report which is always helpful, but because of the health impacts and I hope the production that will result for our citizens.

Thank you very much.

MR. EGENTON: Thank you very much, Commissioner, we appreciate your time. We know you have a busy schedule so thank you very much.

Next up I have the privilege of introducing an individual who I have worked with over the years in my capacity here in Trenton and I am also a South Jersey native so I am very happy he was able to come here today because we are the New Jersey Clean Air Council. So it is not just the port in the Newark, Elizabeth, New York region, but also South Jersey. I'd like to introduce John Matheussen. He is a fourth term New Jersey State Senator having represented the fourth legislative district from 1992 to 2003. On April 1st, 2003 he assumed the position of Chief Executive Officer of the Delaware River

Port Authority and president of PATCO. Some of his board service includes being co-founder and member of the board of home port alliance for the USS New Jersey and I might add that Senator Matheussen was a defining voice for South Jersey and advocated for Battleship New Jersey to be brought to the Camden/Philadelphia area. I encourage the Council and all present here today to make that trip to that historic landmark.

Senator.

MR. MATHEUSSEN: Thanks for that plug, Mr. Chairman, very much. Let me not pass the moment without saying happy birthday. All these years and I didn't know your birthday. Not bad for, what, twenty-seven.

MR. EGENTON: About that.

MR. MATHEUSSEN: First of all, I'd like to thank obviously the Council for this invitation here today. I'm privileged, I am honored to be here and certainly hope that the small words that I have for you today will make some impact on the various decisions that you have to make going into the future.

I'd also like to thank the members of the Council for your dedication and hard work

in working with the New Jersey Department of Environmental Protection on issues of great importance to this state and obviously to the region as the Commissioner so explained. I would also like to acknowledge Commissioner Jackson for her fine work and her staff, the expertise that they have brought to this state, the stewardship of our state's natural resources and well-being of our residents.

The DRPA is a bi-state transportation authority. We operate four bridges that cross the Delaware River, the Ben Franklin, the Walt Whitman, the Commodore Barry and Betty Ross Bridge, as well as 14.2 mile PATCO Rail Line from Lindenwold, New Jersey to Center City Philadelphia. In addition, the DRPA owns and operates the Philadelphia Cruise Terminal as well as the RiverLink Ferry.

DRPA has a long-standing commitment to clean air, clean water and sustainable development. Each capital project conducted at DRPA and PATCO undergoes an environmental review and is designed to the highest environmental standards. We are always looking to identify opportunities to improve our

impact on the environment.

Our Ben Franklin Bridge de-leading and repainting project is one of such example. In its final phase now, at the onset, this project presented numerous environmental challenges. It had more than twenty-seven coats of leAd paint, crosses a major waterway, the Delaware River, traverses several major roads and highways, involves two cities and two states, carries in excess of one hundred thousand vehicles a day and two active train tracks, the PATCO rail line, and passes within feet of peoples' bedroom windows.

When we began the project, we involved stakeholder environmental agencies, elected officials, municipal agencies, resident groups and special interest groups and made them a partner in this project. We kept them apprised every step of the way and demonstrated how we intended to protect their interests, the environment and the health of their neighbors. I am proud to say that we will, in the next year or so, finish this five phase, ninety million dollar de-leading and restoration project with no major environmental infractions and with few

concerns expressed from our neighbors.

Helping us achieve this high level of sensitivity to environmental issues is our in-house environmental coordinator, familiar with environmental regulations in New Jersey and Pennsylvania to ensure compliance with regulatory requirements. We also maintain updated response plans and provide training for staff members responsible for responding to environmental incidents that may occur, as an example of the tasks we routinely undertake as part of our commitment toward a clean environment.

DRPA has been investing in environmental friendly technologies and processes since its inception. Other examples of recent and past investments and processes include our PATCO train line began operations on February 15, 1969, with the first trip from Lindenwold, New Jersey to Center City Philadelphia. Back then, the 14.2 mile line carried twenty-one thousand two hundred people per day. As the cost of a gallon of gasoline in the region hits three dollars or more, many more drivers are escaping the pain at the pump by

riding PATCO. Today, PATCO daily ridership is averaging around thirty-five thousand passengers, up close to seven percent over last year, getting them to work, school, sporting events, shopping and anywhere else they need to go quickly, easily and in an environmentally friendly way.

PATCO is one of the regions primary mass transit providers, helps reduce air pollution and traffic congestion in South Jersey and Philadelphia by removing more than twelve thousand five hundred cars from the roadways each day. Recent studies sponsored by the American Public Transportation Association show that public transportation reduces natural carbon dioxide emissions by approximately seven million metric tons annually by getting people out of their cars and into buses and trains for work and recreational transportation.

For example, a solo commuter switching his or her commute to existing public transportation in a single day can reduce their CO2 emissions by twenty pounds daily or more than forty-eight hundred pounds in a year. If we do the math, PATCO reduces regional CO2

emissions by approximately fifty-five million pounds per year by taking twelve thousand five hundred cars off the road. Further expansion of rapid transit in the region will increase these benefits.

The recent introduction of the PATCO Freedom Smart Card is a service enhancement that our riders are very happy with. A tiny computer chip makes this credit card sized, stored value smart card a big help to our frequent PATCO riders. To enter and exit the system, riders just wave the card near a sensor located on each turnstile. Efficient, contactless and modern. Plus it can be automatically refilled just like E-Z Pass. Our Freedom Card has been designed using the National Fare Collection Standard which means we have taken the first step toward developing a regional transit fare card that will facilitate transfer among transit systems when our regional transit partners implement similar systems. Another incentive for increased mass transit ridership, helping the environment.

Speaking of E-Z Pass, the DRPA introduced E-Z Pass on our facilities in 1999.

E-Z Pass can process two hundred fifty to three hundred percent more vehicles per lane, thus reducing the toll plaza delays and traffic congestion. Less congestion leads to reduced auto emissions and fuel consumption. Before that, in 1992, in conjunction with the other Delaware River Bridge agencies, we had implemented one way tolls on all of our bridges which eliminated the need to stop to pay tolls in the eastbound direction. Both green ideas.

In addition, DRPA implemented movable barriers on three of our bridges several years ago to reduce bridge congestion at peak times. A more efficient travel system, we make better use of existing lanes making quicker trips for travelers.

Not only is it DRPA's goal to make travel on our facilities more environmentally friendly, we are always looking for ways to upgrade and maintain our facilities with as little impact as possible. For example, we undertake an off-hours construction schedule whenever possible. Off-hours construction reduces travel delays and the associated congestion and the pollution caused by idling

cars. We have converted to the use of low sulphur diesel fuel for our construction and maintenance equipment, to reduce the impact of our operations on our air quality. Plus we are in the process of implementing a pilot program to convert a portion of our fleet to natural gas powered vehicles.

But at DRPA we are not content to rest on the past. We are still innovating looking at the following cutting edge projects and technologies to further improve our reliability, value and service to the commuting public. Future short-term investments and processes include a traffic management center which improves the efficiency of all DRPA facilities by allowing sharing of real time information between our bridges and PATCO and the delay information, once centrally accessible at the TMC can be shared directly with businesses, such as the ports. National regional network of intelligent transportation systems, the TMC will help to facilitate the continuous movement of people and goods between New Jersey and Pennsylvania. It will compliment the existing operations center at NJDOT and

PennDOT, allowing for a seamless operations and management plan for the regions highways to take hold, getting timely and accurate traveler information out to the public and businesses, reducing response and clean up times for accidents improving overall traffic flow, redirecting drivers to less congested roadways thereby reducing backups and vehicle emissions and improving overall quality of life.

DRPA is actively working with NJ communities around our stations to encourage transit oriented development or TOD. TOD can help municipalities in coordination with the private sector, concentrate development around transit stations. It encourages transit use, promotes walkability, reduces auto emissions and preserves the capacity of the existing road network.

We recently completed a master plan for all seven of our stations in New Jersey that have surface parking lots to help guide us as we look at the potential for creating TODs around each of those stations. We are currently working with the Borough of Collingswood to TOD around that station and have recently issued a

joint request for qualifications from interested developers.

The Ben Franklin Bridge west side traffic mitigation study is looking at ways of reducing congestion on the bridge and roads in Center City Philadelphia. Reducing congestion will reduce air pollution, save on fuel consumption and greatly enhance quality of life for commuters and residents of South Jersey and Philadelphia.

DRPA is taking on the role of facilitator for a green port with our regional stakeholder neighbors on the river, including the South Jersey Port Corporation and the Philadelphia Regional Port Authority, with the collective goal of a comprehensive and coordinated approach to reduce or neutralize the impacts of port development and operations on the environment and the community. We are beginning to map out a framework and strategy for this initiative.

Finally, there are two PATCO transit station studies presently underway that I would like to touch upon. The projects under consideration in both studies will improve air

quality by removing cars from the road. Provide an alternative for people who cannot or choose not to drive. Encourage TOD. Help communities preserve precious land and water resources, strengthen the linkage between land use and transportation to aid in south land use planning. Support regional effort to reduce auto trip making. Continue directly improve air quality by reducing auto dependence. Promote walkability and a healthy lifestyle.

The first, the PATCO Southern New Jersey expansion alternatives analysis will address the lack of transit/mobility alternatives in South Jersey. The existing PATCO line ends in Camden County. The proposed expansion would provide a new rail line through rapidly growing Gloucester County, providing greater transit connectivity between the key regional employment locations of Philadelphia, Camden and Gloucester County with the growing residential areas of South Jersey. I will quickly advance through the five New Jersey alternatives currently under study.

By providing a high quality transit alternative, this investment would

result in many environmental benefits related to fewer cars on the road, including improved air quality. Expanded PATCO service would support population and employment growth in South Jersey by providing a logical framework around which transit oriented development could occur. This investment would not only permit thousands to take the train instead of driving, but it would serve to preserve open space, slow the creation of impervious surfaces, and encourage walking and cycling.

Several of the alternatives being studied would provide a one seat ride from southern New Jersey to Center City Philadelphia.

Initial order of magnitude ridership estimates for this expanded service indicate the potential for between ten thousand and fifteen thousand new transit uses on a daily basis. This can translate into the potential reduction of approximately thirty to fifty million pounds of CO2 per year on top of the current PATCO system.

The second study is the PATCO Philadelphia waterfront transit expansion alternatives analysis. The purpose of this

project is to support housing, employment and entertainment investments along the Delaware River waterfront in Philadelphia. This area is presently not easily accessible by both transit systems that serve the region, PATCO and SEPTA. Developing transit will decrease auto travel and the need for parking facilities along the water front corridor, saving valuable space for public access to the river via bike and walking paths. This is consistent with the public visioning undertaken by PennPraxis in 2007 and reported in their vision for the Delaware waterfront. If undertaken, expanded transit investments along the Philadelphia waterfront will potentially reduce greenhouse gas emissions further by thousands of pounds annually.

Here are the four alternatives currently under study in the Philadelphia project. Both transit studies are in the alternatives analysis phase, which means that several alternative alignments are under consideration. Ridership and construction cost, as well as operating and maintenance cost data will be calculated for each alternative and presented to the public. The next round of

public outreach is scheduled for summer 2008. A complete draft environmental impact statement will be our next phase of study as required by the National Environmental Policy Act along with the preliminary engineering allowing us to officially document the environmental benefits, impacts and mitigations of the transit expansion in southern New Jersey and Philadelphia.

Thank you for the opportunity to present this testimony. You also asked me for my recommendations to improve air quality. A major recommendation would be for your help to keep these transit expansion alternatives in the public eye. We have conducted extensive public outreach during our initial feasibility study and now during our alternative analysis efforts. What we have heard consistently and almost unanimously is that residents of our study area and those that use the highway network within the study area feel very strongly about the need for expanded mass transportation. Transit investments provide numerous benefits both to society and to individual travelers. Getting commuters out of cars and onto trains is perhaps the best investment in clean air we can make.

For those of you that are familiar with the Route 676/76/42/55 corridor, you know how untenable traffic is now during the weekday morning and evening commutes, during Friday and Sunday evening trips to and from the shore and for events at the sporting and entertainment complex in south Philadelphia and to the airport. It will only get worse with time.

Your active support, by discussing these and other transit investments with New Jersey department leaders, our state legislators, members of Congress and other stakeholders will maximize the likelihood of these proposed investments going the distance.

Thank you.

MR. EGENTON: Thank you very much, John, I appreciate it. Do you have time if we take one or two questions?

Is there Council members with questions?

DR. BLANDO: Senator, you mentioned with the transit oriented development that seems like a great idea. I was just curious based on your experiences what you see as the biggest barriers to those types of

developments.

MR. MATHEUSSEN: Well, what we did was we communicated with the individual communities and let them know that it was their choice whether or not we would develop transit oriented development in the boundaries of their communities and respect their zoning and planning rights within each community. There are some communities that do not want to see any further development. There are some communities you want to see a particular kind of development. Could be low impact on their school system, age related, so dealing with and going the distance with the individual communities is perhaps the most challenging, but I think perhaps the most important element. If you are going to be successful, you need to involve the entire community. We have to build these things not as DRPA dictates, but as the community desires.

MR. EGENTON: One more, Jorge.

MR. BERKOWITZ: Thank you, Senator, very informative. I want to bring you back to one of your paragraphs. DRPA's taking on facilitating a green port, regional

stakeholders on the river including the South Jersey Port Corporation and Philadelphia Regional Port Authority. What relationship among the three entities and how are you coordinating your efforts and what do you mean that you are facilitating green port?

MR. MATHEUSSEN: First of all, the coordination is because we have the money to do it. Second of all, the relationship between the three entities are that the DRPA obviously is in the business of moving traffic through the region. Most of that traffic in the terms of what our neighbors are consisted of truck traffic on both on the Philadelphia side and New Jersey side. The DRPA, its neighbor across the river are both involved in the truck traffic once it leaves or once it gets to the port. So our coordination is helping to move traffic to and from the ports as well as investing in opportunities that will allow the ports to take a look at some green projects, whether it be cold steel, cold iron, whether it be low sulphur fuels or electronic operations of their forklifts. We are inducing those kinds of things.

We are also involved in a master plan particularly for the City of Camden that will allow and separate the commercial traffic to the residential neighborhoods that visit the port every single day.

MR. EGENTON: Thank you very much, Senator, appreciate your comments.

Keeping on schedule, we appreciate the next individual who I am going to introduce took the time out to join us from the West Coast. It is Peter Greenwald and Peter serves as the senior policy advisor for the South Coast Air Quality Management District. He has engaged in private consulting practice consisting of regulatory agencies including air quality districts throughout California and the United States EPA. His recent work includes developing innovative regulatory mechanisms and legislative proposals and engaging in advocacy to local, state and federal agencies in an effort to reduce pollution from the goods movement sector. We appreciate, Mr. Greenwald, that you can join us here today and enlighten us to share what is happening over on the West Coast, thank you.

MR. MAXWELL: You mean the left

coast.

MR. GREENWALD: Stole one of my jokes. Good morning, it is a pleasure to be here. I am with the South Coast Air Quality Management District which is a government agency responsible for achieving clean air in a roughly four county area of southern California including Los Angeles County comprised of about sixteen million people. We have made a lot of progress in reducing air pollution in southern California, but we still have the worst air quality in the country.

Goods movement is a big and in many ways growing part of that problem and there are a number of efforts underway to try to reduce emissions from sources and goods movement due to legal restrictions on state and local authority. We also are very active in advocating for stronger standards at the federal and international levels which I will be talking about in a moment. Which is how I recently came into contact with representatives of the New Jersey Department of Environmental Protection in supporting S1499 which was the bill that Commissioner Jackson referred to earlier which

would cut sulphur content for marine vessels and I must say we thought that Commissioner Jackson's testimony before the environmental public works committee was some of the most effective provided that day.

We believe it is important to get support for stronger policies at the federal level and international levels, have wide understanding of these issues and wider implementation of the control technology, as I will be discussing in a moment, that will help us and around the country.

Southern California area, this is Los Angeles basin, again, about sixteen million people. Just by way of background, our key pollutant problems are particulates and ozone. We have different attainment deadlines, but we have got, again, some of the most severe pollution in the country. Little bit of a quick background. This slide shows that a number of days of exceeded of the federal ozone standards in the last few decades. The good news is we have made a good deal of progress, the two top eight hour ozone standard. The bad news is that we are concerned the progress seems to be

leveling off and we still have about eighty days out of the year that the federal ozone standard is exceeded.

Also in the realm of bad news, there have been a number of medical studies recently which have shown what even the levels of pollution that we have now, there are some very severe adverse health affects. This slide alludes to one of those studies which is USC children's health study which shows that children growing up with relatively high particulate pollution are at greater risk of reduced renal function which in turn is a risk factor for a number of adverse health affects including premature mortality.

One of the things that concerned me as a parent most that the researchers believe that the reduction of lung function is likely permanent, particularly in young woman because it exists at the time their lungs have fully formed by age eighteen and a bit older.

Next slide, please. The California Air Resources Board, the state agency which has responsibility for mobile source controls in California has estimated that there

are some fifty-four hundred premature deaths every year in the south basin just to particulate pollution. Many other health effects that you have heard about as well as exacerbated and hospitalization and loss work days.

In terms of geography, the impacts for criteria pollutants in our area are largely in the inland area and the left coast. The ocean is on the left. We have got primarily on shore breezes and in those ozone building up over the course of a day particulate pollution problems are very similar.

In terms of toxics, however, the picture geographically is quite different. This is the result of a monitoring study that the South Coast Air Quality conducted a few years ago which estimated cancer risks over our region. This slide shows the results without diesel, the yellow areas are relatively higher risk. The purple higher still. That purple area to the left is over Los Angeles International Airport. If we include diesel, we have a very different picture.

The average cancer risks in our

area are approximately one thousand two hundred in a million. We consider -- that is from air toxics. We consider that to be very significant. Air quality district rules prohibit stationery sources from emitting toxics creating risk in excess of ten in a million for new sources and twenty-five in a million for existing sources so twelve hundred in a million average over the area is considered very high.

The highest risks are found in that purple appear at the lower left corner. That is a technical term right here and that is right over the ports of Los Angeles and Long Beach, the largest combined cargo through-put container imports in our country.

You can, if you look carefully, make out the key transportation corridors including freeways, areas where there is a lot of rail traffic and such and the reason is that the primary source for this risk over eighty percent is diesel particulate matter. This slide indicates it contributes eighty-three percent. There is a more recent version of that study of the risk was found from diesel particulate matter.

One final point, there is currently a lot of research going on on the subject. Ultimate fine particulates less than a tenth of a micron in diameter. The photo on the left is indicating the size we are talking about that gray area is a diameter of a human hair. On the right there is summary of some work with the air resource board did. They got into electric vehicle, drove the highways and other areas and counted ultimate fine particles and you can see that the highest levels were found on freeways behind diesel trucks up to a million particles per cubic centimeter.

I'd like to bring a sugar cube and hold it up and point out the area of volume which you have up to that many particles and I went to the cafeteria and you don't have sugar cubes, you have these little packs. So I will hold up one of these. Probably you can imagine if you're behind a diesel truck, this is what you will be exposed to.

Some of the key air quality challenges we have are the easy reductions that have been achieved. If you were representative of the industry you probably take issue that

word easy, that is why I put it in quotes. We have the most stringent standards in the country for factories and power plants.

New standards alluded to end growth and goods movement. This is where it all begins in our area and I suspect to a large part here. This is a container ship arriving from Asia to the port of Los Angeles. This container ship is powered by an enormous diesel engine. I recently had an opportunity to go into the engine room of one of these vessels. As I was standing there looking at this engine which is about three stories tall, I was struck that in this country we have such severe pollution problems in many areas that we regulate pollution of small underarm antiperspirants and barbeque lighter fluids and yet there are no federal, state or local emission standards that apply to that three story tall engine.

This vessel is foreign flag. That is important because the U.S. government has not adopted an emission standard or foreign flag vessels. This vessel holds thousands of containers. Certainly every one of those containers will become a truck powered by diesel

on our highways. That vessel will dock here. This is the overview of the ports of Los Angeles and Long Beach.

Growing container cargo through-put similar to here as I understand it, and about over forty percent of the nations imported goods come through these ports. The majority of goods go to the rest of the country. The container will be removed from the vessel by these large gantry cranes which are notable, but they are virtually the only sources in the goods equipment movement chain that is not powered by diesel. These are electrified. The container will be dropped on yard equipment that is powered by diesel. Cargo handling equipment is also diesel or onto a train. These are on dock rail yard like this is pulled by diesel locomotives. More diesel cargo handling equipment at near dock or off dock rail yards.

This is one of the off dock rail yards. The large portion of those containers will travel our highways, again, diesel powered trucks. Rail intermodal ports serve the whole country. The key pollutants created by all this equipment are diesel particulates, sulphur

oxides and NOx. I am going to talk about each of those in turn.

This is a result of inventory recently conducted by ports of Long Beach. They are working together. The notable points are sulfur oxides. You can see the marine vessel which is the dark blue predominant NOx large capacity as well as the trucks which are the light blue and particulates, marine vessels, trucks and contributions by all of these sources. I have copies of this so you can take a look at this later.

Diesel particulates created by these port sources are a very large and growing portion of our inventory, currently about thirty-two percent of diesel particulate matter emissions in our area will be growing to growth and cargo through-put in reductions and other sources. Key point to keep in mind that with diesel particulate matter proximity matters. These can create significant localized impacts.

This photo is taken on the playground of a school near the ports of Los Angeles and Long Beach next to a highway on which container traffic is carried across the

street from the location of a new rail yard. We have a QMD monitor on that elementary school. It is a particulate monitor. The filters that go into that -- I brought some air pollution in southern California. The particulate filters that go into the monitor look like this when they go in, they are white kind of like coffee filter. Twenty-four hours later they come out and they look like this. The dark color is indicative of products of combustion, largely diesel exhaust. It is designated carcinogenic in California. The volume of air pulled through that filter is approximately equal to what a human being would breath in a three months' time.

We think it is very important to be cognizant of location when citing goods movement facilities. It is also very important to get those diesel emissions down and consider alternatives such as alternative fuels or electrification. The air resources board has conducted health risk assessments of many facilities involved in goods movement in our area. This is some of the key findings. Cancer risks in excess of five hundred in a million

from the ports and similar levels from some of the rail yards.

This is a modification of the slide I showed earlier, cancer risks in our area. We zeroed out emissions from all sources other than marine vessels and this was the result. The findings are and, again, this is the area of the ports right here. The findings were that there is about four million people exposed to cancer risks in excess of a hundred in a million maximum risk. You can actually see offshore the road of the main shipping line entering the area. Cumulative impacts are concern particularly with diesel particulates as well as some of the other pollutants. This is an overview of part of the port here and then you could see there is refining and all kinds of other activities which are going on there.

By the way, I went back after I took this picture, I went back to a meteorologist and asked them is this a bad air pollution day because it looked pretty bad and they said no, actually it was very good. I said why, you see that brown haze in the distance. They said the air pollution was good enough so

the air was clear so you could see the pollution. Normally the pollution is so bad you can't see the pollution.

Sulfur oxides, the key message here are the ships are predominant because of the high sulphur fuels they burn over fifty percent -- actually seventy percent I think it is similar in areas such as this which are caused by the marine vessels. The reason for that difference is that the state adopted a rule that limits the sulphur content of fuels used in auxiliary engines in marine vessels. That rule will result in the benefits, this yellow area is the off road contribution. That will result in significant reductions in sulphur efficiency, but there was a legal challenge filed by the merchants shipping association in the Ninth Circuit Court of Appeals just recently overturned that rule and the result if that rule cannot be implemented that the marine vessels fifty percent contributions will be contributing seventy percent. The fuel sulphur content just to give you an indication, the hourly sulphur content of fuel used in ocean going vessels, twenty-seven thousand parts per million. As you

probably know on road and other fuels in the United States limited to fifteen parts per million. So that is an enormously high level and contributions to particulates.

We have conducted analysis showing that about seven hundred premature deaths could be avoided in southern California just by controlling marine pollution. That is over one third of the benefits of the entire state plan to meet the standards. The major portion of that benefits is low sulfur fuels.

This shows the contributions to nitrogen oxide which is a particulate in our area. The green top of the bars are declining. These are the benefits of all the rules on the books today including future effective dates over the coming years. This horizontal purple line was where we need to get to achieve attainment and the news story here is that this yellow area which is the contributions of sources in goods movement that are port related actually by itself exceeds the carrying capacity in our area to achieve the federal annual eight hour ozone standard. So clearly we need to control those emissions. The green area, the

other emission sources are relatively well controlled compared to goods movement sources.

Ships in our area, this is NOx, top ten NOx sources. Ships number three. This green bar is all of the refineries, power plants and three hundred other largest stationery sources in our region. Ships much larger and locomotives, air crafts on par. By 2023 ships become number one and, again, the aircraft, locomotives on par with all the large stationery sources. This is one reason the level of control is relatively low particularly for ships.

The EPA a few weeks ago released a new rule on locomotives. This slide is a bit outdated. I noted that will result in over ninety percent control from new locomotives, but not until 2015. There has been a lot of fleet turnover after that, but get significant benefits so it is going to be a long time. This was the result of some work done by Professor Corbit at the University of Delaware. He recently published a global study of health impacts of marine vessel emissions and he was kind enough to pull out the portion for the

United States for us and it shows basically that there are significant health impacts from marine vessel emissions all around the country.

This is EPA website showing levels of diesel particulate matter in the country. This the not just a southern California issue. Control action on the ships, the international maritime organization standards are extraordinarily work. We allow forty-five thousand BPM sulphur content. Doesn't do anything when the average content is twenty-seven thousand BPM. Last Friday a committee of the maritime organization proposed a tighter standard and there will be a meeting in October where those standards will be considered and I put a question mark there, we will see what happens. USEPA rules don't apply to foreign flag vessels. They present ninety percent of pollution problems so they have not had a significant impact on those ocean going vessel emissions. EPA had committed to consider adopting standards by April 2007 and extended that to the end of 2009. We have sued them about that and we are hoping for more stringent standards at the national level.

One of the things we are advocating in this bill we are talking about earlier, S1499, which are required to adopt more stringent standards. Locomotives, again, level of control not up to what other sources which generally about ninety percent control in southern California for stationary sources. The newest locomotives being sold right now have a fifty-eight percent control for NOx, similar level for particulates. Much better can be achieved, in fact, filters which have ninety percent control level are installed on locomotives in Europe and the new rule will again require deployment of those more stringent technologies, but it will be some time.

State and local efforts, I put the authority issues at the top, but I mentioned earlier there have been lawsuits. There are a number of legal hurdles. Any time a state or local government tries to control emissions from sources in international or interstate commerce. Nevertheless, California has some unique authorities and there are things that can be done even if we are not talking about California. In California the state has adopted

and is promoting to adopt a number of rules that would limit emissions from marine vessels, require turnover of the truck fleets, marine vessel auxillary engine rules, short power dock. I don't have time to go into them, but I will be happy to talk to you later about those or provide additional information.

In South Coast we have adopted rules that would require risk assessment at rail yards, limit locomotive idling. Locomotives idle an extraordinary amount of time and we believe unnecessarily so. Those rules were challenged by the railroads and were recently invalidated by Federal Court. Those are on appeal right now and other actions that are described in our air quality management plan which I will be happy to site for you. You can take a look, it is all on the Internet.

One of the things that has happened in southern California is that port projects have been challenged by environmental groups. This slide alludes to one such challenge which was a legal challenge under what is called the Environmental Quality Act.

As you can imagine, the growth in

goods movement through-put, there are efforts to expand for the infrastructure. The ports want to grow and the cargo through-put is a very important part of our economy. This particular litigation resulted in a settlement where shore power was implemented and a number of other air pollution control actions. This vessel you can see is being plugged in here from this barge and it is not operating its auxiliary engines at dock which greatly reduces the key sources of local air pollution near the ports which is the running of those auxiliary engines. Probably because of those kinds of challenges, the two ports, Los Angeles and Long Beach, has recently gotten and adopted San Pedro Bay ports action plan. It is the first time the ports got together a joint meeting in forty-nine years so they obviously thought this was very important. The plan includes a wide range of control measures to be implemented by the ports and I don't have time to go through all these, but basically cover all the sources I have been talking about. Low sulphur fuels, cargo handling equipment, retrofit and replacement or for rail.

The legal mechanisms that the ports are using are, number one, project approvals and this slide alludes to a recent project approval that the port of Los Angeles where the ports have imposed environmental conditions on a lease and on approval of a project which require short power and many other things designed to reduce emissions from current levels.

The ports are also considering port wide programs. They recently adopted a clean truck program which is designed to basically turnover the entire fleet, the sixteen thousand eight hundred drayage trucks by 2012 to 2007 or later model year. Just about a week or two ago, they adopted a main engine low sulphur program for marine operators to use low sulphur fuels on approach and on exit from the ports. Technology advancement program is also part of these joint efforts.

This slide alludes to one project that we are co-funding which is development of an electrical power drayage truck basically to take the containers from the ports to near dock rail yards.

Key message I want to convey that the solutions are available. Technological solutions are available. The key issue is how to get them implemented. There are controls applicable to all the sources I have been talking about and in many respects that are starting to be deployed right now and we expect a lot more presenting in the near future.

Some recommendations, I'm not entirely familiar with your circumstances here so these are rather general. Ensure that policymakers and the public are informed about air quality issues. Advocate for sufficient federal, international actions particularly important with some of these international interstate sources. Use all available state and local authority. Again, the ports are using their authorities. Funding programs, it sounds like you are doing many of these thing already from Commissioner Jackson's remarks earlier today. Support technology demonstration as appropriate infrastructure to log the location of sources that are involved in goods movement, particularly diesel sources.

Take away message, impacts are

very severe at least in our area, we think in many areas and the country. Solutions are available and all levels of government must act.

Thank you very much.

MR. EGENTON: Thank you, Mr. Greenwald. We have five minutes left if you could indulge us if there is any other questions from Council members.

I was just going to ask you as far as on the West Coast with the competitive issue with the ports that you mentioned, if we look at some of these possibilities here on the East Coast, we obviously have a big port in Newark, Elizabeth, New York region and there is competition with us with Halifax up north as well as Baltimore in the south. So would you recommend as we move forward in sort of an East Coast type of implementation of how the ports implement you said a lot of this is done by federal jurisdiction. So I just want to get your guidance on what you are doing out in the West Coast as far as those recommendations.

MR. GREENWALD: Our general philosophy is to push all levels of government. That because there are uncertainties with anyone

of these, IMO may adopt sufficient any stringent orders and they may not. The Federal Government may or may not. There maybe a lot. The point being we are advocating all levels of government become involved and do what can be done and there is a synergistic affect of this. This is a sense of inevitability created we believe, for example, that the marine vessel building Commissioner Jackson mentioned earlier today has already had beneficial impact on the international maritime organization as IMO sees that the U.S. government is serious about controlling these emission sources here.

One of the things that industry would prefer to see international standards rather than individual standards and different ports or different countries so even large industry such as the World Shipping Council have supported IMO action that is sufficiently stringent to meet the air quality needs of all areas. So, again, we think it is very important to be acting when it can be done at all levels of government.

In terms of competitive disadvantage, we sometimes hear arguments about

this. Again, we believe that by moving at all levels that the higher levels will eventually come to that same level. Also, it is important to keep in mind the cost and benefits, for example, low sulfur fuels we talked about today. We have done analysis that the cost are really quite reasonable and we don't believe will result in any significant amount of diversion.

To give you some examples, we calculated that increase the cost for a pair of tennis shoes imported from Arabia or plasma T.V. and we are talking about fractions of a penny for the shoes and just a few cents for the plasma T.V. and you compare that to the health benefits which I didn't have a chance to get into the monetized benefits of these programs, but they are in the bills.

MR. EGENTON: I would suggest you watch the use of the word monetized in this state. The governor is starting to change the lingo. It is now financial restructuring, but I appreciate the input, Mr. Greenwald.

Other Council members, Toby.

MR. HANNA: With respect to the IMO's action, whatever it may be, what does

the -- how does that change the inventories? How does it change the modeling for ambient impacts or health risk? Can they go far enough or does their need to be action beyond that?

MR. GREENWALD: The standards that the marine environmental protection committee of IMO proposed last Friday the ultimate standards are in our view good. The key question is will they be adopted and secondly the timing. The timing is relatively far out in the future, for example, for sulphur content of fuels they are proposing one thousand parts per million. May sound high, but the current level is well over ninety-five percent reduction, but only in certain levels. The most stringent NOx standard, eighty percent NOx standard over and above current standards they are proposing, but only for new vessels built in the year 2016 and later. Again, vessels last a very, very long time so fleet turnover is the big issue in terms of significant benefits there.

So those reductions ultimately will translate into benefits and, in fact, essential benefits in our case for attainment purposes as well as in reduced particulate

levels causing cancer risks and other health impacts in the vicinity of the ports as well as large areas downwind. You saw in the modeling and we have modeled those benefits because we are assuming those kinds of reductions in our state implementation plan. We cannot get to attainment without those several reductions.

MR. EGENTON: Irwin.

MR. ZONIS: Mr. Greenwald, you are able to move a higher percentage of containers arriving at the port by rail to remote uses. A higher percentage than we do here in New Jersey. Were you blessed with pre-existing facilities or did you build new rail facilities to handle that amount of traffic?

MR. GREENWALD: I'm not familiar with your situation here, the ones you have here. We handle about a quarter of our containers by on dock rail at the ports of Los Angeles and Long Beach. We'd like to see that go higher because when it is not handled by on dock rail, at least the portion that goes out of our region gets on the truck on the highway then a rail yard, put on a train which is not particularly efficient and results in impacts

all along. The ports are targeting getting up to thirty-eight or forty percent on dock rail. I don't know if I answered your question, but the efficiencies of the ports is one big issue. Some of the other ports around the world particularly in Asia have been higher efficiencies per acre than our ports, but they are set up very differently and I'd be happy to talk to you about it more, but I am not sure if I answered your question.

MR. ZONIS: That would require new investments to improve from twenty-five percent to say thirty-eight or forty?

MR. GREENWALD: Yes, they would have to expand. On dock rail capacity is limited space which raises an issue of how they conduct their operations within the port boundaries.

MR. EGENTON: Thank you, Irwin, Just last question from the chairman, Jim Blando.

DR. BLANDO: I was just curious, one of the intriguing aspects of ports I have seen here and I wonder if you look at these is the fumigation of cargo. Have you looked at in

California the fumigation of cargo that comes in?

MR. GREENWALD: Yes, but I personally have not -- I am not personally familiar with it, but I know the issue has been one. I can get you information about it. I can get you in touch with people that know about it.

MR. EGENTON: Thank you, Mr. Greenwald. I thank you.

I just want to remind the audience that as far as this public hearing, that the Council members have the ability to ask the speakers regarding questions. If there are questions from the general audience, I would encourage you to submit that through the DEP e-mail process and we will make sure that staff and everyone else concerned in the air division gets back to you. So thank you for your consideration.

Our next speaker is Tim Pohle. Tim, thank you. I know you made a trip from Washington D.C. to be here with us today. He is the managing director of the U.S. Environmental Affairs and assistant general counsel for the Air Transport Association of America. Before

joining ATA in September 2005, Tim was in private law practice focusing in on environmental and aviation law. Tim represents airlines, airports and surrounding communities regarding safety, security, environmental and local land use matters before a federal and state agencies of course. At ATA, Tim manages the Active Environment Council which directs airline involvement and domestic environmental issues of national significance. Under Tim's direction, developing policy regarding air quality impacts relating to airport operations continues to be a major focus of the Council. Tim, we appreciate the time you took to be with us here from Washington and please share with us what is going on in the aviation industry.

MR. POHLE: Sure. Thank you very much. I really appreciate the chance to be here by train from D.C. Unlike my trips to southern California which I visit with very frequency as well. I am filling in at the last minute so I apologize for any typos or some of the informality of my comments here. I just want to give a little bit of background. At ATA we are the oldest airline association. We represent

the areas you all heard of.

Our members and our affiliates transport over ninety percent of passengers and cargo in the U.S. Environmental issues are of huge importance to us and have taken on even greater importance recently. We have created an environmental department in the last year. I run the environment council which is basically the U.S. domestic affairs. Then we have an international noise and emissions committee which deal with international affairs. That means I get to come to Trenton and my counterparts get to go to Geneva.

Just a little overview of what I am going to be doing today. I just want to go over where our emissions come from. I don't if folks know, but basically the aircraft and what we call ground support equipment which is basically all the stuff you see scurrying around the aircraft at the airport to help support our operations. Things like catering trucks, baggage loaders, those kinds of things that you see right alongside the air aircraft while you are boarding and hopefully getting out on time.

Like all sources of impact are

both global and local. The global are really the greenhouse gas. Local air quality emissions and one thing I want to stress is that there are potential trade-offs on among these emissions including trade-offs with other impacts, mainly noise which continues to be an extremely important issue to us as well.

Another aspect of our emissions profile I think is that we are extremely emissions efficient. By that I mean relative to the economic impact we have. We have a relatively small emissions footprint and I will be giving you figures about that in just a moment.

I just want to touch on the regulatory framework both at the international and U.S. level and also at the local level. Local level when there are infrastructure improvements, I think folks are aware there is an approval process which is basically a de facto additional layer of regulation. And I want to get into what we are doing because we have done and are doing a tremendous amount and we are actually very proud of our record and I am looking forward to sharing that with you. I

just want to touch on some other impacts. The profile.

The things to stress here is our emissions, aircraft emissions are purely a function of fuel burn and the basic constituents we are seventy percent carbon dioxide, about twenty-nine plus of water vapor. That is just the carbon and the hydrogen oxidizing in our engines and in the fuel and you can see that it is extremely efficient because that accounts for ninety-nine percent plus of our emissions. Then we have traces of these other emissions.

I think the other thing to stress here is that the more we save, the less we emit and our economic and our environmental impairment reinforce one another. Fuel is our number one cost center. It is up in the neighborhood of forty percent for some carriers now. Every penny of fuel, again, fuel cost translates into about two hundred million dollars of our bottom line. So if we can save fuel and we can avoid burning it, we do it. The other point here is that we are relatively small contributor. We account for about two percent of greenhouse gases in the U.S. It is about .7

percent in New Jersey based on my review of the inventory, trapped inventory, that is out. Local emissions are generally less than six percent around most airports. That is airport emissions, that is everything, not just airport GES, that is everything as an airport. It is about four percent for New York area and that is JFK, LaGuardia, LGA last time I checked LA is not part of the New York area. So it is about four percent in the New York area and I took a look at the latest inventory and these figures for aircraft and GSE are from 2002. Actually emissions for New Jersey and aircraft are about .1 percent of VOCs, .5 percent of NOx. GOC accounts for .17 percent of GOCs in the inventory. Our footprint is really relatively small. In fact, I'd say they are small slivers in some cases. We are an extremely emissions efficient economic engine.

Nationally, we support about nine percent of employment. We drive about five percent of gross domestic product. One thing I don't think folks are necessarily aware of, we carry twenty-five percent of U.S. international merchandise trade measured by value. That is

not weight, that is by value. By weight I think we are less than one percent. The value of our cargo is so high, it is eighty-eight thousand dollars per ton versus about less than eight hundred dollars per ton for a truck and less than four hundred dollars for shipping. That even though we carry very small portion of the trade by weight, we carry a huge twenty-five percent portion when it is measured by value. This is something I think might surprise a lot of folks and that is that our emissions since 2000.

In 2006 we actually burned four percent less fuel which means compared to 2000 we're emitting about four percent less than everything, but we carry twelve percent more passengers and we carried twenty-two percent more cargo. So it is less emissions and more service. It is more passengers, more cargo. I think it is an enviable record that is really unparallel.

I think there are challenges. One is that we plan to grow and hope to grow and emissions are likely to follow. The IPCC which is the International Panel of Climate Change

which the UN panel you hear about from time to time coming out there recommends on global climate change says that aviation for about three percent of CO2 and six percent of time and change impact in 2050. So that gives you a sense of we are, two percent domestically and three percent worldwide. Most likely scenario is that we may go to six percent in 2050, but one thing I would point out is that our growth rates differ.

In the U.S. we have very mature markets. It is not going to grow at the rate that China is growing, that India is growing, that the Middle East is a huge growth area for aviation. That is really where we are seeing most of the growth. There are structural issues that constrain our operations. Our aircraft and engines are extremely expensive. They have a long useful life so it is hard to turn that over. We have many -- safety is our absolute number one imperative and we have to make sure that any kind of advances with our equipment or fuel meet those safety standards. It takes a great deal of lead time to develop technologies and deploy them in the real world and we have a

limited ability to pass on our cost. I think folks have heard about our attempts to impose fuel surcharges and we have had intermittent success with those. That means as the fuel prices have gone up, we have tried to recover some of that cost through airfare increases and the market is such that we haven't necessarily been able to do that.

Local emissions constraint, facility expansion as I talked about before and I wanted to emphasize again that there are potential trade-offs. There are other environmental parameters that mean a great deal to us including noise and obviously sometimes there are trade-offs with noise versus fuel burn and we have these other issues to deal with, fuel management, ensuring that there aren't leakages of fuel into the ground water, et cetera and controlling stormwater run off from the area port.

Little background on the aircraft emission standards. These are set or originate at the international level through something called ICAO and the committee -- you can read the full acronym out there and these standards

are set at the international level and adopted by the EPA and an FAA clean area. You see here that essentially the CO, the HC and the smoke have been reduced so much that in recent times it's been considered unnecessary to reduce them even more. NOx standards continued to be ratcheted down from 1993 to 2008 this implementation date. We have reduced about forty-one percent the NOx standard has come down. ICAO is considered doing a carbon dioxide standard, but they decided it was unnecessary essentially because fuel is the driver there and we are already motivated to minimize our fuel burn.

I point out that EPA is planning public advanced notice of proposed rule making that is what ANPRM stands for and that is in response to a petition to the states asking EPA to take a closer look at that. New Jersey is one of the petitioners in that instance and we welcome this. We think we have got a great record and we think that any time folks can take a look at it and it is only going to be a good thing for us. This is really what we get down to is a fuel efficiency mandate. That is that

we are absolutely driven to be as fuel efficient as possible. As I said, it is our number one cost center. It is number two for years now it is over taken it. Again, it is about forty percent, thirty to forty percent depending on the carrier in terms of their overall costs.

Our fuel efficiency record I think is hard to match from any other sector. We have improved about a hundred and three percent since 1978. Sometimes you see a figure that fuel efficiency of aircraft operated are about seventy percent more efficient. Well, the aircraft may become more efficient, but we don't stop there. We actually implement new operations, operational measures. Some of the things I will get into later and we are able to operate the aircraft even more efficiently so that the overall efficiency is even higher than the equipment improvement. Again, we have had this absolute reduction in our emissions and even though we are providing more economic value, a tremendous amount more economic value.

As I said, we are not stopping there. We have an additional -- ATA airlines have additional improvement between 2005 and

2025 so we have a great record in the past compared to cars which essentially have remained flat in terms of their fuel efficiency and meanwhile our fuel efficiency has gotten much, much better year after year after year. This gets into what we are doing. As I said, we do absolutely everything we can here. We have what we call a four pillar approach to our addressing our emissions. It involves technology, operations, infrastructure, economic incentive, technology. I just can't help this because I was on the train coming up here and I couldn't have been given a better prop today. It is an article from the New York Times today entitled a cleaner leaner jet age has arrived and they are not kidding. I will send the link or provide the article to y'all, but they talk about such developments as reliance on composites as opposed to aluminum, much stronger, lighter materials transitioning from hydraulic systems like systems aboard the aircraft and the geared turbo fan which was developed by Pratt Whitney which offers about a twenty percent increase fuel efficiency coming down the line here as well.

So we just never stop trying to enhance our existing technology. I think you've all seen the winglet's that are added to aircraft wings. They basically reduce turbulence. It is about six percent increase in fuel efficiency. They don't come cheap, I can tell you that. They are probably about a million dollars to retrofit an aircraft with those. Advance navigation aides which allow us to improve our operations as well which I will get into.

We continue to invest in new aircraft. I don't know if you heard about the Boeing Dream Liner 787 coming out. It is I think first one on line in about 2010 and that's got about a fifteen percent increase in fuel efficiency. We are also looking to alternative fuels and that is through something called the commercial aviation alternative fuels initiative or CAFI. The bottom line there is that we want a different fuel. We want all the alternatives we can get with skyrocketing fuel prices. Any alternatives from an economic sense are only going to put us in a better position, but one thing I want you to be clear on, ATA just

approved principal documents to guide the petroleum companies in their development of alternative fuels for aviation and non-negotiable part of that any new alternative fuel on a life cycle basis has to be more environmental friendly than existing fuel. So we are aren't just saying give us a new fuel, a new fuel that is more environmentally friendly.

We also need a restoration in federal R and D funds. These have declined an incredible amount in the last decade or so and that is exactly the kind of investment that Pratt Whitney was able to build onto give us the turbo fan. So it is the kind of thing we need more of, not less of.

We also do absolutely everything we can to improve our performance through increased better maintenance and through optimal operations. Easiest is reducing weight, taking things like magazines off the aircraft, replacing carts from heavy carts to the food carts to lightweight food carts. You wouldn't believe how much difference it makes. You take paint off the aircraft, it improves the aerodynamics and reducing the weight and

improves our efficiency. We also do things like reduce the thrust on take off, single engine taxiing and engine maintenance like engine washing. You wash an engine and you can improve its performance and save fuel.

We are also trying to do everything we can within the existing air traffic management system to improve our efficiency. Things like continuous descent arrivals. Right now we have got or in the past it's been more of a descent where you go through plateaus and every plateau you ratchet up your power and you come in in steps. Here we are stalking about just as it sounds, a continuous glide into the airport. It saves fuels, it saves NOx, it saves noise so it is a win on every possible front. So those are the kinds of things we are always trying to do.

One thing I don't think people are aware of is that we run on a basically 1950's radar based technology for our air traffic management system. Your brand new car has a better navigation system or a more advanced navigation system with its GPS than we do in the cockpits. What we are looking for is the U.S.

next generation air transport system which is Nextgen. Essentially that will allow us to drive straighter paths instead of zigzagging across the country from radar station to radar station to allow us to fly straighter paths. It will allow us to fly more efficient routes and closer together which will reduce delaying and improve the efficiency all around.

Again, it is not only going to improve our fuel efficiency, but it should reduce noise and other local air impacts as well. That is the bottom line here is that we need a system and the Federal Government is the one in charge of making it happen. One thing I would point out is we are not asking for a handout here. We paid for this system. Unlike a lot of other sectors, we paid for our infrastructure and that distinguishes us from virtually everyone else.

So we are not asking for any handouts. We are asking the Federal Government to use our money in a smart way to help us improve our environmental profile and improve our economic impact. I just wanted to throw this out because I came across this. This is

kind of typical of the kind of impact that an airport can have. EWR is Newark. You could see it's got twenty-four thousand people employed there, about eighteen and a half billion in economic activity, 6.7 billion in wages and salaries and hundred and fifty-seven thousand jobs are derived from the airport. It is that kind of impact that we have across the country and juxtapose to the small impacts I noted above I think you see that what I call our emissions efficiency is really unmatched by anyone else.

Another thing I'd like to talk about which we are talking about environmental impacts is our safety record. Because it is human health in the environment and my colleague from South Coast was talking about the toll from carcinogenic particulate matter and the kind of death rates that can generate. When you look at our safety record and you look at per passenger mile basis. Motor vehicles cause about eight times more fatalities and trains cause about seventeen times more. When you look at injuries, it is off the charts. It's about three hundred sixty times more for motor vehicles and about twenty-nine hundred times

more for trains. That is something that I always like to point out because any time you are talking about shifting modes, you can talk about unintended consequences and those are the kinds of things to keep in mind.

I guess what I would like to do is if I can find them, leave you with five points here before I take questions. One is that we are extremely emissions efficient and we represent really a small sliver of many of the air emissions that are of concern here today. We have gotten there by working extremely hard to improve our performance. We are driven by fuel costs in part.

Environment is extremely important. Economics is extremely important to us too. To me sustainability means economic and environmental sustainability. Here they are one in the same thing. They are reinforcing one another. So we have gotten there by working really hard and we are not stopping there. We are going to continue to develop technology. We are going to continue to develop alternative fuel. We are going to continue to look for air management improvement to do everything we can

to improve our overall efficiency and the last thing I'd leave you with is that I really believe that we need the airlines and you need the airlines to move us toward a more environmentally friendly future where we maintain economic growth. We are extremely efficient. We drive others to be extremely efficient and, frankly, I don't think you can do it without us. I don't think you can get us to an economic future or future of economic growth with an improved environmental profile without us. So I welcome your questions.

MR. EGENTON: Thank you, Tim, we appreciate it. Just to keep on track, I am only going to take two questions because we are a couple minutes behind.

Jorge and then Toby.

MR. BERKOWITZ: Thank you for your presentation. I understand it is very interesting the relative impacts of the aircraft and percentage of the industry normalized over national level, very interesting. However, I am interested more localized impacts. If you were -- I am wondering if you were aware of studies that would get to the issue of a ten

mile radius from the runways. Have people done an analysis of relative contribution and sources that you aware of the studies?

MR. POHLE: What I refer you to are the numerous studies that are done in conjunction with infrastructure improvement projects, for instance, Philadelphia is doing one, in the process of doing an expansion plan and they will conduct a study so there are studies out there, but what I wanted to point out here is these emissions are the local emissions are just what you are talking about. They are airport emissions. It is about less than six percent around most airports. About four percent for the New York area so those are low emissions.

MR. BERKOWITZ: What does local mean? That is a rhetorical question, you don't have to answer it.

MR. POHLE: I don't know the answer to that question. I'd be glad to get you the answer. What I do know is that these other aircraft are GSE represent the overall inventory for the state. So that doesn't get to your local question, but it shows the relative amount

and we recognize there are local impacts and we want to do as much as we can and I think we are driven to do it. We are driven to do it on the GSE side. We are driven to do it on the aircraft side so I absolutely recognize the import of your question and we look at it and try to address it.

MR. HANNA: It is just a follow up from that, Jorge, and I share half a brain or something between us. The GSE that we talked about ground support equipment. There is lots of options out there for reducing emissions. There is terminal power, there is things like that. Would you be able to supply us with some more information about what the industry has been able to accomplish at that level?

MR. POHLE: Absolutely, that is one thing if I had time to fold into this.

MR. HANNA: You could forward it to us separately. I know it is probably half a page or so.

MR. POHLE: It is half of the presentation, yes, but aircraft are the major source so GSE is very important. There are electrification options. There are conversions

to newer diesel engines, et cetera that are out there. Things are getting a lot cleaner. If we can electrify gates and not have to burn our fuel with our auxiliary power units we are all for it. If we can get electric in at airports that will help us reduce our fuel burn and our GSE and it makes economic and operational sense, we are all for it.

We are talking to airports and we are talking to manufacturers even now trying to get a better handle on what exactly the economic analysis is and operational analysis and environmental analysis to better understand exactly where we should be pushing, but I can tell you in southern California, for instance, about fifty percent of the GSE is electric and it is concentrated in certain types of GSE which are amenable to electric. When you are talking about really heavy cargo movers or cargo loaders, that is a difficult application. When you are talking about belt loaders and baggage tugs, that is a much different animal. We can deal with that.

Another thing I would point out, there are climate and operational challenges.

Southern California is a different place than New Jersey, Philadelphia, Newark. So you have to take those things into consideration, but our focus, I would point out, that another challenge that I didn't note here is that the industry isn't exactly flush with cash so to be able to buy all those things takes capital and any kind of support we can get through state grants and those kind of things to help the airports put in the infrastructure, for instance, puts in a great deal.

DR. BLANDO: Thank you. I want to cut in because I think we are running over time now. Since you are the only representative from the airlines, are the airlines able to do anything about the transport, the passengers to the airport, for example, we have been very concerned about all the cars that tend idle outside the terminals and so on. I am wondering if the airlines have any influence on that? Just a quick response would be sufficient.

MR. POHLE: I hope not. Not that I am aware of.

MR. EGENTON: You know what, Tim, in the interest of time we appreciate because

you were the one sole airline representative here so we gave you some extra time and you traveled from D.C. Several of the Council members, if you could supply with your e-mail, send us that link on the New York Times article. We will probable have some follow up stuff. Toby Hanna talked about what is going on on the ground and certainly we appreciate the time that you gave us here today and we will follow up with you.

MR. POHLE: Great, appreciate it. Thank you.

MR. EGENTON: Our next speaker is Brent Barnes and Brent is the director of transportation systems planning and research for the New Jersey Department of Transportation. His thirty-five year planning career includes work in municipal and state government, environmental economic consulting, school facilities construction and a housing developer. He is a New Jersey licensed professional planner and he wrote and published the complete guide to planning in New Jersey, a compendium of state planning law and policy and it is published and lectured extensively on linking land use and

transportation planning.

Brent, thank you for joining us here today.

MR. BARNES: Good morning. Thank you for having us. All of that really means I am the vision guy for the asphalt department. It is not important that I am the vision guy, it is important that you understand we are properly as asphalt department or at lease have been for the last hundred years or so. We are working hard to change that. I think you will find some of this quite interesting. I also have to apologize for my voice this morning, pollen or something is trying to kill me.

So as I said, we have been a land use asphalt highway department for nearly a hundred years, eighty years at least and in the last five to eight years we are sort of breaking out of that mold and thinking about some new things. We are heavily engrained with New Jersey Transit and do a lot of transit planning as well as highway planning. We are not really in the road building business much anymore. You might have noticed that we have plenty of roads out there, but we are in the business of fixing

bottlenecks and making small intersection improvement and creating more efficient roads so that traffic can flow more easily and air quality is improved.

Importantly, here we are looking heavily at demand management. The land use side of the parking where you get into your car and how you travel to work is very important to us. So we are trying to create alternatives to the single occupancy vehicle.

Another good way to create efficient transportation is through the use of technology, intelligent transportation systems. The most obvious symptom of that, visual symptoms is that variable message signs that you see on the highways, but that is just the part that you see. There are a lot of cameras at work and transportation centers at work that work behind the scenes for those visual message signs to redirect traffic in the event of incidents and congestion. More importantly, land use patterns in the state. The state is heavily built. We are the most densely populated state in the nation. We are as I'd like to say, we are the most densely suburban

state in the nation. We are working to help urbanize that just a bit more to create land use nodes that can be supported by all those other things. Notably transit.

So the real key question for us is can land use changes reduce vehicle miles traveled and if so how much. There is compelling evidence now over the last five years or so that land use changes do, in fact, significantly reduce travel. This is a little study I did out of Savannah, Georgia. It is not important to go through all of this, but the idea here is if you have historic -- even at the area in the top two or three circles which are square mile area each are really connected land use and transportation network, you have a lot of more efficient travel patterns, economy, land development patterns, a whole range of things than you do in the sprawl patterns out here. This is really an important one here. Five times more trips per square foot in these sprawl developments than there are in the densely developed areas of the city. So an array of the programs that we have undertaken we still have going.

Future transportation is our way of looking at land use and transportation corridors around the state. We have about eleven of these programs going. We work with multiple municipalities at the same time to help them understand how their land use patterns impact our transportation network and vice versa. We work with them on community development issues primarily, but our focus for the hand off for our engineers is those bottleneck solutions I talked about a few moments ago. Here's an example of one down in South Jersey, Woolwich Township Center, they are building a new town center on Route 322 is the sort of green line that goes through the middle of there.

In the traditional way of doing things, development would just sprawl out along that highway wand we are working very hard using transport development rights and other tools to create an internal network for their town center so the bulk of the trains can be off of state highway and it can be very walkable and bicycle friendly kind of place. Another program is our transit village program. Obviously around bus

and rail stations, major ones and this seeks to create or recreate if you will dense nodes of development in these areas that excellent job, housing balance so folks can live, work and play in the immediate vicinity of transit and not have to use their cars. This is Collingswood, a very successful area along the PATCO line which was a very, very sleepily little community a few years ago and it is now a happening place, a hopping place.

Another tool we are using is integrating land use transportation and economic development. We are actively working in the Route 1 corridor here to create development nodes of major employers and make them transit friendly. In this particular case we are working on a bus route with transit system through this area. Very similar to the concept of the monorail around the Newark Airport area off the highway system, but it lacks the major employers and then links with the regional bus lines and rail lines that serve this area so that you could come in from New York or Philadelphia or wherever, access the shopping and employment in this entire area and never

have to use a car.

Another one is the Atlantic City master plan. Atlantic City is scheduled to grow by about forty thousand new employees over the next fifteen to twenty years. They can't all live on the island. We don't want them all to drive from Ohio which is pretty much the case for some of the workers. There are literally people coming from Pennsylvania to work in Atlantic City.

So we are working with the communities around Egg Harbor, Pleasantville and some of other close in cities to recreate growth nodes in conjunction with this growth and we are also working across the range of transit options including some you probably never heard of like personal rapid transit which is a sort of Disneyland like pod that works on a semi-fixed guide with a system. Imagine a taxi on a guide way. A full range of transit options that are applied here and then across the state when they can be demonstrated to be successful here. Mobility and community form is our way of working with municipalities to link transportation and land use in their master

plan.

Right now under the law the land use element of master plan is mandatory, but the circulation element is not. Many communities do not have adequate circulation element. We are working very heavily around the state to make those two things integrate and talk to each other so you can actually create places that support less transit. We are working heavily with municipalities around the state to link their transportation and land use systems together.

A new product that has a lot of appeal speaks very directly to communities. As an implementation tool for that we are actually doing street design guidelines for a full range of different street types and using this to educate local engineers and planners about one size does not fit all. You can have different ranges of streets and the way that they work together with the particular land uses around them is very important. This book is just about to be published. This was a bi-state product, both Pennsylvania and New Jersey DOT worked on this together. It's been very, very successful.

A little bit more close to home of interest to you I think will be our port project and our overall strategy for capital investment.

As I said, we are not really in the highway building business anymore. In fact, a few years ago we made a commitment that less than four percent of our overall capital program would be for new capacity and roadways. In fact, it is like two percent or one and a half percent these past couple years. It is expected to remain very low.

The answer is we have enough highways, we just need to make them work better. In the area of north Jersey around the ports we are looking very heavily though at truck and rail infrastructure. This is a map of the portway projects. You can see there is a whole bunch of little ovals and yellow swatches and so on. Those are individual highway development projects or rail development projects that seem to move goods more efficiency into and out of the port. Our main goal of course is to get as much as we can into the rail system, but that's a very, very tough thing to do.

Finally, I will leave you with a

really cool kind of new technology you may have seen. This is idle air. It basically turns your truck cap into a hotel room. All of this stuff that is listed here including On Demand movies, land line, Internet service, long distance phone service and air conditioning and so on are available through one plug in at these places. There are only two right now in New Jersey as I understand it, but we are working on building more of these. Idle Air is a private installer, however, we have funded and helped technically with the installations. I believe that's all, thank you very much. I'd be happy to take questions.

MR. EGENTON: Thank you, Brent, and just to keep on track, we will take one or two questions from the Council. Any Council members have questions?

Joyce.

MS. PAUL: Earlier we heard Mr. Matheussen talk about the plan of the PATCO extension. They talked about various potential alignments. How closely is DOT working with them to help them determine which is the best way and does DOT have their obvious preferred

allotment?

MR. BARNES: Even though my phone is turned off, the commissioner is going to call me again on that one.

MS. PAUL: You can answer in code.

MR. BARNES: DOT is working closely with PATCO. The study is not at a place where we have any official recommendations of any sort at this point. Obviously, there are alignments that are better than others in terms of place making. Let me just say that it is very difficult to make places that are accessible and livable in the immediate highways and leave it at that.

MR. EGENTON: That is a good answer. Thank you, Brent, for your brevity. Tell the Commissioner we appreciate DOT being here today. Thank you very much.

All right, our next speaker before we break for lunch, we are pleased to have Reema Loutan here and she's senior staff on the mobile source team at USEPA region two office in New York and she is the region two contact for port and fuel issues. Reema has been involved in development of mitigation project for dredging

emissions such as the retrofit of the Staten Island Ferry and just of particular note this Council addressed diesel emissions a few years ago and interestingly Reema has also commissioned the study performed by EPA's office of research and development which demonstrated a continuous idling of a school bus for more than three minutes emitted more soot than at restart. Thank you for joining us today.

MS. LOUTAN: Good morning. I'd like to thank you for the opportunity to be here today. I will touch a little bit on ports very little and airports, sorry, and most of my presentation will be on ports. I will touch on some EPA regulations and our partnerships and the EPA ports vision mission and strategy for moving ahead with ports.

So basically, the mobile sources of airports that we look at are the aircraft, some infrastructure such as shuttle buses, ground support equipment and maintenance and construction vehicles. Within the region we mainly work with voluntary initiatives around the airports. We have worked with the Federal Aviation Administration on their voluntary

airport low emission program.

I know recently the Port Authority of New York and New Jersey received some funding to purchase hybrid shuttle buses to operate at the airports in the area. We were very happy to see that project get funded.

I am going to move straight into the ports just to keep things moving along. Just a general map of the ports in our area. This map does not show Puerto Rico or the Virgin Islands which region two is also responsible for.

Some key issues that we are looking at right now, what are waterborne freight shipping coming in from overseas is expected to double by 2020. The ports spend about 2.8 billion in capital improvements in 2001 and 2002 and cruise ships are becoming an increasing factor in ports in our area. Importantly, vessel sizes are increasing. I know there is a vessel planned that is going to hold up to fifteen thousand containers. That's definitely coming to New York and it is good in a way because it reduces two ships coming in, but also you still have that one ship. It is

going to have emissions that go along with it and also the trucks are going to need to get those containers where they need to go. Because of the vessel size increasing, there is dredging in the harbor, there is dredging in the New York harbor, there is dredging in the South Jersey/Phili area as well.

There is community pressures that are being faced by the ports and a lot of the ports are not attainment areas. New York and New Jersey and the Long Island area is definitely a non-attainment for NOx, PM, lower maintenance area for carbon monoxide and security issues are something that come into play that we have to keep in mind.

I just want to quickly go through some inventory. This is an overview for nitrogen oxide in 2001. Highway trucks were dominating our mobile source inventory at sixty-two percent. By 2030 it is going to be the category three. Marine vessels and that is basically the ocean going vessels. For particulate matter highway vehicles were dominating the nonroad vehicles were also dominating, but again in 2030 it is going to be

the ocean going vessels and this phenomenon is seen incredibly with the sulphur oxides and that was mentioned in Peter's presentation previously. 2030 looks at ninety-five percent sulphur oxide contribution from ocean going vessels.

What are some regulatory programs that we are working on. EPA realizes that mobile source programs are a key tool for improving air quality at the ports and previously we have regulated highway trucks and nonroad engines. There are sulphur diesel required for on road engines and nonroad which does include locomotives and category one and two vessels. Ultra low sulphur we definitely seen increased action from the ports to help clean up their emissions and we do realize that there is a lot more that can be done and we are here to help the ports do that. EPA recently signed their no locomotive and marine program and I will talk a little bit more about that.

This slide is just a snapshot of where our emissions are. The tiny red dot, the lower left-hand corner, that trucks will be in 2020 and nonroad engines in 2014 and we would

like to get there with our marine and locomotive engines. The orange circle that is just representation of the international maritime organization NOx limits. As I mentioned EPA recently signed our locomotive and marine rule and what I'd like to note about that rule, there are basically three parts to it.

There is an engine remanufacture standard for existing locomotives and marine and we thought that was very key because while our standards mainly covered new engines, there are still that legacy fleet out there that needs to be taken care of and with these remanufacturing standards we believe we are going to take a big hit and reduce their emissions.

So then we also have tier three standards for newly built locomotive and marine engines as well as tier four standards. What I'd like you to know about the tier four standards, they will require an after treatment technology to meet the EPA standard and that after treatment technology is similar to a selective catalytic reduction technology as well as a diesel particulate filter and to make the pair legal right now the 2007 trucks are using a

diesel particulate filter in order to meet EPA standards. Ocean going vessels as I showed from the inventory, ocean going vessels are definitely the target coming up.

International Maritime Organization as Peter mentioned, they proposed a couple of standards to reduce the sulphur fuel for the ships. In sulphur emission control areas that could be as low a PM by January of 2015 and Marpol, that is the legislation the U.S. has yet to the ratify, but the EPA is very much behind the ratification of that program. We believe it is necessary to move forward with the regulation of ocean going vessels and we are also working on our own ocean going vessel industry standards.

Some additional actions that are going on in a lot of these are being done at the ports right now. For example, they are using nonroad engine, nonroad equipment and greatly helping to reduce emissions from that category of port vessels. Speed reduction known as vessel speed reduction with the ocean going vessels slow down as they approach the dock and that greatly reduces emissions. There's a

statistic provided by Star Crest Consulting out in Seattle. If a ship goes from sixteen knots down to about twelve knots, they can reduce nitrogen oxide by a hundred and thirty-five tons in a thousand round trips and we are working on a program with Port Authority to put that in place. We are working to get some buy in from the ocean going vessel operators. Cold ironing is an alternative marine power and another program that we are working on with the Port Authority of New York and New Jersey. We are looking to get something out in Brooklyn for the cruise terminal there and I know there is a Port Authority representative speaking later and hopefully he will cover some of that.

The hydraulic hybrid we are also working on that with Port Authority and APM terminals and what that is it's taking out -- it's hydraulic hybrid for yard tractor so it will rely on a lot less diesel fuel and we are looking, hoping to see about a fifty to sixty percent reduction in fuel consumption.

I just want to keep going really quickly here. So just clean ports USA, that is EPA's program. Through that program we are

hoping to develop a lot of partnerships with ports. We believe working together with the port is the best way to get these projects underway and to be able to address the emissions that need to be addressed. One thing we do focus on is that the technology has to be cost effective in order to be effective because the ports aren't going to buy into that unless it is something that we can show you are getting the biggest bang for your buck. It is something that we believe in as well. We do have a website and on that website we are looking to showcase some of the good projects across the nation. We are also recognizing the port authorities for their giant step towards reducing their operating pollution and also the clean ports USA program is looking to verify technology so we can move forward with reducing pollution.

In September 2007, region two hosted the EPA regional administrators as well as the assistant administrators to talk about the agencies port strategy, the approach to ports and to save time, it is in the folders there, but basically we want our ports to be

environmentally and socially responsible, but also economically viable, safe and secure.

Basically, our port strategy consist of six themes. We are covering clean air and affordable clean water, healthy communities with local environment, port communications enforcement and also along with enforcement is compliance assistance. I need to add that in there because that's very important.

So some funding that's become available and I think that is really key, a step in the right direction by Congress that is going to help EPA help the ports. We received about 49.2 million for 2008 and we are looking to receive a similar amount for 2009. Within the region itself, we have about 5.4 million dollars request for proposals on the street right now and we have identified ports as a priority for the region. Those proposals are due in June so if you have any ideas, certainly put them together and send them on to us.

Basically, I just want to say that cost effective strategies are available today. Cleaner fuels, the ports are using ultra low sulphur diesel way ahead of schedule and that is

definitely helping to control emissions at the ports. We definitely have a broad stakeholder support. EPA is fully behind this and our port strategy is the way that we are as an agency organizing our approach to the ports. Here's just some contact information and if you have any questions, I will be happy to answer.

MR. EGENTON: Thank you Reema, I appreciate the EPA's input. Just to be respectful of the time, I am going to use my authority here as the hearing chair to move things along. Between me and lunch and you never get into an angry mob like that. I am glad you supplied us with your e-mail address. It is possibly easier for us to communicate to you through the Council and DEP to get some more guidance as we move forward and put our recommendations together.

Thank you very much, Reema.

MS. LOUTAN: One more thing I want to recommend. We have a faster freight cleaner air conference coming up in July. I supplied you guys with some save the date cards and that is going to be a major event. It's been held out in California for the past three years.

They have had over eight hundred attendees and it is a great way to get the industry, the port authorities, the regulatory partners together to just talk it all out.

MR. EGENTON: That is great. We will take you up on that offer and hopefully see you in July.

Just a quick announcement for the Council members and those in the audience. Lunch for the Council members and the invited speakers will be up on the seventh floor large conference room, please join us.

The guests and public here that are in attendance, the DEP has a cafeteria down at the end of the hall across the lobby so please partake in the DEP cafeteria and then we will resume back here promptly at 12:30. We have some more interesting speakers that we need to hear from. Thank you very much.

(Whereupon, a short recess was taken.)

MR. EGENTON: Next up at bat is Jay Jones and Jay is here with the South Jersey Port Corporation. John Matheussen mentioned you'd be joining us this afternoon, Jay, and you

are currently the executive director of administrative services and Jay also serves the Port Corporation as the public information offices ethics liaison officer and the security officer and, Jay, thanks again for attending today's hearing.

MR. JONES: I didn't prepare a Power Point presentation. I did present some remarks written in. They are very poetic, I won't read them, but I will have to reference them to keep me organized.

Thank you for inviting the South Jersey Port Corporation back. A background, quasi-state agency. We have the authority to develop strategies and operate the marine terminals in the seven southern counties of New Jersey. We currently have two deep water terminals in Camden. We have a small barge facility in the Salem River in Salem City and we are engaged right now in preliminary development of a new terminal in Paulsboro, New Jersey.

The current facilities we are generating through the port four million tons of cargo. We are not a container facility, we are a great bulk and bulk facility. We are moving

four hundred ships a year through those facilities. The cargos we handle are we are the largest plywood port in the country. So likely some of the wood you get from Home Depot and Lowe's is from South Jersey port from Camden. We are the second largest coco bean port on the east route. We are one of the largest scrap metal export facilities and all that means that generates a lot of economic development, economic activity in South Jersey.

Certainly green initiatives are extremely a priority for us and we started this a couple years ago. We brought a tenant in, Saint Lawrence, who brings slag from Italy and gets a cement product called Gramsend and the ships would come in at Becker Street and be unloaded by diesel powered crane and then eighty thousand trucks a year would have to move that cargo down to their facility at our other terminal at Broadway.

What we did is we did a clean air forty million dollar project. We built a new pier. We bought a seven million dollar electronic crane and we eliminated those trucks from running and now the ship pulls up next to

their facility, a fully electric crane unloads onto their conveyer system which is hooded to keep any particulates down and goes right to the facility. So that was really a big initiative when we started looking at this and Reema from the EPA mentioned about grants and working with ports. We are, of course, working with the EPA and New Jersey DEP. We have a five hundred fifty thousand dollar grant to evaluate our hundred and sixty diesel power forklifts and equipment in the port and put out air mission control units on that equipment.

In the meantime, what we have been doing with that equipment, we employed a fleet maintenance software program so we can manage and monitor preventive maintenance and repairs of that equipment so they are running efficient. They are not burning up excessive fuel and keeping emissions down.

At our Broadway terminal, we have a tenant Delmonte. It is there largest port in the world, five hundred thousand tons of fresh fruit comes through that facility so bananas, pineapples go right to the supermarkets. They use electricity for their refrigerator

warehouse, but they also have reefer trucks and we have reefer plugs. The electric that we provide them through a third party supplier, ten percent of that is green. We are empowering the reefer plugs. So the twenty thousand reefer trucks are moving through that facility and so we think an environmental sound green initiative is to look at how that electricity is brought to that tenant the other tenants at our facilities.

The Broadway terminal was the former New York Shipbuilding Corporation and when we took that over in 1968, we also enjoyed the right to resell electric power. So we are investigating not only taking the two million square feet of warehouse that we have and put solar power panels on that, but we are looking at other ways to create an energy park to look at a cogen facility because the trash facility adjacent to it, to provide electrical power, electric to users to have that clean process.

Quickly, back to that Saint Lawrence cement process, we have electric crane, electric conveyer right adjacent to it. Reema mentioned about cold ironing, it is alternative maritime power we are looking at that. It is a

challenge because most of the ships have to be expensively retrofitted and expensive equipment on the terminal. So what you have to look at are ships that are going to return and be frequent and work with the steamship lines to get that moving along. We are looking to do that with Saint Lawrence activity at the Broadway terminal.

To keep on point here, looking at the Paulsboro Marine Terminal development, as we look to develop new terminals along the Delaware River we have identified Brownfield sites and Paulsboro marine terminal, the BP facility and Exxon was right for port development. We are also looking at a facility in East Greenwich and one in Deep Water and as we develop and plan those new terminals. We are looking at green initiatives from the bottom up from stormwater to electrical power. The A & P is even looking at what we are doing at Beck Street and Broadway with those diesel equipment and the forklifts we are looking at may be propane powered forklifts. The problem is heavy steel coils. You require very large piece of equipment so we are looking at it. I believe the port of Los Angeles has

some propane powered twenty ton forklifts so we are looking to put those in place not only at Becker Street and Broadway, but also the new port in Paulsboro.

So basically we are looking at technologies to green the port, but there's a cost issue with that as some of the earlier speakers mentioned. We are just trying to implement cost effective solutions that enable the port to bring emission while maintaining long and near term impacts surrounding the community. The trend or the sustainable port model for ports is environment, community and finance and certainly our partnership with the community is very important.

I believe Carrie Sargeant with Camden will be here later today. We partnered with them on one of our properties. We allowed them to come in and build a nine hundred foot long what I call an environmental berm which they are planting trees. It will help filter out particulates carried in the air and, of course, the river to Philadelphia and the rest of the way and also help reduce the urban heat zone issue from providing green space.

So I would like to turn around to any questions and certainly thank the Clean Air Council for inviting us here.

MR. EGENTON: Thank you, Jay, appreciate you making the trip up from the south. Council members, chairman.

DR. BLANDO: I had asked this question earlier and I am still curious about you mentioned a large amount of plywood and fresh fruits that are brought in in bulk and I know that is required by USDA rules for fumigating. I am wondering if you could comment, I am curious, I never seem to get numbers on how much methyl bromide is used, how it is used, how it is controlled. I am very curious about that particular component to the operation.

MR. JONES: The plywood isn't treated at the terminal site at all and the fruit is treated before it gets to Delmonte's facility. The coco beans whoever are fumigated in the warehouses on our piers and I don't have the numbers, but I certainly can get that for you, how much chemicals are used for coco beans and I can reach out to Delmonte and get those

numbers for you.

DR. BLANDO: If you could provide that, that would be of interest to me. Do you also by any chance know the fumigating, does it go to a control device or just exhaust into the atmosphere?

MR. JONES: With coco beans they are on pallets and bags and they are stacked four to eight high and they do cover the beans. They seal the building up and the company comes in and releases the gas for a certain amount of time. So it is actually in the warehouse facility itself, but they try to keep it under tarps for the coco beans.

MR. EGENTON: Dr. Bielory.

MR. BIELORY: Do you have a quantities overview? I was looking for quantities of the actual -- when you say several hundred thousand square feet impact of the use of the number of trucks, you actually say you are going to reduce, but do you have the number of ships, NOx measurements similar to --

MR. JONES: We are going into do an entry audit and we are working to do those kinds of analysis. We don't have those numbers

of what that impact is.

MR. BIELORY: How has it been assessed in the past?

MR. JONES: We haven't had at South Jersey port been tracking emissions from the operation.

MR. BIELORY: You have not?

MR. JONES: No, we have not.

MR. EGENTON: Pam.

MS. MOUNT: I am curious with all their cargo coming in, does anything go out?

MR. JONES: Majority of our cargo is inport. Export is scrap metals about a million tons of scrap metal. Probably about two hundred thousand, three hundred thousand tons of Saint Lawrence cement finish product will go out waterborne. The rest of that goes out by truck so the majority of the four million tons is import.

MR. MAXWELL: I just have a quick question. Where does the plywood come from, where does the coco come from, where does the scrap metal go to?

MR. JONES: Well, wood products come from Brazil, Malaysia, Indonesia, even

China. Coco beans come from the Ivory Coast, Indonesia. Scrap metal can go to -- it's changed over the last fifteen, twenty years. It is now going to places like Turkey, China are some of the countries those cargos come and go to.

MR. EGENTON: Thank you, Jay, and if you could keep in mind to send the Council through Sonia, your e-mail address so we can follow up on some of the additional questions we have.

MR. JONES: I sure will.

MR. EGENTON: Thank you very much.

Our next speaker we are very honored to have Susan Bass Levin here and she was appointed first deputy executive director of the Port Authority of New York and New Jersey by Governor Corzine in July of 2007. She's the senior New Jersey official on the agency's executive management team that oversees over seven thousand public employees who operate and patrol many of the busiest and most important transportation links in the region including airports, bridges, tunnels, seaports, rail systems and the World Trade Center site. Prior

to her tenure at the Port Authority, Ms. Levin served as Commissioner of the New Jersey Department of Community Affairs. She's recognized for her creative approaches to economic and community development. I know as a neighbor in Vorhees down in South Jersey she's also the former Mayor of Cherry Hill and I still call you Commissioner so that is how I am going to address you. We surely appreciate you joining us here today on your busy schedule and certainly look forward to your remarks regarding the efforts of the Port Authority of New York and New Jersey.

MS. LEVIN: Thank you, Mr. Chairman and to all the members of the Clean Air Council. I appreciate your dedicated service here today. With me today from the Port Authority are Bill Nertin and Ed Caneese, both of whom handle environmental issues, Bill in our port commerce group and Ed in our aviation group. Also with me are Tina Lado who is the director of government and community relations and Marie Tershon also in that group.

I am here today to speak to you on behalf of the Port Authority of New York and New

Jersey. For those who may not know, the Port Authority is a bi-state agency that owns, operates and manages a vast transportation and trade network. It includes aviation, maritime and rail facilities, vehicular, Hudson River crossings and real estate in New Jersey and New York. With five airports, that is Newark Liberty International, Teterboro in New Jersey, JFK, Laguardia and Stewart in New York. Four bridges, the George Washington, the Outerbridge, the Bayonne and the Gothels. Two tunnels, the Lincoln and Holland. Two bus terminals, Cano cargo and marine terminals in Port Elizabeth for the Jersey line. The Path rails system and World Trade Center site in lower Manhattan. The Port Authority is certainly uniquely positioned to improve the quality of life for people who live and work in the region.

The Port Authority begins a new era of intense investment in the regions trade and transportation infrastructure. We have made a parallel commitment to ensure that environment sustainability is paramount to the agency. Operating our facilities in a way that conserves the regions resources for future generations.

The Port Authority's ten-year capital plan adopted just a few months ago is a guiding framework for our efforts to increase energy efficiency, reduce greenhouse gases, improve our environment and expand the capacity of mass transit. Certainly a tall order. We know it is not enough to build, we must do so in a way that respects the environment and our communities.

In 2007 our chairman, Tony Kosh, announced that the Port Authority would reduce greenhouse gas emissions related to Port Authority facilities by eighty percent from 2006 levels by the year 2050. Just last week our Board of Commissioners adopted an environmental sustainability policy with the following goals.

First, the Port Authority committed to reduce greenhouse gas emissions at its facilities by five percent annually. Through improvements resulting from capital investments and changes in operations. Second, we committed to establishing a goal of net zero greenhouse gas emissions from our own operations by 2010. Third, we will encourage our customers, our tenants and our partners because we are, in fact, both a landlord port and a

landlord airport. So we will encourage our customers, tenants and partners to conduct their businesses in a more sustainable way and, fourth, we will develop strategies that reduce the risk posed by climate change.

In furtherance of our sustainability agenda, we have expanded our program of environmentally responsible clean fleet vehicles at all of our facilities. We are committed to the installation of energy efficient LED lighting on the George Washington Bridge and on the tunnels. We are installing advanced energy metering systems at all of our facilities to allow for efficient energy management. We provided funding for open space acquisition for certain pieces of land in the Hudson Raritan estuary resource program. We are partners with New Jersey Transit in the building of the Art Tunnel by three billion dollar commitment from the Port Authority to build a new commuter rail tunnel under the Hudson River doubling passenger capacity and reducing trans-Hudson auto trips by more than thirty-five thousand cars. We are investing a record 3.3 billion in the Path rail system that will expand

capacity by thirty percent. We are working closely with the DEP on a number of initiatives and really that's just the beginning.

So let me turn now specifically to our seaports and airports which this committee is focusing on today. First are seaports. The seaports of New York and New Jersey which are actually the third largest in the country are an economic engine. Handling a record one hundred sixty-six billion dollars of cargo in 2007 creating opportunity with more than two hundred forty thousand jobs, twelve billion in wages, six billion in taxes. With increasing cargo volumes projected needed in order to satisfy growing consumer demands, the challenge we face is how do we accommodate cargo growth that we want with all the economic benefits that it brings, but doing so in a way that protects our environment and quality of life for people who live and work in communities near the port.

Our key focus in facing that challenge is on improving air quality and finding ways to reduce port air emissions. To offset increase air emissions that result from the dredging equipment used in the harbor

deepening project, the agency developed the ferry retrofit and marine vessel engine replacement program. That enables ferry and tug operators to replace or retrofit their older diesel engines with cleaner engines. We have contributed fourteen million dollars to marine diesel retrofits. It is estimated as a result of this program, nitrogen oxide emissions have been reduced by four hundred tons per year.

We have gone on record recently at the request of the DEP partnership with the DEP supporting regulation that will mandate a reduction in diesel emission from marine vessels. We know that to make a long-term impact, we have to understand the sources of air emission and measure the reductions. Therefore, we have conducted very detailed and specific air emissions inventories of the primary sources of air emissions from the Port Authority's port facilities. We have taken the inventory so we can measure and, therefore, work to reduce.

A detailed cargo handling equipment emissions inventory that compared our 2002 fleet to our 2004 fleet which had modernized vehicles showed a thirty percent

reduction in air emissions. We will continue to work to reduce these air emissions and continue to work to modernize our fleet and cargo handling equipment.

We recently completed a greenhouse gas inventory for all of our Port Authority facilities and we are going to make sure that as we look at how vehicles get back and forth, how do facilities get built, that what we do looks at how to reduce greenhouse gas. We know too that travel by trucks to Port Authority facilities contributes a large amount of greenhouse gas emissions. We have developed several initiatives to address this problem.

One, Express Rail. Two, Smartway Plus and I will talk about this momentarily. Three, reducing the length of off terminal trips and, four, reducing on terminal congestion. I am going to discuss them briefly. We can certainly provide more information to you if you desire and we have some experts here, Bill, on some of these initiatives.

Express Rail is a comprehensive rail program that creates a dedicated on dock rail facility at each of our container

terminals. With Express Rail the container comes off the ship, it is put right on a rail car that connects to the rail lines and so no truck transport is necessary. This on dock rail capacity has significant environmental benefit as it saves 1.7 trips per container. It is helped us realize our goal of accommodating increase cargo volume with less congestion and fewer emissions. We started Express Rail in 1991. We estimate that when it is finally completed in 2011, it will take approximately 2.5 million trucks off the road, but just this past quarter we have seen a twenty-one percent increase in cargo carried by Express Rail as compared to the first quarter of 2007. We estimate that's taken a hundred and forty-two trucks off the road just in this quarter. So as cargo containers continue to expand, Express Rail continues to expand giving us an environmental benefit along the way.

Second program I mentioned is Smartway Plus which is sponsored by the United States Environmental Protection Agency. We are working in partnership with the USEPA. It is a program to offer low cost loans to finance

acquisition of new trucks so that they can be equipped with special particulate matter that will, therefore, cost the trucks much less over the long haul. The program includes installation of certain upgrade kits to achieve a twenty to ninety percent particulate matter reduction. We are working with lenders and other funding sources so we can promote this program and make the trucks serving the port more environmentally friendly.

Third, port fields. We have partnered in the New Jersey economic development agency in our port fields initiatives to establish nearby port warehouse and distribution centers on former industrial sites. This will help us clean up the former industrial sites. It will also help you provide warehouse facilities and distribution centers near the ports. This redevelopment reduces vehicle miles traveled by trucks that serve our marine facilities and, therefore, reduces energy consumption once again. We are studying the feasibility of a virtual container yard to reduce dead head truck trips to pick up empty containers.

The fourth area is to reduce on terminal congestion. We are a landlord port as I mentioned and in addition to improvements in our agency, we are working with our terminal and warehouse operators who have taken voluntary air reduction initiatives such as installing electric cranes or reorienting the terminal footprints to make them more efficient. In other words, dealing with traffic on the ports. Installing electronic gates and spending gate hours to reduce congestion. Installing solar panels at a warehouse at the Elizabeth Port Authority marine terminal. Using ultra low sulphur diesel fuel in our cargo handling equipment, establishing a green practices task force with our tenants. Implementing a no idling policy at our terminals and participating in a pilot program to evaluate the operational performance of hybrid yard tractors at both the APM container terminal in Elizabeth and New York container terminal in Staten Island.

It is important to note that we at Port Authority can't solve this problem alone. Port Authority working with DOT, DEP and various New York City and state agencies are hosting the

first ever faster freight/cleaner air conference on the East Coast in July of 2008. This conference will focus on identifying solutions and resources to improve operation in the freight movement industry in order to reduce air emissions. We are also working with the port Rotterdam to sustainable port partnership to organize the C40 world ports climate conference scheduled for July of '08 bringing together leaders from the world's most important ports and port cities to sign a world ports climate declaration and by so doing to subscribe to a tangible program to reduce greenhouse gas emissions.

In sum, in our seaports we know that our ports are continuing to grow and that is great news for our economy, however, we realize that to be successful we must be a sustainable port and that means finding ways to accommodate port growth that also protects the environment.

So let me shift from the water to the air and talk to you for a few moments about airports. Addressing air quality issues at airports is indeed a task. Our airports are

brimming with customers, with traffic and cargo. Again, great economic news for the region, but presenting practical and environmental challenges.

Our airports served over a hundred and nine million passenger in 2007. That is an increase of five percent over 2006 levels. Like our seaports, we are a landlord airport owner. We own the airports, but we only operate a few of the terminals. As such we are undertaking efforts at our facilities and in conjunction with our tenants to improve air quality in the area surrounding our airports. I am sure all of you when you think airports, you think delays and so do we. If we decrease flight delays, we will decrease emissions since flight delays increase aircraft idling time by increasing runway congestion.

The Port Authority authorized a flight delay task force that brought together all members of the industry and consumer groups and recommended seventy-seven initiatives to the Federal Aviation Administration to increase capacity and reduce flight delays. We have a long way to go to to convince the FAA to take

the necessary action, but we are hopeful that with assistance of Congressional delegation, we will make the right steps.

The Port Authority is doing its part in renovating runway access roads and increasing the access between those roads and minimize airport congestion as they approach the runways. We also recognize that one way to reduce airport congestion is to acquire another airport and we did that when we purchased Stewart Airport in Newburgh, New York.

We are working with airlines in order to get more flights to go into Stewart to take some of the congestion out of our other airports. We pledged to make Stewart Airport a cutting edge environmentally friendly airport that we plan to develop into the country's first carbon negative airport. The gates at Stewart will be upgraded with four hundred megahertz power and reconditioned air so aircraft will simply plug in reducing the use of jet fuel as aircraft are serviced at the gates. We are also buying hydrogen fuel tugs for the aircraft and electronic aircraft ground service equipment, two other great technologies and opportunities

to use low emission technology. We partnered with the Polytech Institute to develop proposals and new initiatives to make Stewart a test bed for renewable technology. This is an important example of the new era of growth at the Port Authority, expansion married to sustainability.

In order to reduce emissions, we know we have to know the status quo just as we need to know about our seaports where our emissions are coming from and at what levels. Therefore, we have embarked on an effort to measure air emissions from the aircraft from ground service equipment and cars using a computer modeling process.

Our commitment to environmental sustainability means reducing emissions from all of those sources and finding ways to continue to expand in a greener more sustainable way. We are members of the EPA, FAA emission reduction stakeholder for airports which is made up of representatives from engine makers, aircraft manufacturers, the government all working together to promote lower emissions. To make our airports more sustainable, we now have greener buses which we have added to the shuttle

fleet in our airports, Twenty-one hybrid diesel electric buses and thirty clean technology diesel buses. For the first time ever at an airport we are using geothermal energy to power one of our airport buildings. That project is currently underway.

We are replacing inefficient baggage handling equipment with electric energy efficient equipment. We have a hundred and fifty compressed natural gas vehicles at our ports using geothermal energy and certainly Air Train at Newark and JFK is significantly reducing vehicle miles traveled at those two airports. If you haven't used Air Train, I would strongly encourage you to.

Our tenants at the airports have made strides towards improving air quality too. At Newark's Terminal C, Continental Airlines has modified jet bridges to supply reconditioned air and power to aircraft parked at the gates. These bridge modification provides heating and cooling of the airport and allow the aircraft electrical systems to be operational. These measures reduce emissions and fuel consumption.

Continental also added winglets to

many of its planes lowering aircraft drag and resulting in up to a five percent reduction in emission and noise. Delta shuttle recently converted its entire fleet of ground service equipment at Delta to electric equipment. Continental is looking to do the same thing at Newark. At Teterboro, Jet Aviation is installing solar panels on the roofs and First Aviation has installed a fuel farm in its facility.

So once again, we are always looking for ways to introduce new technologies. Yes, we know we still have a long way to go and we are committed to continuing air quality. At Teterboro Airport, the Port Authority work closely with the Meadowlands Commission and New Jersey DEP to find an air quality study that was completed earlier this year. We also announced that we ask a Teterboro noise abatement advisory committee known as TANAC which is an independent panel of local and elected officials to create an air quality committee to examine this issue in depth and deliver recommendations. Along with our tenants, we have invested over a hundred million dollars in capital projects that

have an environmental benefit at Teterboro Airport including developing a more efficient taxiway and runway system. The taxiways and runways now intersect at less acute angles. Exit and enter runways with much greater efficiency resulting, again, in less ground run up, fewer emissions, less noise. Aircraft queues are shorter further reducing emissions and noise and idle for less time in part because of our departure clarence e-mail system. This program actually notifies pilots they have been cleared for takeoff by e-mail so they don't run their engines unnecessarily again decreasing emission and noise. At Teterboro we purchased hybrid vehicles and we have a program to install solar panels measuring a hundred and fifty thousand square feet.

So in conclusion, let me just say our ports and seaports are busy and crowded and our regional economy depends on that growth. However, even as we move ahead to implement our new building agenda, we recognize the need for new approaches to the way we conduct business. Environmental sustainability is absolutely vital to the future of our region. The environmental

challenges at airports and seaports is to continue to meet current demand and grow in a way that improves and reduces the environmental impact. We look forward to continuing to adopt new innovative strategies in our push for long-term sustainability and we look forward to working with New Jersey state government and agencies like DEP as we move forward together.

Thank you very much to this Council for all of your good work. We look forward to working with all of you.

Thank you.

MR. EGENTON: Thank you, Commissioner. Do you have the time to take a few questions?

MS. LEVIN: I will try, but luckily I have Bill and Ed here.

MR. EGENTON: First, I want to say that was an excellent presentation. There was a component from this morning that some of my colleagues were mentioning about what is going on on the ground and everything and you really filled in the gap there very nicely so I appreciate that very extensive update of what your agency is doing.

MR. ZONIS: Thank you for the presentation. I wanted to ask about Express Rail. One end is on the dock, what is on the other end, a warehouse or is it the main U.S. rail.

MS. LEVIN: The main U.S. rail system. It basically takes it from the dock and connects it to the rail system so that the cargo container stays on the rail the whole time.

MR. ZONIS: You can ship a cargo box from the port directly to a customer in Albany for example?

MS. LEVIN: That's correct which is one of benefits. Obviously, it is an environmental benefit. It also makes our port much more competitive because when shippers are looking at what the cost involved, they can look to the ground transportation or warehousing, but actually literally taking it anyplace on the East Coast or even out to the midwest.

MR. ZONIS: Thank you.

MR. EGENTON: Dr. Zhang.

MR. ZHANG: My personal experience in the airports in Bangkok --

MS. LEVIN: That's never a good

start.

MR. ZHANG: In Bangkok the new airport you have a major airlines, they are very restrictive. It is 5:30 in the morning sometimes they push out of the gate 5:25. One of reasons for the lanes is so aggressive that part that is huge stay in the airport at the gate for additional ten minutes, fifteen minutes. That is not the case in Newark. Seven out of ten times for a very long time. Can you comment on why Bangkok can do that. It's economic incentive or a way to push.

MS. LEVIN: Let me say this. I am sure the airlines would gladly takeoff on time if they could. So I will start with that. It doesn't help the airlines economics to be late. A couple things are different. The key is you said the new airport in Bangkok. They are building airports differently. If you look at our airports facility, they are often close together. They are shorter and so there are safety issues in terms of how frequently you can have planes takeoff. We are constrained in terms of the growth that is how many additional planes we have in our airports. We have a lot

of regional jets, smaller aircraft. So there is a number of aircraft, the number of planes taking off may be larger, but their capacity may be less.

If you look at international flights, obviously they tend to be bigger planes, they carry more people. We also have here weather issues as anybody knows who travels if the day starts badly, it just gets worse and worse and worse throughout the day. So the best times to travel are early in the morning so that you can get on a plane and hopefully get out and our issues, although we clearly have the worst on time records right now, it is very much a national problem because if there is a delay anywhere else, it impacts us.

So I would have to say that I don't think fining the airlines is the answer for us. They would gladly takeoff on time if they could. It is not because their pilots are late or their flight attendants are late or they haven't fueled, it's just the logistics of the airport. Having said that, we clearly recognize it is a problem.

One of the things that the

government is working on is a whole new system called Nextgen which is the next generation of computer technology to help with managing flights in the sky. It is billions and billions of dollars of investment. Do you know, Ed, how much by any chance? I don't, but it is billions and billions and a long-term project. It will help make it better. In the short-term there are things we can and should do and things that we are doing.

MR. EGENTON: Just one last question from Dr. Bielory.

MR. BIELORY: Similar to the West Coast, what are the numbers that actually at present time transfer by rail. It is twenty-five percent on the West Coast. What is it here and what I will say the intent and growth of that number, is it also going to go to thirty-five percent over what period of time?

MS. LEVIN: It is about fifteen percent now that goes by rail. As we continue to expand our capacity of Express Rail, we expect that it will continue to increase. We would hope to get up to about thirty percent directed by rail.

MR. BIELORY: Right off the boat right to the rail and the maximum is approximately thirty percent that you think you could maximum out at?

MS. LEVIN: When it is completely done.

UNIDENTIFIED SPEAKER: There also is that demand to support that and what we continue to believe that we are going to have that continued demand and we will be able to increase that mode share, if you will, of the rail to upwards of twenty-five to thirty percent.

MS. LEVIN: Remember, much of goods go to within this region so they might go by truck because they are not going anyplace by rail.

MR. BIELORY: What percentage actually go out of the region.

MR. BILL: About thirty percent.

MR. EGENTON: I will just say --

MS. LEVIN: Let me just add one of thing. We are doing Express Rail is adding lines, but we are also, for example, adding a second track so we take in and take out which

will help ease congestion and we are certainly committed to that investment and will continue to build out rail as we built out new container facilities.

MR. BIELORY: Thank you very much.

MR. EGENTON: I was going to add as we can fuse money into the transportation trust funds there are projects I know that you're supportive of like Portway that will help get more of the trucks off the road and build a rail system that connects a lot of freight warehouses. So obviously there is a pressing need to make sure we have the capital dollars there.

I appreciate the time and your staff took to be with us today. Thank you very much, Commissioner, I appreciate it.

MS. LEVIN: Thank you very much.

MR. EGENTON: All right, our next speaker is Dr. Monica Mazurek and you are a assistant professor in the Department of Civil and Environmental Engineering and Monica is a member of the Center for Advanced Infrastructure and Transportation. She directs the air quality and transportation program with NCAIT. She's

one of the core faculty who initiated the Rutgers Energy Institute serving as the first associate director and now as a member of the internal advisory board. Her research interest include air quality engineering, renewable and alternative fuels, chemical composition sources, distributions. We should also note she's a member of the United Nations inter-governmental panel on climate change which along with Al Gore share in two equal parts the Nobel peace prize for 2007 for their efforts to build up and disseminate greater knowledge about man-made climate change and to lay the foundation for measures better needed to counteract such change. Thank you for being with us.

DR. MAZUREK: Thank you. It is a great pleasure to be here. What I would like to describe for you today are current engineering research programs that are operating within the New York metropolitan area aimed at improving air quality.

As our center suggests, we are focused on advanced infrastructure and transportation. So we are working on cutting edge tools that need real world examples and we

believe port and airports give us some problems in great abundance to work with with great interest and vigor.

For the past two years, I have been sandwiched in between two transportation engineers and I guess there is great result in that because as an air quality chemist, we have been discussing where the big holes are in the transportation models and that is in the emission inventories and actual emission tests that give us the fundamental information that goes into computer modeling.

So what I am going to describe today are our current efforts at improving some of these state-of-the-art engineering transportation models for the port. I'm going to start off with my recommendations in this slide.

It is going to require three key operations or activities. The first is monitoring. Although the states of New York, New Jersey and Connecticut have been engaged in extensive air quality monitoring programs, have produced vast amounts of data, these monitoring locations are insufficient to really monitor

what is going on within the ports and the particular sources. So we need to basically improve our monitoring capability with better temporal and spacial monitors.

There have been improvements in real time measurement technology, particularly in particulate carbon and I think this is a technology that would really suit the port very well. Elemental carbon, organic carbon and PM mass so that is a recommendation.

Secondly, measurements is very important. We talk about these emission inventories, but they are usually based on very few experiments that actually have the testing equipment that are testing the different types of mobile sources that accounts for PM and gas emissions in the port area. So then the emission source profiling is going to be key. We also need to know more about the operations. I am happy to hear that the Commissioner has worked with others to develop very detailed inventories. We certainly would like to be able to share this information. I think our models will benefit from these sorts of inventories.

So, finally, the last step is

incorporating the emissions information on your monitoring methods and our operations inventories into state-of-the-art models. The new tools that we are using for modeling emissions and quantifying operations in the port of New York and New Jersey are key research activities within Rutgers University.

The first category are transportation models. The first is micro simulation level which actually looks at vehicle population and quantifies emissions as a function of vehicle speed. The second is regional scale that looks at large network operations or transportation networks. The second area is chemical emissions profiles that is what Mike has been doing for twenty years beginning first in southern California with the organic molecular measuring developed as part of the California Tech studies that Len Bielory pioneered and we are now transferring this work and involved in new studies with New York State Department of Environmental Conservation on emissions lab in Albany to generate new profiles relevant to road vehicles in the metropolitan area.

Finally, when we get these two models and profiles working together and they are totally integrated, we can begin to compare the existing inventories, these reductions, what we think is happening with actually ambient concentrations and that is another area that they work in along with the states of insuring New Jersey and Connecticut where our sites are co-located.

This is a slide borrowed from my colleague Professor Maria Bolay. This is just a description of the freight and maritime program that she's operating in the port. This is to simulate the large scale network traffic with a micro simulation tool. I won't go through all of these bullet points here because I think you can read them as well as I could, but in general what is happening is she's got a better description of what is going on with the trucks whether they are going coming back empty, going out loaded, the emissions, idling time, travel time, vehicle miles traveled, et cetera.

So this type of micro information improves the model output for the large-scale traffic network that is in the New York City

area. This model is GIS based which gives us the ability to integrate many different types of layers of information. This is the state-of-art to go with data rosters that are basically embedded within GIS based programs and transportation systems from the input of the GIS data. She also has extensive data warehousing that is capable with the model.

These second traffic engineering model is the one produced by Professor Klein Ospay who is doing inter-pollution modeling from large-scale traffic networks and taking vehicle population data from the New Jersey Turnpike and has used the program model which is parallel micro simulation software to just aggregate emission estimates based on vehicle type. It uses the EPA mobile six emission model that is integrated into programics which simulates the air pollution levels associated with carbon monoxide on the site, NOx and emissions of information each vehicle type. The draw back with using mobile six, there is no accounting for different vehicle speeds or loads so it just has one flat level so we know that is not a realistic number.

We are working with authentic emissions data now from the collaboration with New York State AEL to improve our micro simulation of air pollution from large-scale traffic networks. In my own work and my group, we have been looking at the sources of fine particles in the New York City area beginning from about 2000. Because we look at one hundred individual marker compounds at the parts per billion level, low parts per billion level, it takes a lot of time to develop the molecular marker ambient concentrations. We are looking at major sources of PM in the New York City area developing chemical mass balance where we will then use the chemical mass balance molecular marker model to provide assessment as to which sources contribute the most amount of organic carbons to find mass and then we are comparing to this emission inventory.

So I can tell you by looking at these slides, well, motor vehicles that is one big source category within the metropolitan area, but one category we are surprised to see that probably was not accounted for is commercial cooking where all those french fries

and fried chicken are cooked in large amount of oil which is volatilized and is not controlled so we think probably a large fraction of PM that we see is coming from commercial cooking operations. So without doing our ambient work, we never would have shown this to our state agencies. Well, maybe you need to be looking at when these McDonald's and Burger King and the ethnic restaurants in the metropolitan area.

The receptor modeling and CMB technology began about twenty years ago when I was with Glen Cass. At that time he was just measuring fine particles in California. I was at UCLA working and we were looking at molecular markers which are tiny, tiny agents of tracer molecules associated with organic matter. So essentially I am a carbon manager looking at how carbon is generated, what the sources are and the transport. So, again, he and I were sitting next to one another at a conference and he was telling me what he was doing and I was telling him what I was doing and we realized that we had the interface, the technology which would allow us to apportion particles at the molecular level on suspended fine particles. So that began a

collaboration that has lasted many, many years. Unfortunately, Glen passed away five years ago, but his work continues on through many students and post docs who are now faculty.

What we have here is a chemical species mass balance so if you look at the first column on the left, we have a total fine particle mass and we see that at the top it is about twenty-five that should be micrograms per cubic meter and if we begin to look at layers of dominant species within these different categories in column one, we can blow that up until finally we are in the right hand column and we can look at functional compounds that represent functional groups. Well, this information alone doesn't tell you what is coming from sources. In fact, we were stuck in column four for about a few years until we realized we had to go out and measure the emissions sources at the molecular level to generate these same profiles and emission ratio for these molecular tracers.

So with this information, we went out and basically did source testing for about ten major emission sources within the Los

Angeles area. So this is what's lacking in the metropolitan area. We do not have detailed information and the profiles, current profiles. This is probably from the mid-nineties and earlier. So we are working with really outdated databases that go into the chemical mass balance. We really need to improve our profiles here because our models will be better, our predictive models will be better. All of this goes into developing chemical profiles and we use this chemical profiles in the chemical mass balance model. Then we can find out roughly how much of what sources contribute to the PM.

The crux of the matter here is this relationship where another molecular tracers related by mass usually in nanograms per cubic meter to our total carbon is composed of elemental and organic carbon. With this information, we can estimate what portion of fine PM is from what types of sources.

So for the Los Angeles metropolitan area that was surveyed in the 1982 PM sampling program, about sixty percent came from diesel, thirty percent came from vehicles that were gasoline powered and then ten percent

from paved road dust. You put this information into the CMB model and you can basically see the different receptor sites what is coming from what page or source of input.

So we have cigarette smoke, cooking with combustion, et cetera, mobile sources. So in these different receptor sites mainly coming from mobile sources, the organic fine PM. Now stepping forward into the current century, we are looking at the speciation of organic apportionment of 2.5 in the New York City area or SOAP. We conducted the same type PM sampling category that occurred in Los Angeles to do the fine PM in Los Angeles with the New York City area. This is a collaboration with Rutgers, New York State New Jersey and Connecticut monitoring groups and our main questions were what is the organic composition of the PM 2.5, what are its sources, what are the components that are emitted directly versus those which are in the atmosphere or our secondary PM.

This is a shot of our Elizabeth, New Jersey site adjacent to toll plaza thirteen. I am told by my transportation colleague Ken

Ospay that two hundred twenty-five thousand vehicles per day transfer past this point of the Turnpike. So we think this is a integrated signal throughout the year of mobile sources to an area that is very close to the port. This depicts where our sites were and so although they are within the metropolitan area, you can see that they are not directly within the port itself so we think that better surveillance could go on. These happen to be state monitoring sites that have vast measurements that go on daily, hourly. So we have all sorts of gas and particle phase information plus meteorology.

With the SOAP program we selected in the first year we collected on the one and three day collection site at Elizabeth, Chester, West Port and Queens over four hundred successful filters. We have to composite the filters into basically monthly composites and then we are able to extract those particles and look for the molecular markers with our sophisticated mass spectrometers within the chemical labs.

MR. EGENTON: Doctor, excuse me, I

apologize. If you could sort of wrap it up in three minutes time because we are starting to get into some of the other speakers.

Thank you.

DR. MAZUREK: This is where we have basically not enough monitoring sites for our port area.

Going onto emissions we are working with New York State DEC and we are getting updated vehicle profiles. These go into our molecular models. This is an example of what is being measured in the dynamometer with the AEL lab, all of the gas and particle phase species. Roughly seventeen vehicles from gasoline, diesel and then alternative fuel vehicles were tested so we have those emission profiles. This is an example of what's happening. There is a great disparity between what is being produced by gasoline vehicles from 2000 onward so we can see that the affects of control technologies have improved hydrocarbon emissions. In this example, hybrid has very low emissions, little bit higher CMG and diesels are much higher. Just to show you that molecular level, these extract from all these vehicles.

These are chemical compound solutions and if we look at the distributions, this has seven class of PAH which are toxins we believe are causing adverse health affects.

This is looking at the distributions of these PAH in each different color is a difference compound and ambient concentration we get different profiles between gas, diesel vehicles. So this is giving us some ability to begin to apportion PAH based on engine type.

Finally, key points we have extensive monitoring projects that basically give us information about what is going on around port, but not within the port. Our transportation models are now being developed for the micro and large-scale network levels and this is being improved with emission test from New York State AEL collaborative work. Our chemical profiles are giving us new patterns, updated patterns for emissions, but we need them for the import vehicles to enhance model accuracy and finally these vehicle chemical emission profiles are for for the northeast state emissions inventories to develop useful

state implementation plans and we will be looking at model output versus observed concentrations. This is very important for predicting the impact of motor vehicle emissions in urban air sheds from transportation systems.

Thank you.

MR. EGENTON: Thank you, Dr. Mazurek, appreciate it.

All right, trying to get back on schedule here, our next speaker is a friend of the Council, Valorie Caffee and Valorie is director of Organizing and Justice Coordinator for the New Jersey Work Environmental Council. Membership lines and environmental community and labor organizations and individuals. She chairs the environmental justice advisory council to the DEP. Serves on the board of Green Faith, New Jersey interest faith environmental organization. She's a convener of the New Jersey Environmental Justice Alliance and is the co-chair for Labor of the Coalition for Healthy Ports. Always a pleasure to hear from you Valorie. Thanks for attending today.

MS. CAFFEE: Thank you, I am glad I had the opportunity to be here. My

presentation is sort of like one of three parts so you have to think of the contributing one part of a broader presentation and am I supposed to do something with this little clicker here to bring up the Power Point.

While we are getting that up, I also wanted to say too that the environment council along with the New Jersey Environmental Federation -- Amy Goldsmith by the way, is the director and she's also going to be taking some portion of the presentation today. But we are very concerned, of course, about the effects of ports operations on human health and natural environment. In fact, some of you who have been on the Council for a while and also the environmental advisory council may have remembered the late Demerito Soto and he was a member of both Councils and talked to us a lot about the push in the particular diesel pollution port and about its effects certainly on the drivers as well as the adjacent communities.

In fact, when I first met him eight years ago and it is one of the reasons why our Council got involved in working in ports.

Here we are. Anyway, like I said, also the conveners of new coalition called the New Jersey/New York coalition for healthy ports and certainly, again, our overall mission is to look at the impacts on human health and the environment.

So I wanted to take a portion of this and we have heard some of this today, but I really kind of want to concentrate on the Ironbound community. This is a little area of Newark -- excuse the poor quality of the slide -- but the Ironbound is located in the west ward of Newark and as you can see the port down to your right here is really very, very close to that Ironbound and, in fact, really runs into the community.

The port itself is really unique nationwide in respect that we have a convergence of the port itself, the Turnpike, freight rail and airport all in one place and the Ironbound is an adjacent community kind of also represents that because it is also bounded by the flight path of the airport, the port is very close. It has rail tracks around three sides of the community and also the Turnpike is there as well

as Routes 1, 9, 22, 21 and 78. So there is a lot of stuff going on and looking at then the impacts of all of this on this community, we are really talking about a community that already has a significant environmental load.

One of the main environmental polluters in the Ironbound is the incinerator which is shown by the arrow there in the background and the incinerator by itself would be problematic because it is the state's largest solid waste incinerator and certainly one of the largest one in the Northeast as you can see looking at some statistics about the incinerator. It is burning something like twenty-eight hundred tons of waste daily and emits hundreds of pounds of toxic mercury and dioxin into the air. It violates the Clean Air Act which also contributes to the non-attainment of this county which causes the state to lose money when you have all these counties in non-attainment.

Then looking at other facilities in the area, we are looking at over eight hundred million pounds of toxic air emissions from various facilities in this community that

are dumped onto the residents there. We have at least ninety of the one hundred twenty-five streets that have pollution facilities and store hazardous substances on-site. Approximately ten to fifteen thousand trucks from the ports emanate from the ports are located in the community, are going throughout the community and then we have over forty-five major chemical manufacturing plants, industrial plans that are very near public housing.

Just to list a few names of some of the major companies in the area adding to the pollution and the amounts of pollution that some of them produce and you can kind of read this yourselves. Then we have the legacy of pollution and current polluters that are leaving their own legacy. In fact, one of the worst is actually the Diamond Shamrock Supper Fund site. This was the company that produced Agent Orange during the Vietnam War. It is an enormous Superfund site that has not yet been remediated. Again, it is very, very close to lower income housing community in this area.

Also, Doremus Avenue which has been dubbed chemical row is also here and, in

fact, when the new jail was built in this area, the environmental council did some work with the barge there and very, very concerned about the pollution making them sick because they have to spend so much time in such a polluted area.

Going back to looking at one of the things that spills over from ports into the Ironbound community is the neighborhood that is home to the Terrell housing projects and as you can see to your left, the cargo containers that are stored there are now higher than the housing project homes themselves and, in fact, they are really engulfing the projects and what we are really concerned about is the fact that these containers are now reaching some seven to eight stories high. Interesting enough, the city housing authority signed a contract which allowed more containers to be stored there on a former playground. Promises were made to restore recreational space that hasn't materialized yet unfortunately.

The thing that is also very troubling in looking at a little snapshot of an adjacent community to the ports is the cumulative impact of pollution on the community

of population where people are already vulnerable and already overburdened by pollution. In fact, this community now has been dubbed container city because of the proliferation of these cargo containers that are spilling into the neighborhoods and this really increasing. Of course, it takes diesel trucks to bring the containers to the neighborhood adding again more significantly to the pollution load these people already bear there.

Also, you can see the smoke from the incinerator background. They are going to talk a little bit more about risk to kids. Of course, we all know about the health links to diesel pollution. Asthma certainly being one of the primary one and particularly regarding children, asthma in some area you could classify epidemic levels and particularly for children who live in urban areas. Most specifically for children of color, Latinos and African-American children, but we have asthma rates that are three to four times higher than their white counterparts and also the death rates associated with asthma are also much higher as well. So bringing in additional truck traffic into areas

such as the Ironbound community where people are already saturated with pollution does sort of adds insult to injury.

Interestingly enough, I just recently read a report and Dr. Mazurek probably is aware of this because it was some of the research are involved with the UN, but one of the things I found most interesting about the report is some took a position and those of other environmental advocates here in the state have been taken for a while, we just can't look at greenhouse gas and global warming and climate change just within the context of carbon monoxide. You have to look at more than that, co-pollutants.

What the report says that black carbon now is second behind the carbon dioxide in being a distribution for climate change and global warming that because the black carbon particles absorb solar radiation as it enters our earth's atmosphere and heats things up and heat as probably most of us know in urban communities is also significantly of great significance because people die from the heat during the summer in urban areas and, again,

having so much heavy truck traffic spewing out diesel admissions into adjacent communities like the Ironbound and in Elizabeth. So this really compounds this problem.

Also, looking at the impacts on workers is something that really hasn't been talked about today. Workers were so good about bringing this to our attention. Workers who often sit in queues for hours as they offload and unload at the ports and meanwhile all that diesel pollution is being exposed to and many of these drivers are becoming ill and these are drivers who don't have benefits that a lot of other workers have. In fact, they are classified as independent owner/operators, but quite frankly in our opinion, the only thing they are really independent of is good health care benefits and other benefits many other workers enjoy and many of these workers also live in communities like the Ironbound and not making very much money as well. So that really needs to be addressed and we think that the companies that are hiring should really take responsibility for them.

Here's a couple suggestions that

we have for recommendations. One person talks about how long these trucks last. Everybody knows diesel trucks last a long long time.

Glad to hear Deputy Director Bass Levin talk about some changes that hopefully will be made at the ports, but we need those things to happen now because less idling is less exposure to diesel and certainly illness and less work days and public poor health costs all of us. Decrease and climate change, co-pollutants and decreases in premature deaths that are linked to diesel.

By the way, again, what is interesting to be looking at the cumulative health impacts that diesel also contributes to is the fact that diesel pollution is brought directly into peoples' neighborhoods and also problems to other places as well. It is a not source point of pollution, it really gets around and really makes people very, very ill and can cause premature deaths. Another --

MR. EGENTON: Valorie, I have to give you the two-minute warning.

MS. CAFFEE: Thank you. I am wrapping up.

Some other recommendations also have to do with some standards that could be adopted at the ports of operation and, again, looking not only to how pollution impacts communities, but also for the people to work there and most particularly the drivers because they are being exposed to such large volumes of this pollution and, quite frankly, the work environment council not only should the drivers be treated like other kinds of employees, but also have the right to organize if they want to because other people here who are prolabor or not, one of the good things about unions is they have health and safety committees and, quite frankly, they can be used as a checks and balance with helping to reduce diesel pollution.

Then lastly, independent monitoring also needs to take place as well as independent air sampling and you can even teach young people to do sampling as these photos show right here because we have also worked with young people in doing that and it is a really good educational project as well as produces scientifically verifiable data. So I am going to stop here and turnover the next portion to

the next person.

MR. EGENTON: Thank you, Valorie.

All right, our next speaker is Christina Montorio and she's a community policy coordinator with Change to Win and a member of the Coalition for Healthy Ports. The Coalition for Healthy Ports 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. Change to Win is a labor federation representing over six million workers workers to build the movement to meet the challenges of global economy and I have had experience working with Christina in the past when she worked for Wisnewski and we worked on general aviation issues. Those are the small airports. Christina, good to see.

MS. MONTORIO: Good to see you too and I want to thank the Council for choosing seaports and particularly airports too for today's agenda and to spend not just an hour long session, but a whole day talking about this really important issue. So to all the people that presented and thank you for taking a lot of

time to really dig in. It is much appreciated.

So I am going to talk about -- some of the preliminary slides are a little remedial in light of Pete's great presentation this morning. I am going to give a few slides and then switch to Amy Goldfield with the environmental federation who is going to present part of this presentation as well.

About pollution so just as a way to put port pollution into perspective. This is a supplied by the national resource defense council who issued a report called harboring pollution which shows that ports that you see, the port of New York and New Jersey is about double the average power plant. Now, Peter's slides were a lot more developed on this issue where ports filled in.

We are going to breeze through a few of these statistics on how ports line up in comparison to vehicles which is something that we are used to talking about pollution from cars. Then this is the sources within a port and you can see the circle represents the quality of pollution for that segment of port pollutant, heavy trucks, marine vessels clearly

the largest. Then this is from Becan Economics, an economics assessment of reducing emissions in southern California. You can see from this slide that trucks are a significant part of the pollution that comes out of ports in goods movement. Again, very eloquently stated from the our colleague from the left coast this morning.

So we will move into New Jersey and I will let Amy to come up and talk a little bit about the problems we face in New Jersey with regard to non-attainment which is no new story to the members of the Council.

MS. GOLDFIELD: So this shouldn't be a training to anybody. This is the non-attainment areas. As most people know, these non-attainment goes right to the main traffic corridors and truck corridors of New Jersey. The hot spots, especially when you are looking at diesel pollution, the core of it is right in the middle of the corridors and is then as you go out a block or so off the highways or after the corridors, the diesel levels go dramatically down. We did, as was mentioned by the Commissioner, we did do a snapshot study.

Dr. Bielory was part of the release of that in the City of Newark. These are kids who did the monitoring with us at a variety of locations. The locations here were Cluster Avenue, a residential neighborhood really quiet, no trucks. Weequahic Park right along Frelinghuysen Boulevard which is a truck corridor, major park recreation area. Roberto Clemente ballfield, McCarter Highway. This is where the Commissioner mentioned two hundred fifty to three hundred fifty trucks per hour. That is four to five trucks per minute that pass by this ball field on a hot summer day and Hayes swimming pool which is the middle of the Ironbound where it is completely surrounded by trucks and warehouses and trucks were sitting there idling. This is a result of some of the work that was done. It was curbside monitoring. Again, it was just a snapshot of a hot summer day.

This is the one on McCarter Highway for PM 2.5. The red line that goes along the line is Cluster Avenue in Newark and as you can see, the levels of PM 2.5 as the trucks go by at any time spike rather high.

This is for ultrafine at the Ironbound Hayes pool again, quite traumatic and remember these are kids right there inside the fence line breathing in these fumes. Black carbon which was mentioned earlier at Weequahic Park, again, pretty dramatic compared to a residential street. The reason why we show you all this is because these are truck corridors that come out of the port and go into the neighborhoods, primarily the southward which is where Weequahic Park is and where the Ironbound is at the east ward of Newark.

These are numbers that we release with a clean air task force. Numbers that you saw from Los Angeles area, but these are the numbers, the most recent numbers that we have right now for us here in New Jersey that show you the health impacts, premature deaths, nonfatal heart attacks, asthma, emergency room visits, loss work days all of this costing money to people.

In Essex County in particular, you can see it is rather traumatic. The numbers for asthma, death and hospitalization rates double that of even the rural and suburban towns in the

same county in Essex County. Very dramatic partly due -- we believe partly due to the diesel and truck traffic that goes on and comes out of the port. You saw this slide earlier. One out of four urban kids with asthma as opposed to the state and national average is one out of ten. A lot of kids out of school as a result. These are estimates of medical costs in Essex County alone. You see the numbers aside the premature deaths and these other numbers, the insurance companies assign numbers so if you take out the premature death number and you just look at how much it cost for the nonfatal heart attack, missed work days and asthma attack, ER visits, it is a lot of money that the county residents and the state pays because if you think about people who are living in Elizabeth which is in Union County, but if you think about people in Newark and needing care, many of them are in charity care which means the state is footing the bill or the hospitals are eating the costs.

The thing that we want to say is that we can do better and so I am going to turn this back over to Christina to talk about what

we could do better in trucks and of the world and we have done port tours and I know some of you might have been on some port tours, but if you'd like to do some of the community based port tours, you're welcome to come join us.

MS. MONTORIO: So great point, we can do better. There is technology out there that can bring particulate emissions that are killing people to almost negligible levels. Sixty 2007 trucks equal to one 1997 or earlier truck. So we can encourage upgrade, we can significantly reduce people that die. It is just that simple. This is the Clean Air Council, not the labor council so I didn't want to spend an inordinate amount of time talking about the drivers, but the conditions of the drivers face are part of the environmental problem.

The fleet doesn't get upgraded as fast as it should be because the drivers don't make a lot of money. I will go through this briefly and am happy to talk about this more. I mention it here today because it is an intrinsic parts of the problem.

As Valorie mentioned, drivers are

misclassified as owner/operators. They do not have the ability to set rates. They are paid by the load rather by the hour. If they wait on lines there is no market incentive to move them faster in and out of the ports because the person that pays for their time is themselves. Estimates from around the country, many drivers make less than eight dollars per hour because they don't make a lot of money, they don't buy health insurance, they certainly are not making major capital investments.

In 2007, newer trucks which can cost a hundred and fifty thousand dollars and up. So they drive the older more highly polluting trucks and in order to keep up with the rest, keep their pace with truck payments, rising cost of fuels and other expenses, drivers will take work at lower rates so they may take a job less than what they need to make in order to keep with the truck --

MR. EGENTON: I have to give you the three minute warning.

MS. MONTORIO: The top five U.S. seaports are all considering to reduce diesel pollution. You can see we are in the midst. We

are not -- I am talking about comprehensive strategies that are discussed here. There are some great policies put out there today. They may potentially have some concerns, but may not be able to take advantage of low-interest loans because they are struggling to purchase gas. In addition, when you think about the rail issue, you can certainly do a lot with rail and very exciting, we ought to do what we can with it. You are going to continue to have trucks so we want to make sure these trucks are the newest, cleanest trucks we can possibly have.

So what did Los Angeles do and, again, Peter mentioned this earlier in his slides as parts of the solutions that could be considered around the country. They passed a clean trucks program which requires aggressive fleet monitoring station as well as companies moving into being employers as opposed to brokers or owner/operators. Why did they do this, because right now the -- before they implemented the new trucks program, the drayage system which is the port trucking system in Los Angeles was plagued with operational inefficiencies and community cost and public

health cost in the estimates of five hundred million and 1.7 billion dollars. So you can see all the reasons where those costs come from things that Amy talked about, public health issues. You think about community cost, road maintenance, environmental damage and operational efficiencies where it can back up impact on truckers. Truckers don't have health benefits that Valorie talked about.

What the operative of clean trucks program that was passed in Los Angeles reduced emissions, improve the facility of market share for working sporadic on the flows that are problems with it.

Safety and security. Port security is an increasing issue in any port. There was an effort to improve all of these aspects. Mike, I put that slide in here especially for you. I am so glad you asked the competitiveness question when Peter was making his remarks earlier today.

This is an economic analysis by John Haverman who is a leading economist in the field who did a thorough research of what the trucks program would do to the trucking system.

The industry had a lot of concerns with, how it is going to be implemented and what kind of advantage or disadvantage it would put them in with regard to other ports. Haverman found a significant increase in the overall efficiency of the system, cost reductions that come from economies of scale in addition to not killing people anymore. Not to be inflammatory.

These were the elements of the clean trucks program we can spend a lot of time talking about it, but since I already got the warning, I am happy to answer questions about it and so what the Coalition for Healthy Ports which is the group that Valorie, Amy and I are all members of are here to say to ask the Clean Air Council to do.

We have some key points that we'd like to leave you with. We'd like to urge you to advise the state to enact a plan for reducing the pollution at the port. Other port cities have done this and sort of spurred the conversation. You set the standards and then government entities then need to react with good policy. Then we pledge to work with you to implement those solutions and make sure we

remain economically viable. We are competitive and not doing anything to the great economic engine that is the port while we are also improving air quality and public health and work. So with that.

MR. EGENTON: Thank you, Christina, Amy, thank you very much.

Again, I just want to give due consideration the time to keep everybody within that time.

Our next speaker is Gail Toth with the New Jersey Motor Truck Association. Gail is the executive director. She has over thirty years experience in the transportation industry as an expert in motor carrier, cargo liability and cargo security. Her career has included executive director of the American Trucking Association's Transportation Loss Prevention and Security Council. She served on the FAA commission on airport security, administrator of the transportation arbitration board and the president of freight claim management services. I'd also note that Gail was the only private citizen to receive the U.S. Department of Transportation 911 medal and Gail has worked

with several issues important to the trucking industry and we appreciate you joining us today and sharing your comments with us Gail, thanks.

MS. TOTH: Excuse me for reading, but I have had some real significant medical issues over the last month so I am trying to put things together very quickly and hopefully it will come off okay.

First of all, I'd like to thank you for allowing us to come here and provide you with some comments in regards to air pollution at the ports. The membership of the New Jersey Motor Truck Association does strongly support the achievement of cleaner air and the protection of the environment in New Jersey.

The trucking industry has made many strides in reducing diesel emissions. Trucking actually was the first freight industry to widely use advanced engine technology or emission control systems.

In 2002 where we had our biggest stride was the industry began buying new trucks that incorporated exhaust gas recirculation and other emission control to reduce tailpipe emissions of nitrogen oxide by half. In 2007,

the new diesel trucks purchased by the industry incorporated diesel particulate filters that reduced the tailpipe emissions of particulate matter by ninety percent. These trucks also began the first half of what ultimately will be an additional ninety percent reduction in NOx emissions.

The trucking industry also began transitioning to a new ultra low sulphur diesel fuel in 2006. The ultra low sulphur diesel fuel represents the majority of the on road diesel fuel being purchased in the United States today. It is refined to the lower sulphur content to near zero levels of fifteen parts per million. The new ultra low sulphur diesel fuel is needed to operate our 2007 model engine and we just found out that the Turnpike doesn't supply all the pumps with ultra low sulphur diesel so that is the issue we will take up with the Turnpike. The fuel in older trucks according to Netcon will result in an immediate ten to thirty percent reduction in emissions.

In New Jersey, less than six percent of all trucks randomly checked and they are selected by the output from their vehicles.

Only six percent of the trucks have failed on your stringent testing and we have agreed to support DEP's move to increase those capacity levels. The random test includes not just Jersey trucks or people operating in around New Jersey, but even trucks passing through that are interstate that may have no business here, but are going through our state or corridor.

The diesel engines built in 2002 and 2007 emission technology are remarkably cleaner than many used to think is even possible. Smog from nitrogen oxide is unburned matter that used to generate puffs of black smoke from the exhaust stacks are being stripped to the lowest practical levels by advanced design and ultra low sulphur diesel fuel. The technologies have extracted a price which must paid by the truck buyers and operators. Not only is the new equipment more expensive, it is less fuel efficient. Truckers today have to purchase fuel at over four dollars per gallon and we went from ten miles a gallon to six miles a gallon in our efficiency. So there is a lot of pressure on the industry to increase fuel efficiencies.

In an effort to improve the fuel efficiency and reduce the diesel emissions, the Federal Environmental Protection drafted the Smartway program in conjunction with the trucking industry. This program is designed to educate heavy duty diesel truck owners on ways to reduce diesel emissions by reducing idling and improving fuel efficiencies.

Some of the technologies including idling should offer devices, the tires, tire inflation systems, air dynamics, lightweight parts and an array of operational services like temperature control and power such as auxiliary power units and bunk heaters. New Jersey Motor Truck in some of our New Jersey based trucking company members have received Smartways awards in recognition of our efforts to reduce diesel emissions.

In New Jersey, the trucking industry has partnered with the Department of Environmental Protection to reduce diesel emissions in our state. The NJMTA in partnership with the DEP administered a seven hundred fifty thousand dollar grant program from EPA to provide grants to New Jersey based truck

owners to purchase auxillary power units, bunk heaters as well as particulate matter traps or oxidation catalytic converter also provides programs on diesel emission reduction to its members.

I am really pleased to say that we have now given out all the dollars that we had so if there is more dollars out there, we are looking for it, but we were able to help quite a few people that operate in our region. They have to operate within our region. We will start getting the numbers, exact numbers, but we use the computer chips that are on the trucks and they had to give us a printout of the original chip and what the idling time was and then a year later they have to give us another printout so we can see the savings. In many cases on an APU typical truck in operation, fifty percent of the time on a truck without the APU. With an APU it is down to ten to fifteen percent so it is a very, very significant savings, which is what we are pushing for.

The DEP has also attained funding to install idle air technology at the Vince Lombardi rest area along the New Jersey

Turnpike. There is also idle air installation down at Paulsboro Truck Stop. This allows truckers to hook up to facilities that provide power, heat and air conditioning for a small fee. The NJMTA continues to partner with DEP to seek grants to continue to aid in the reduction of diesel emission in our region. Today's hearings focuses on reducing emissions at the ports.

From a trucking industry perspective, there are some areas that we can concentrate on such as idling reduction and updating or replacing older trucks. The new 2007 tractor trailer is approximately a hundred thousand dollars. Even in the best of times, this is a huge investment for an individual that operates on a profit margin of pennies on the dollar. However, there are incentives and internal operations that we can assist in accomplishing our goals. Any approach to solving this issue must be done in a way that providers a reasonable and efficient and legal approach. As some of you may know because I wasn't here earlier, but I am assuming you already heard and I know Christina touched on it

is that the California ports had approved a clean truck plan that would ban on a phase basis the support trucks from 1989 effective October 2008 and by 2012 all port trucks have to be 2007 compliant.

LA has been fortunately approved a provision of this plan that Teamsters are here today to urge you to consider that will undermine many efforts to implement a workable clean truck program in California or in any other state. By adopting a union design schemed that in the name of cleaner air bans independent owner/operator drivers from providing port transport services even if they drive a brand new 2007 truck, port city officials have now guaranteed that the next venture for any such proposal would be in the courts.

Motor port carrier today operates under a federally deregulated competitive open entry business model. Based on a motor carriers business decision to use employee drivers, trucks deliver by an independent owner/operator or under contract or a combination of the two. The American Trucking Association has announced that it shortly initiated litigation to block

the implementation of the LA proposal and believes that the owner/operator exclusion will run afoul of the federal laws codified in 49 USC14501. That prohibits states and political subdivision of states from enacting or enforcing a law that relates to a price route service of any motor carrier. This conclusion was recently affirmed and in a Supreme Court decision, Rowe, versus, New Hampshire Motor Transport, the court rules Congress was to assure that carrier rates and services are structured via competitive market forces and not because of government commands.

The trucking industry has shown that it does have a sincere commitment to clean air and will continue to work with others to accomplish this goal. In addition to all the current advances made by the trucking industry to reduce the emissions, the following recommendations may help to address how we can reduce the emissions at our ports.

First one would be to improve efficiencies at our port. Probably the biggest problem at the port is long waiting lines. Some of the lines over times have been better than

other times. When we heard recently particularly with the purchase of a lot of banks getting into the terminal business. They are like bean counters, they are reducing the amounts of personnel, therefore, it is having an impact because now we have to wait in line again and as we are waiting in line we are burning fuel. So if we can do things to improve efficiencies at the terminal, that will go a long way in reducing port pollution.

Extending gate hours has been done, but it wasn't done right. We did have an attempt by several terminals to extend their gate hours so we could work and operate off peak time and reduce the congestion at the port. The problem is that none of the shippers or receivers were in on the plan and what we need to do is work and get particularly the large shippers and receivers to except freight at an earlier hour or later hour. This way we can move the trucks in and out and get this to where they need to go.

Most importantly, what I found which has been really to me our members really do want to embrace a clean air program because

we all live in New Jersey. We know we are a nonattainable state. What we found, education, reaching out to the trucking community has gone a long way from getting people on board. We need to provide truck owners that service to port which is a group by the way, I have to admit we do not directly -- we represent trucking companies, not owner/operators and there is a significant owner/operator aspect of the port that works in terminals, but they are also a lot of owner/operators and truck owners are fleet owners is that are also members of our program. We need to go find a way to reach out and provide educational materials and to provide these owners of trucks that may not have the resources that there is an enormous amount of resources up and Congress -- and I have included in my packets something this morning on small loan programs and a lot of neat things that EPA is doing in order to help these owners to get better equipment. Tax credits to purchase new technologies or a combination of grants and small business loans with low interest rates are a way to go.

Probably the biggest problem for

any truck owner is the investment that they have to make for a new truck which is in the vicinity of a hundred thousand dollars which is quite expensive. Anything that we can do to help them. Not only that, there are technologies that we can utilize. There is particulate traps on these trucks. The catalytic convert. There are things that can be done if they have sleepers and utilizing them.

The thing that I really find most attractive is a program that started out in California a while back. It is a scrap program and the neat thing about that program is they would encourage owners of very old trucks to bring their truck in and they would put a bolt through the engine so this way it doesn't have an after market value, it's gone, it is gone. You won't find it in Mexico or in India a couple years later, but the engine is done and what they did is by taking the oldest vehicle they offered about twenty-five thousand dollars for that owner to then purchase something newer. Obviously, probably not a brand new 2007 hundred thousand dollar tractor, but if you could get a 2002 and have it upgraded, then you have

accomplished a lot. So that is a program I'd love to see although it is extraordinarily expensive. If they had money that was given to them or monitored through their Port Authority, but I'm not sure their Port Authority raised those funds and I do believe there was also a registration fee attached to every car registration that was used for clean air funding that also contributed to this program, but there are more and more dollars being allotted by the federal government. Hopefully maybe we could get some of those dollars and use that to get rid of the really old trucks. Installing idle air around the port.

A lot of things that we are funding. We have thirteen hundred missing truck parking spaces in the State of New Jersey based on a study just done by the North Jersey.

MR. EGENTON: I have to give you the three minute warning.

MS. TOTH: What happens, you have a lot of that. Some of the comments earlier and they sit around and wait for the gates to open at the terminal. If we could put the idle air technology which allows them to just drive up,

if they don't have APU which then does not require them to operate their vehicle, they can plug in and they can have electricity. They can have the air conditioning, they could have the heat. It is a very small fee and this would allow them to stop polluting and stop sitting there idling just for the temperature purposes.

I also noted that when I just saw the study that was presented, I know that there is a lot of work being done to reroute traffic around the port to put them more on the industrial side of the road and maybe we need to really look into those things if we have too much truck traffic to the local neighborhood, there is always a way to reroute around that.

In conclusion, the New Jersey Motor Truck Association is willing to continue to work with the DEP and with all the motor stakeholders to develop and implement reasonable, legal and efficient programs to aid in the reduction of emissions to our ports.

Thank you very much.

MR. EGENTON: Thank you, Gail, appreciate you being here.

Keeping on track here, our next

speaker is Eileen Murphy and she's the director of DEP's division of science and research and technology. Before becoming director in 2004, she served as assistant director for four years and as a research scientist for eleven years within the division's department primary scientific research and technical support unit. The role of the division through its studies, evaluations and monitoring efforts is to help provide the department with a sound, technical foundation upon which to base policy and regulatory decisions.

Eileen, thank you.

MS. MURPHY: Thank you for inviting me. I am actually presenting the work of researchers who are a lot smarter and more educated in this topic than I am. Dr. Allen Kao who is based in Boston, but couldn't come down but gave me permission to bring the topic he gave to Teterboro February 11. For a copy of his complete presentation plus the complete report and appendices, we have them up on our website here at DEP. So if you're looking, if you're longing for more on this study, rest assured you can get it by visiting our website.

A little bit of background before I get into the study. In 2001, Environ was approached by a community group in the Teterboro area, the Coalition for Public Safety and Health. We were asked to do some limited monitoring in the area. They did do that and found that the downwind of the airport, some air toxics were higher than elsewhere in the state. This led them to conclude that monitoring was needed in order to ascertain the actual impact of the airport on the community.

In 2003 the Environmental and Occupation Health Sciences Institute did a modeling study to do the same thing without a monitoring. They concluded that a negligible, that is one to five percent, of the total air toxics in the ambient residential areas due to the airport. So we had two different conclusions from two different studies. In a lawsuit there was a settlement reached between the Coalition for Public Health and Safety and the Port Authority to do a more extensive monitoring study in the area. And specifically to use Environ for that study. DEP was asked to manage that project which we did.

The overall goals for the project was to measure the ambient concentrations of specific compounds and really to see if there's a way to find a signal that would indicate the actual contributions of air toxins, specifically the airport to the rest of the community. This graph shows the location of the airport in relation to some of the major roadways. We have Route 80 over here. We have the Turnpike over here and closer to the airport there is Route 46 right here to the northern edge and then Moonachie Avenue here on the southern part of the airport here. So when we talk about roadway influences, we are talking about Moonachie and Route 46 specifically. Here's the monitoring sites that they use. They had primary monitoring sites and secondary. A lot of the analysis for the contaminants they were looking at are costly so they did an abridged monitoring at these two secondary sites on this smaller runway and comprehensive monitoring at the primary one and primary two sampling locations.

They sampled over the course of one full year for volatile which they do twenty-four hour integrated samples every six

days over the course of a year and the particulate and black carbon they did continuously over the course of a year. They also tracked wind speed, wind direction. They used a radar device to track the traffic. They were able to distinguish passenger cars from larger vehicles and they received aircraft landings and takeoff information on a monthly basis from the airport. They also put up digital cameras on their primary one and two monitoring sites pointed at the airport so they could look at the landings and takeoffs themselves.

So what was happening at the airport versus what is happening at the roads. The landings and takeoffs you can see a pattern during the week day and early morning and then again in the evening, lesser on Sundays, lesser on the weekends. Here's for Route 46, you can see the influence of commuting in the morning and in the evening. It doesn't show it on this slide, but the larger vehicles also did not show that bimodal kind of pattern, it showed the unimodal pattern so you have truck traffic consistently all day versus passenger cars

during the rush hour and different pattern on the weekends. This is Moonachie Avenue similar kind of pattern.

Now we will go into some of the results very quickly. In general of the sixteen organic compounds that were detected, consistently detected, thirteen were detected at higher levels at Teterboro sampling sites than elsewhere in the state. Here are the locations of those other sampling locations that they compared them to. Camden, which is an urban area. New Brunswick which is a suburban. Chester which is background and Elizabeth which comes close to the monitoring sites that we had in Teterboro, however, all of these locations are cited very specifically in accordance with EPA guidelines and the results are interpreted with that in mind. They were not able to site sampling locations at Teterboro using those same guidelines, those comparisons while interesting were not too sure what -- how much exactly they tell us.

These are the bar charts showing you the formaldehyde, ethylbenzene and xylenes, the medians, the seventy-five percentile,

ninety-five percentile for those various contaminants. We are going to talk about formaldehyde in a minute. That is the one that jumps out at you. For a couple of COCs there was no difference, benzene and here's the formaldehyde. It is not surprising to see increases in aldehydes in the summer months. This is July and you can see the yellow is temperature, the pink is formaldehyde. These two blues are other aldehydes and this is a pattern we expect with aldehydes in the summer. They increase due to photochemical reactions in the atmosphere and then they go down again towards the end of the year.

What was surprising about formaldehyde it showed up and stayed up and then gradually declined. This pattern said to us local source. It could be the airport, we don't know definitively, but we at DEP in response to this result are looking at what could have been happening in the area in some of those industries near this monitoring site that could account for this formaldehyde pattern. It was only seen at one of the monitoring sites at the P-1 and not at the P-2 also indicating that it

might not necessarily be from the airport. It moot be from a local source near that P-1 sampling site. So in the process of investigating that, PM 2.5 a different analytic technique was used to reach the results up and by fifteen percent. So keeping that in mind, yes, they did see an increase, a higher range of PM 2.5 in the Teterboro sites. But again keeping in mind that the methods that they used weren't exactly comparable.

I am going to explain these charts. I am going to show you several of these. What this shoes here on the Y axis of the concentration of PM 2.5 and here are the days for one whole month, September 2006 and the dots are showing the wind direction. These blue dots are showing you the PM2 concentration when the wind was coming from the airport to the monitor.

So here you see some distinct spikes of PM 2.5 when the wind is coming from the airport. With the pink, this is when the wind is coming from the roadways. Again, a couple of distinct spikes when the wind is coming from the roadways and then we have cross

wind and you see some spikes there indicating that the sources are both the airport and the roadway. This is the same information as the other primary monitoring site. For black carbon we see a similar pattern. We see some spikes coming from the airport. Some spikes coming from the road, a blend in other words. This is with the P-1 sampling location. This is for the P-2. They are not as high as PM 2.5, but they were measuring.

One of the interesting things that Envrion did in this study that we were interested in as well was the deep ultraviolet technology. It is environmental technology and what it does is put a transmitter and a receiver on either end of where you think your contamination is coming from and it will measure that gas contamination and give you a reading in the form of DUV intensity.

So they put receivers and transmitters right here. This is sampling location P-1. This is as close as they could get to the end of that roadway. As you can see, they are right up on the road and they were constrained, they couldn't get any closer. This

is as close as they could get, but that's pretty good. For P-2 they were a lot closer to the runway down here transmitter and receiver and here the roadway here. So they put those up and let them run continuously and then took a look at the results. It does represent all the gases that absorb and I have to emphasize it is experimental, it's only been used in a couple of airport studies, this being one of them. The way they present the results, again, this Y axis is the DUV intensity that the instrument observed and this down here the X axis is the amount of time closest to a landing or a takeoff. So right here would be right at the landing or takeoff, thirty seconds, a minute, a minute and a, half two minutes. Here it goes down to four minutes.

What they have concluded from these results is that they can pinpoint the influence of an airplane landing and taking off by the DUV intensity. It is highest during the shortest amount of time between a landing and a takeoff. This is the wind speed direction. Here again you see the DUV intensity, very high distinct spikes when it is coming from the

airport. Lower when it is coming from the road and here's a combination. Same thing for the other sampling location. What is very interesting here is that with the use of their cameras and the DUV readings, they could actually pinpoint the source of that gas emission. They took a look at this day at 7:00 a.m. They saw there were automobiles on the runway and look, low and behold you see the DUV intensity increase. Same here, they saw this and there were planes idling right in front of the monitor. There likewise they took another couple of these and here they saw four to six planes idling on the apron. That was very close to the monitoring site and they have similar explanations for these other peaks that you see.

So they were definitively able to pinpoint the reason for the DUV increase in intensity using that technology. So is the air near the airport worse than the rest of the state. Well, they did see statistics significant increases in some of the VOCs at the Teterboro monitoring sites as compared to some of the other state sites. The PM 2.5 was higher

however they used a different analytical technique that they themselves recognize to skew the results higher. Is it affecting local air quality? They did show a measurable affect in the airport they showed measurable affect as well from the roadways.

I will go back and say the study concluded that less than five percent could be attributed to the airport using professional judgment. These were researchers, they couldn't quantify what they thought was contributed from the airport to local air quality, but in their judgment they feel it's higher than five percent. It's highly dependent on wind direction and wind speed. So like any researcher, they are recommending additional study.

A lot of folks were hoping that this particular study would answer a lot of their questions and while it answered a lot of them, it didn't answer all of them. It just couldn't, there wasn't enough money and we didn't have the knowledge that this study itself provided. So we do need to look at more emission sources. We have to really study what

is going on with the VOCs and the PM 2.5. Like I said, I was very interested in the DUV results. I think it is a very promising tool each time it is used, it is improved and we learn more. It is just one of those technologies that needs more study before it becomes practical. This was helpful particularly within the community to understand what both the airport and the roadways how they are influencing the air quality.

And that's it. I tried to keep it quick, but like I said, for those of you who want more information, it is up on the web.

MR. EGENTON: Eileen, that was excellent, you just boom, boom, boom, I appreciate it.

We are going to give our stenographer a five-minute break because his hands are ready to disintegrate so I would encourage you to try to float around this area because we are going to try to stay on time. We have a couple more speakers lined up so we will reconvene in five minutes.

(Whereupon, a short recess was taken.)

MR. EGENTON: I'm going to introduce the next speaker. Quiet in the audience, please.

Our next speaker is Diane Brake, president of PlanSmart New Jersey and you have been before the Council before. We welcome you back. Just a little background. Diane has developed in-depth knowledge of land use planning in central New Jersey as well as in statewide transportation, housing and state plan programs. She's an experienced facilitator and has developed working relationships with state agencies in DCA, DEP and DOT developers, county planners, mayors and a broad range of non-profit groups including environmentalists, housing, transportation, urban and social justice advocates. She's the founding officer in two statewide coalitions, the New Jersey Regional Coalition and the Coalition for Affordable Housing and the Environment and we appreciate you joining us again and look forward to your remarks.

MS. BRAKE: Thank you. All of that has been because of my job for twenty-three years. So it is like showing up is what it is

all about. Good afternoon and I want to thank you for inviting me. I think I am speaking on this panel to talk about land use issues in particular and one of the things that we have found over the years if you can connect land use to many of New Jersey ills and we have been looking at that, but because they are all connected to each other, we have also developed a reputation for looking for win/win solutions because we don't want to solve one problem and then cause other problems in other areas. It is probably the reason that I was dumped off my high school debate team because I listen to the other side and said that is a really good point. You will understand why we are talking about that here.

Basically, the way we talk about land use and how it is connected to these issues is that center based development really is the only way to begin to address all of the issues. It is really connected to transportation and I think that this animation begins to show you that you pick the center, you connected them with transit and this is how you reduce auto dependency and hence airplanes and our research

in this area goes back.

We had a federally funded study back in 1990. We published the results and, again, to look at if we did that center based plan, what it was for central New Jersey between Trenton and New Brunswick we actually tracked that we could reduce the number of trips by almost sixty percent, at least the growth in trips and also the growth in vehicle miles traveled by as much as forty-three percent and the growth, of course, is because you are adding more people and more trips, but you could get significant results if you center development. So that has something to bring to the airport and ports discussion as well.

We began to look at how we could bring all those positions, the smart growth project. Basically looking at how you could bring all these things without hurting all of other things. So we have four kinds of reminders. That we take care of better outcomes on the ground from the economy, for the environment, for efficiency, reducing costs and resource consumption and regional equity, the social justice issues and you have heard a great

deal about the environmental justice issues. All of these things have to be touched on. We call the four E's as you look at those recommendations. How can you optimize results rather than to maximize any one in particular. So we started by looking at the economy and I pull up this slide. These are the ten major sectors that are important to New Jersey.

Basically, if they are above the line they are significant to New Jersey and if they are over in the right hand quadrant they are growing. You could see 2001 to 2004 was a pretty poor year for economy and the hot pink one is transportation logistics center. It shows it is very significant. This is just employment, not the dollar value. The dollar value would actually show transportation logistics to be even greater than pharmaceuticals and other science and technology to our economy.

So my first message to you is as you work to improve the environment that you don't kill this very important economic sector. Then we began to map these jobs and began to look at on the left-hand side is the number of

jobs and where they are today.

The middle is where they are concentrated today. That is very much like the map that Amy showed you that showed where the pollution is. This is, of course, where our major corridors are. What is even more interesting is the gray to black part of this map shows where growth is happening in this sector. You can see that the jobs are moving west.

Now, obviously you get huge increases if you didn't have very many jobs to start with, but we show it because this is where the jobs are moving on their way to Pennsylvania as we are finding out. So that is something very important and one of the things that we have developed in our smart growth economy project is something that I have mentioned to you about are these calculations or where we try to say how can you take statewide goals and get to local land use decision-making and one of our first calculators was, in fact, a greenhouse gas emissions reduction calculator taking up at the top the Governor's target and then we look to how can we make a target for each county and

then actually get local actions to meet that county level. So it is a way of taking a goal, quantifying it, distributing it so that everybody has equal part in making the answer and I can talk to you more about that too, but it is this connection between policy to land use that we have been looking to strengthen.

I think that I am showing this again because I am reminding you that each of these counties could have a significant contribution to reducing the gases. In terms of land use policy and this is, again, related to how you come up with recommendations. These are what we have decided in New Jersey and all the different programs. These are the growth areas. This is where we want new development to happen. We think this could be efficiently served. It could reduce our cost, it could save open land, it could make growth capacity for the economy, but as we put in regulations to try to solve specific problems, we have also put in impediments also to growth in those growth areas.

So I show this map and this isn't even showing all of the impediments that people

have told us actually makes it harder to grow in growth areas and that's one of the reasons they move to greenfields. It is one of the reasons we have all the warehouses at Exit 8A where it is greenfield development, easier than remediating the soils around the port to use for warehouses. So I just remind you that this map can show you what you should be looking for.

One of the other things that we began to look at is how should transportation fit into goals for small growth. It is basically reducing auto dependency or for your topic today reducing truck dependency and you begin to look at how can we invest in transit and begin to make the land use so it makes that transit efficient.

Now, as I understand it from my experience with some of the communities in central Jersey who are looking to reduce the truck traffic on 206 and 31, we've heard from some of the CSX, the freight rail line that we could have as much as twenty-five percent of the containers moving by transit. Right now that level is about six percent so -- higher than that, Frank. Are we moving up towards

twenty-five percent. I know that Frank will talk more about the Liberty Carter plan.

The transportation sector is I think a model for other important economic force for New Jersey and they come up with a plan of what they need for infrastructure investments, land use changes, highways and rail and other things. They actually have a plan, this is what we need to work better. But I would say that you should recommend that twenty-five percent target at least in the short-term should be a goal for moving freight by transit rather than by truck. That would be a beginning start. But of course you really can't do that unless the land use is supportive. When you allow through zoning to have big box retailers everywhere, you are going to have trucks having to go everywhere because they have to be filled. So land use has a significant impact.

Again, what I am trying to tell you that we have three particular messages today and I have given copies of a more detailed speech that goes with this slide show, but I am trying to cut back on the time.

First of all, is to worry about

the economy in general and this particular sector in particular as you pursue clean air, absolutely in favor of all of the improvements that you've heard from the advocates. Push the envelope of transit and you cannot do that without remembering not only the long haul for the CSXs of the world that travels across the country, but short haul and that is, again, a local land use decision-making process where so many of those short haul lines have become defunct because of a neighborhood that complained to a mayor who then decides that they can do without that short haul line and I do not think anybody really thinks about what impact that has. So remember those short haul lines they are very significant to New Jersey economy for the last hundred years and it seems to me the decision to erase them has been fairly capricious.

Third, to make sure we can have things like the great investment for the train station on the Northeast Corridor line to allow passengers to access the airport. Remember that they are not going to use that wonderful expensive facility unless they can get to the

train station from their origin so they could take the train. That is a local land use issue and it is also the kinds of emphasis on jitney services as well as these big investments in say the Art Tunnel. It is some of those localized issues that I think are relevant to our overall goal.

So thank you very much for giving me the opportunity to talk today.

MR. EGENTON: Thank you, Diane. Appreciate your presentation.

Our last scheduled speaker and then we will go into the public speaker forum is Frank McDonough and, Frank, it is good to see you again. You have hosted us actually at a Clean Air Council at your facility. Just a little background. Frank is an environment attorney and former maritime advisor to the governor of the State of New Jersey. He served as a maritime consultant and executive direct of Nations Port, a lobbying group and in 2001 was elected president of the New York Shipping Association. That organization represents the ocean cargo carriers and terminal operators in the Port of New York and New Jersey and is

responsible for the hiring and training of the work force in the third largest port in the nation. Port of New York and New Jersey imports and experts a hundred and sixty-six billion dollars in cargo annually. Frank is a former professor at Stevens Institute of Technology Center for maritime systems, the chairman of the New Jersey State Tidelands Resource Council. He serves on the board of advisor of several academics institutions and prior to embarking on his career in law and public service was a career marine and combat veteran retiring after twenty-two years with a rank of major, congratulations.

MR. McDONOUGH: You just took up my entire time.

MR. EGENTON: Your times up.

MR. McDONOUGH: Pretty clear from that resume that I can't hold a job. First of all, I want to say that I agree with everything that Gail had to say except the comments about my bosses, that part we have to take off the record. I also agree with everything Diane had to say and we had the pleasure of working together before and hopefully again in the

future.

I am going to keep this as short as I possibly can. You have my remarks in front of you. They are fairly extensive so I am going to try to breeze through this as quickly as I can given the late hour and the fact that I am the only thing standing between you and the door.

Good afternoon, thank you for inviting me. I am pleased to provide you with an update from the last time we met some two years ago. As you will recall when we met at the NYSA training center, I reported that my segment of the industry, the people I am representing here today, the port terminal operators and cargo vessels constitute only one percent of the emissions in the North Jersey air shed. A fact that had been established by the Port Authority through its consultants Star Crest. I also reported that as a result of the many improvements in equipment and terminal operations, we collectively had reduced emissions by a minimum of thirty to thirty-five percent in every measured category or forty-five percent across the board and that was

2004. As I understand it, the Port Authority is about to embark on Phase III and take yet another look at it to see how much we've done since then.

Some of those improvements included switching to cleaner fuels, looking to electric powered equipment such as substituting electric cranes for diesel cranes, purchasing on road compliant equipment even though we don't fall under the regime installing idle shutdowns on equipment, switching fuels in equipment and buildings. New lane systems and, of course, more efficient gate systems which is something that Gail alluded to a little while ago.

Since then we have implemented a number of other programs and stand on earlier initiatives and these are the things I am going to breeze through very quickly. First of all, I picked the tallest guy in my organization back there, Jim Carp, to go around the port and hang no idling signs everywhere in the port except the truck lines and not only that, but New York container terminal although a New York facility did exactly the same thing and created an incentive for folks to turn off their engines.

So we have a no idling policy throughout the entire port. Signs were a little high, that is because Jim is a little high. We also installed plug-ins in a number of areas in the port and I would love to work with the folks that got some more money in that area so we can get them just about everywhere in the port we need them. Right now we don't have enough.

Some of you will recall that in the past we supported something called a port inland distribution network, PIDN, program which Bill and others worked on for years. Unfortunately, it failed, but it failed for reasons not related to our discussion here today, but it was a great way to get the cargo off the road onto barges and run it up to Albany. So it was a result despite the fact that failed, we are working with Connecticut, Camden and other places to see if we can't re-establish some more barge runs. By the way, when we did that, we applied a lower rate to that cargo than all the other cargo that we handled at the time. So if you moved your cargo by barge instead of at that time paying a hundred and twenty-five dollars a box to NYSA

for the privilege of moving that through our port, you only paid twenty-one dollars a box. That was to encourage additional barge traffic.

We also have been for years advocating the marine highway system which would take trucks off of I95, put them on the water move them down the canal and other places by water instead of by truck. Just an aside, we moved seventeen thousand containers a year by barge. I would rather use row-rows to do that, those are bigger ships then we can take the eighteen-wheelers and drive them around on a ship and move them south and that is what I hope to see throughout marine highway system which just this last year was finally recognized by Congress so that means hopefully the next step we will get some money to do this.

We have lobbied for funding for an electrified truck park system. One of our brother agencies, the Metro mechanics, have offered up twenty acres of land near the port if we can electrify that, we can park those trucks there. As Gail was saying, we need to have a place to put those trucks while they are waiting to get in an out of our terminals. We created

something called a port support zone and freight logistics zone program to get trucks out of the urban areas into the port area itself, have all of their activities take place in and around the port as opposed to spread out all over the place, as Diane correctly points out and take advantage of portways, port fields and a lot of other problems that are out there.

We actually designed the liberty corridor program, the initial program. We designed it and one of our members managed to get Senator Mendez to sponsor it and get the funding for it from Congress. And we want to utilize that program as a steppingstone to increase and improve those last mile projects in and out of the port that we talk about all the time and the rail projects.

This past year fifty-seven million dollars was allocated to seven point related projects through the liberty corridor program. Everybody knows that railroads are more efficient than trucks, seems to be a generally accepted wisdom. So what we did and I am not going to go through it all, the stats are in there in terms of railroads, how much more

efficient they are and everything else. What we did was we created a rail incentive to move cargo out of this port by rail versus truck. So if you bring a box through this port and you move it by rail to its customer, we will only charge you ten bucks. If you move it by truck, we charge you a hundred and ten bucks. As a result of that program, our rail movements are now twelve percent out of the port and going up. In fact, they rose by 7.5 percent last year and, Bill, I just had a discussion this first quarter alone they were up twenty-one percent. So it is having an impact and we are going to continue that program as long as my bosses will allow me to do it, as long as we can continue to pay the bills. We are currently projected to move more than three hundred fifty thousand boxes this year, but after I saw those figures, I think that number is going to go up substantially. Each rail car, as you know, can carry twice the number of containers as a truck. If you take four hundred fifty-six forty foot containers and put them on trucks, you will consume somewhere around six hundred and fifty barrels of oil. If you move that same quantity of cargo by rail,

you cut that more than half.

We negotiated new start times. Gail mentioned these we negotiated gate hours. She's right, there is a problem and the problem is you can't create longer hours if the truck has no place to go.

So we need to deal with the other end of that problem which is the warehouses and the distribution center. That is the first time I ever heard somebody say earlier opening times and later closing times you don't have to run twenty-four hours which is what I think a lot of local mayors and other folks are concerned about. I don't think you need to do that and we did our own analysis a couple years and we think we can just tack on a couple hours on either end of that working day and it will be extremely helpful.

We lobbied NJDOT on the rail shuttle program which, again, Diane mentioned a few minutes ago and to try to get some funding for that. So that we can open up rail shuttles, for example, to Exit 8A. There is a rail line there we can use somewhat like the one that runs to Raritan Center. That was an entrepreneur

that put that thing together, but that is the kind of thing we are talking about.

I instituted a productivity training program. The faster you move the cargo off the ship, the sooner we get the ship out of here. My guys loved that so we instituted that a couple years ago and our efficiency is up by some thirty percent.

Use of alternative fuels is another area we have looked at and we created a discussion agreement under the federal maritime commission which allows our terminal operators to talk to each other. You can't do that ordinarily because you have all these anti-trust issues. They now talk to each other. They created an environment and committee looking at the whole range of programs. Alternative fuels, fuel co-ops, new equipment, emission reduction options in addition to all the stuff that we have already done. All the shut-offs, all the equipment we are using now has automatic shut-offs.

We have instituted in the terminals time limits for idling. The number is ten minutes, that is it. If you idle for ten

minutes, you have to shut it down, it's that simple. In the winter it is a little longer because the engines require a longer time to keep them warmed up. More new on road appliance equipment. I told you about the electric cranes, the automatic shut-offs, we have the plug in, locomotive and we are also testing LNG hustlers, the little truck that hauls the boxes around. We now have a train in our terminals. It is a train instead of one truck per box, there is a bunch of cars that you put a bunch of boxes on and pull it around.

We have fixed reefer receptacles instead of utilizing the generators that come with the reefers, plug them in. We are investigating a number of other emission options for carriers. One of the things we talked about a couple years ago was a vessel reduction program. Bill I think was running that program and for whatever reason it kind of fell by the wayside and I think the primary reason is because we were already going slow in the port. We were going to reduce to twelve knots and we said wait a minute, we are only going fourteen at most. Of course you got some things that

can't go twelve knots because they have a dead slow issue and, of course, we have a Killvan Cut which is one of the dangerous channels on the east coast. We don't want to knock down that bridge that I don't like.

In any case, we are going to reopen that discussion and I talked to Bill a couple weeks ago because we have an opportunity to slow the vessels down from outside of Ambrose Light all the way into Verrazano Bridge. The average speed is actually only fourteen knots. Even if we knock off a couple knots off that, it may be helpful. The downside to that is you slow the vessel down, it is in the water longer so that's the other issue. I am talking about air emissions itself out there for another twenty minutes or another hour. So we are looking at that. We are looking at alternative fuels at birth. We will see where we go with that. We have done a couple studies to help us.

One of the things was to determine the pollution cost of reduced port operations. Before you decided that you wanted to regulate us out of business and start moving those boxes somewhere else so we brought in Moffit and

Nickel. We had them take a look at that and it turned the environmental cost and infrastructure cost of the State of New Jersey on an annual basis would be about 1.2 billion dollars if we moved all that cargo through Norfolk, Washington, somewhere else. So we have to keep that in mind. Whatever it is that we do, we have got to look at the unintended consequences.

We also just recently took an analysis of our carbon footprint just to give us a baseline of where we are going. We are going to continue to work on that, but if somebody wants to know what those numbers are, I will be happy to give them to them.

I also note for the record that EPA has established new emission standards for locomotives, marine engines other than ours. A number of other pieces of equipment out there. We think that is a good first step. We think that even more importantly is the second step that occurred last week and that was the IMO, the International Maritime Organization's environmental committee which adopted new standards for engines and fuels for all of our international vessels. So we are hoping that

the IMO if EPA buys into those standards, I am no scientist, I can't tell whether EPA wants it or not. We have been pushing for EPA and folks on the West Coast and World Shipping Council which is all the carriers to get these standards in place and if EPA signs off on them, we hope the IMO will adopt them in October. That is what we are wishing for.

As the Governor said on more than one occasion the port is a major economic engine in New Jersey. We create more than twenty billion in economic activity. We support more than two hundred thirty thousand jobs. We deliver prosperity to our region's citizens. Today I saw an article in the Journal of Commerce, Port of LA and Long Beach that complex lost cargo last year. Wasn't much, but a hundred thousand boxes because guess what, because of that they are going to lose seventeen thousand eight hundred warehouse jobs.

So that is how critical these operations are and I hope that you will take those into consideration when you make your recommendations because we live here too and we are as concerned about the environment as you

all. That completes my comments.

Thank you.

MR. EGENTON: Thank you very much, Frank, appreciate it.

All right, this is the part where we have got a couple of public speakers signed up and I would encourage anyone that is interested in commenting, as I said at the beginning of this hearing, the written comment period will remain open for roughly another month.

With respect to the Council members here, we have five to six individuals signed up so I am going to recognize them and, again, as I said, if anybody wants to be duly noted, please submit written comments electronically to the Department on Clean Air Council website and with that we are going to call up Bob Belzer and Bob is the president of the New Jersey coalition against aircraft noise.

MR. BELZER: Hi, I'm Robert Belzer. I appreciate the opportunity to present comments to the Council. Just a brief introduction. We are principally a grass roots organization in the northern New Jersey area.

As our title indicates, our primary objective is reducing aircraft noise, however, we also have emissions or airport emissions positions which principally concentrates on capping emissions at the airport or an airport bubble concept.

My comments are broken into two parts. A two part first comment and a second comment specifically on the excess idling time at the airport facilities. Part one is what I believe is to introduce a formal framework and this would also be relevant to the port. Let's get a formal framework on the board, in other words, establish an emissions inventory with the current inventory projected five-year and a projected ten-year inventory.

Then the second part of this is to establish emissions caps at the airport and seaports and then we have heard a number of emission reduction strategies here today. The key question is are these strategies going to reduce the aggregate level of emissions at these facilities because as we all know, the Port Authority and the various industries and regulatory agencies that are running the airports and the seaports are actively engaged

in increasing volume or capacity at these airports. I am assuming the port terminal facility as well. I am less familiar with that so the rest of my comments will concentrate on the airports.

It's a pretty good study that I included in my comments the Internet link to it, controlling air pollution. This essentially provides a framework for what I just outlined in my initial comments here. As I mentioned, the Port Authority is actively engrained in expanding airport capacity. They recently concluded a task force with seventy-seven recommendations. A week later the FAA concluded its New York aviation will make a committee task force with seventy-seven recommendations.

These recommendations are very clear that they are interested in expanding the capacity so with more volume are more emissions. Do all these strategies that we heard about offset the increase in volume at these facilities and I think that's the key issue that the Council -- one of the key issues I'd like to see the Council address. Recently, this is a pretty good example of how the FAA conducts its

activities. It completed the New York airspace redesign project. Here's the draft report for that here. They concluded that very clear capacity increasing activity. They concluded that it is not going to increase capacity. We have numerous documents that suggest otherwise. They are very actively trying to increase capacity. The USEPA didn't buy the FAA conclusion and neither did we and both of these are in the public comments on the record here that they are actively engaged in increasing capacity and they are not taking appropriate mitigation measures to offset the increase in volume.

Just finally, the last issue that I'd like to bring up is the excess idling time. There is an excellent report out by the New York comptrollers office. Idling time in New York airport is twenty-nine minutes. The national average is sixteen. That is approximately eighty percent higher than the national average. It is up by five minutes since 2003. What is driving this is the overuse of the facility, in other words, air carriers are over scheduling operations. FAA recently put in a cap at Newark

that will go into effect next month of eighty-three operations per hour which attempts to address the delay situation. I am not aware of the FAA looking at the idling situation. I'd like, you know, the Clean Air Council to look at this issue. Will this eighty-three caps an hour reduce the idling time at the airport. Also, what is a feasible idling time at the airport. The comptrollers report highlights the excessive volatile organic compounds that are a result of the excess idling time and with that if there is any questions, I would be happy to take them.

MR. EGENTON: Thank you, Bob.

Again, in the interest of time, if there is further follow up, please supply the department with your e-mail address and we will have the counsel members reach out.

MR. BELZER: I'll send you an e-mail.

MR. EGENTON: I'm sorry, there is one question.

MR. BIELORY: Air quality in the past, where have you addressed this specifically, does it go to the Department of Health or to the NJDEP?

MR. BELZER: I was with Wilbur McNeil and we were presented the DEP reduction workshop and I introduced this report at that workshop so the DEP has had several years.

MR. BIELORY: Who is responsible for noise?

MR. BELZER: Who is responsible for noise where?

MR. BIELORY: At an airport, the Port Authority is the principal. What department in the state does that, do you have to report that?

MR. BELZER: Jerry, do you have an answer to that, Jerry Fader with my group.

MR. FADER: The NJDEP abolished I guess having any formal paid organization responsible for noise. There is a Noise Control Council that met yesterday to deal with some of the noise regulations in the state and a lot of enforcement is off-loaded towards the counties and municipalities.

MR. BIELORY: So there is no state agency that oversees noise?

MR. FADER: To the extent the New Jersey Department of Environmental Protection

does provide some support to the continued operation of the Noise Control Council, but as far as I know there is no formal funding.

MR. BIELORY: Not funding, just any legislator any administrative executive component, does noise quality get reported? I have been told it is a local issue.

MR. EGENTON: Thank you, Mr. Belzer.

Is Carol Skiba in the audience? I know she might have had a problem getting here. We are going to skip over her.

Next up is Carrie Sargeant, she's the environmental director with the Heart of Camden.

MS. SARGEANT: Good afternoon. Thank you for letting me speak. The Heart of Camden is a non-profit community development corporation based in south of Camden City. Our community lies directly between both terminals of the South Jersey Port Corporation to the north is the Becket Street Terminal and is on the south is the Broadway Street Terminal, the waterfront south is a recognized environmental justice community by the DEP.

What we are doing is we are trying to work to make the neighborhood a healthy place to live and work. We would like to recognize the current work taking place, direct vehicles and equipment at the port made possible by funding by the DEP. In addition, we would like to acknowledge as they had mentioned earlier the cooperation of the board and the Heart of Camden and planting a landscaped berm that is acting as a particulate matter catchment system between the industry and the neighborhood residents and we feel this type of collaboration between the port and the local community is something that is needed in moving forward to green both the port and the local community.

In Camden we are concerned about particulate matter which can trigger asthma and as we heard earlier impaired lung development in children and cancer. There are four hundred trips per year visiting both terminals of South Jersey Port and we appreciate the DEP's support of federal regulations controlling import emissions and we'd like to see it continued. We don't have numbers on emissions by the ships at the port. There was an air toxic project done

for our community and in that project the emissions from the ships and from the port in general were not modeled so we don't have numbers on that so we don't know what an improvement would be so something would be good as Jay didn't have the numbers either we could maybe get those numbers so we can find out where we are and where we can go.

Our concern, however, is not simply over the port in our neighborhood, but with the ships at birth and operations on the Philadelphia side of the Delaware River. We would like to encourage the Council to recommend to the DEP to incorporate interstate collaboration to improve air quality at the port so that after it is on our side of the river is neglected on what is going on the Philadelphia side. We are directly across wind from Philadelphia.

In our neighborhood, of one square mile and seventeen hundred residents, there are indications that impact from diesel emissions are significant. Aside from the port we have a county sewerage treatment plant. We have a trash to steam incinerator. We have two EPA

Superfund sites. We have twenty-eight DEP known contaminated sites. So working with the port is just one issue that we are contending with.

So from the port alone and from other industries back in 2003 there were counted to be over seventy thousand truck trips per year generated by the port in industry containers and that Saint Lawrence cement. So that number might be different now since as Jay said they actually put the crane down at Saint Lawrence, but still the numbers would be high. The direct emissions from the truck traffic at the port were not modeled in air toxic study. The direct trucks emissions that is difficult to quantify as I understand so that would be something that we'd like to get a handle on. Maybe the DEP could recommend a DEP get a handle on that as well and due to the segregation of the port terminals, there are truck traffic between the terminals through the residential core of the neighborhood. There are problems with trucks waiting to get in to the terminal and enforcement of the anti-idling regulation is a problem.

We would like to encourage the

exploration of options to address truck traffic into the port such as a staging area within the terminal, control idling or mechanism for the port to enforce upholding idling rules or regulations of drivers accessing its facility. I think the port of Camden hasn't had the same development in terms of from what I've heard today as the northern ports of the straight.

So that's it, thank you for your time.

MR. EGENTON: Thank you, Carrie, appreciate you coming here today.

Wilbur McNeil, I see you are here, Wilbur. Now, I am not going to do -- how do you pronounce the park association.

MR. McNEIL: Weequahic.

MR. EGENTON: Good to have you here.

MR. McNEIL: Thanks for inviting me. My name is Wilbur McNeil. I am president of Weequahic Park Association. Grass roots organization. Our goal is to make Weequahic Park a designed park, one of the best in the land. We are located in the proximity of Newark Airport so sessions like this are critical.

I've spoken before you before much to the same issues.

My concern is the air quality in and around historic Weequahic Park in Newark, New Jersey. Weequahic Park is in proximity of the Newark International Liberty Airport so the problem of harmful air is magnified. One of the earlier speakers they had a listing of things the economy, the environment, efficiency and equity. We start at equity at the top, that is what we be looking for. We be looking for equity at the top of our goals. Is there anyone in the Clean Air Council who represents the Newark district?

MR. EGENTON: Dr. Bielory does. His facility is U.M.D.N.J.

MR. McNEIL: Because I asked the question the last time. If I come to these meetings, I rarely see any of the elected officials from Newark or the Newark vicinity and Newark is most critical in terms of air quality. We have probably the worst in the state. I know they showed charts and they had Teterboro up here and they used comparison and they didn't have a comparison from Newark. They had

Elizabeth included. They are next-door to each other.

MR. EGENTON: I advise you that Dr. Bielory is well renowned in the state. As a matter of fact, when I am driving into work in the morning, I constantly hear him on 101.5 regarding his asthma reports and such so I know nice little plug for you so hopefully the two of you can get together.

MR. BIELORY: What medication are you on.

DR. BLANDO: Certainly we should emphasize you mentioned about officials from Newark. Our monthly meetings are open to anyone to attend. We, of course, meet. If someone from the officials office in Newark wanted to come to one of our meetings, they certainly could.

MR. McNEIL: I realize that because I have been to your meetings at the College of Medicine and Dentistry and at the airport and it was same results. There were no elected officials or appointed officials at any of those meetings.

DR. BLANDO: But they can always

come.

MR. McNEIL: I know it is an open invitation. The particulate emerging from the aircraft emissions have created a real nightmare for the residents of our community and we have a good doctor up there so he should be able to attest to that. How many suffer from emphysema and other respiratory illness. Tragically, the incidents of asthma among children is soaring.

The airline at Newark Airport continues to operate with impunity while poisoning the air quality ignoring the fatalities. This results in absence of none or no nonsense watchdog agency. If we have a person from Newark to be looking at those things, I am sure any test you take about emissions, Newark will be at the top of the list. Any kind of emission or any kind of illness from infant mortality to AIDS, you will find that the people in our community in the ninety-five percent. So we need all those voices that have some kind of expertise in that area to speak up for the residents because I also mention that the airport has a license to kill. They are James Bonds of our era. They

take out more people in our community than traffic accidents and homicides combined. Homicides get a lot of play, but the emissions from those pollutants are killing more people and that is a matter of record.

In the state of operation, Newark Airport imposes an alarming rate of danger to human health, in particular the residents of Newark all while enjoying tax exempted status which results in the Authority of New Jersey and New York amass in billions of revenues. I heard a staggering figure of over twenty billion in revenues coming into the port just here today.

Perhaps one of the cruelest facts of all is that additional flights are planned at Newark Airport in the absence of any air quality concerns without efforts to reduce air contamination which will blanket this area combined with already the situation of the port traffic. I would say that the problem with the development on the greenfields or any other new development in Newark they are planning to expand the Newark warehouses and they expand to put warehouses on brownfields and we were to anchor institution for that area, we would to

anchor institution in the area and time and time again they come in with plans and ask the community what they want. The last time we had community hearings, they came in with concept plans and they had warehouse and we found out that they didn't do the air quality testing for the aquifer, the ground water and that was one of the options and they were going to encapsulate that warehouse, but the cruelest cut of all in that concept they put two basketball courts next to the warehouse for the community. That is what we do, we play basketball, but that's what happens time and time again. They bring in a community concept and they want to give the community any funds to put their dreams or their concepts on the table. They ask us what do you want and then they want to add onto what they have already planned. That is something that cannot work.

The Weequahic Park Association that I represent has been designated by the City of Newark as an anchor institution both for empowerment zone and enterprise zone, identified as area 4802 extends out by the airports.

We had two meetings and during

those meetings we didn't receive any funding for organizing those meetings. The city came in and they had paid somebody to organize it, but we hosted those meetings.

MR. EGENTON: Mr. McNeil, three minute warning here.

MR. McNEIL: I will wrap it up. The concept plans were not acceptable to us because of the things I mentioned previously, but what we would like, the bottom line we would like air an study done in our community. There was one done in Elizabeth, but we would like one done in our area over a reasonable period. We'd like to have those public hearings in terms of brownfield development. We would like the public and schools and private homes to be soundproof.

I read in one of the reports that if they sued in Morris County in Morristown, they would soundproof some of the homes down there, but they had to institute a suit first and already they have soundproofed some of the schools in Newark. How did that come to that determination to report the soundproof some schools and not soundproof others. We certainly

would like those schools in the flight patterns of those areas soundproofed. We certainly know that the vegetation in our park has been damaged and that is not no scientific study, but we can look at vegetation and trees and things that they have been affected by the contaminants coming from those jet fumes that fly over our park. We would like an assessment of the damage done and you can make a comparison of the trees and the bushes in our area and then areas along, but you need money to do those studies and we would like that because our bushes and trees has a dollar figure on it and we believe that the airport is part and parcel cause of the dying trees and the vegetation in our park.

We would like also in New York they had the kids with asthma walk around with these backpacks on the kids with asthma and they monitored those kids over a period. We would like that done in our community. As an anchor institution to two developments, the Weequahic Park Association accepts and is determined to fulfill the role as the monitor advocates for the people of our community where negative environmental factors threaten. That is

basically my reaction. I want to thank you for having me.

MR. EGENTON: Thank you, sir, appreciate you coming down from Newark today.

All right, just checking I know he was here earlier. Is Bill Wolf still in the audience or did he leave. I did see him and he wanted to make a few comments. So all right, Bill's not responding.

Our last scheduled public speaker is none other than every year it's Jeff Tittle.

MR. TITTLE: I also forget about it.

MR. EGENTON: Mike is the director of the New Jersey Sierra Club. Prior to accepting directorship of the Sierra Club, Jeff founded numerous other grass roots environmental organizations in New Jersey including the Highlands Coalition and he still serves on the boards. Many of you know that Jeff is a very vocal advocate for the environment and many of us have enjoyed some of his quotes over the years in the paper and the media. His current priority is working to keep our parks open under these difficult budget cuts and, Jeff, obviously

thanks for joining us today and we always look forward to your closing remarks.

MR. TITTLE: Thank you, Michael, maybe some people want to speak afterward, but I just wanted to start off and say that we see the ports and the airport not only from an environmental perspective, but it is a major part of the economic engine that drives our state.

Quite frankly, there is not a conflict between the environment and economic growth for ports. There is currently, because there is a mismatch between how we manage our ports and airport and how we deal with the environment and when we look at those communities that are directly around the ports and airports, citizens there for certain chemicals like benzene and toluene some of the other volatile organics are basically having their community levels that are not acceptable. Eighteen hundred times what is considered the safe health base standard for certain air toxins especially those two I just mentioned.

You also have tremendous problems with grand level ozone and particulates. There

is really a way to keep our ports going and growing at the same time using the economic vitality reports to help clean up our environments. The Sierra Club is very active. I know you heard a speaker earlier today talk about what is going on in Los Angeles. We have a full-time staff person with the ports of Los Angeles and part of the vision task for when we started out with a lawsuit from the Sierra Club and the other groups because of the implications in the LA port area, not just air quality, but also environmental justice and a whole bunch of things. California is moving forward, but it got prodded to do so. So hopefully you guys could help prod this administration and our Port Authority to move forward in a lot quicker and better ways for helping our ports.

I think the first area I just wanted to talk about is the whole concept of access to and from the ports where we see the off-loading of our containers and ships coming in trucking fifty miles down the Turnpike to Jamesburg or even further south down to Washington Township and then getting broken out to distribute and extend back north and other

places from there.

As we are doing it, we are passing miles of brownfields, underutilized sites closer to the ports even next to the ports that cannot only be easier to drop off, but serviced by rail. I think that is one of the biggest problems that we face. That our distribution system is not connected to our ports. I think another problem that we see, I will use the example of the failure of state and the region to look more reasonably the ocean terminal site in Bayonne by the federal government would make sense for a container port. It is a deep water port. You won't have to raise the Bayonne Bridge. It's deep enough where we dredge it, you can bring in any size ship and is big enough that you can go from container to rail right there.

One of the problems we face at Newark in particular is that the older channels and the warehouses there are so close, it is almost impossible to go from container to rail so we off load it onto trucks and we ship them down the Turnpike past plenty of other sites creating a tremendous waste of fuel and air

quality problems for the region.

So one of the things that we are part of with the Coalition for Healthy Ports here is where we are as part of the coalition for safety ports in the West Coast that we have to deal with trucks. We have to have enforced the idling, electric hook-ups in the wintertime, cleaner fuels and a whole safe and clean truck program to be part of this. We also ought to be looking at rail alternatives and one of the issues I will again bring up besides moving is to have the warehouses closer. There is a rail line that runs from Carteret down to New Brunswick and ends there. We are talking about widening the Turnpike for more trucks. We can also talk about extending that rail line down to Jamesburg and even down to Washington Township so we can have freight as well so we can use the freight system and run electric diesel versus running dirty trucks.

I think there is a lot of things we could do. Even how we manage the containers on-site. Most containers come in a week, even less. We have no place to put them. Putting all over North Jersey to find a way to fund

them. There is better systems to manage containers. They basically a stackable system that uses electric cranes where you can actually on a thirty acre parcel maintain and access container and this thirty acre parcel that you would do on a three hundred acre parcel normally. It uses a lot less energy and a lot less pollution, but it is a better management system. Those are the kinds of things we should be doing.

Right now it is mostly jobbers coming in and out instead of having a rationale system through trucking firms that can actually have the trucking coming in in sync with the ships coming in which we don't do now. That is why there is so many delays and pollution, but people are stuck there for hours if not days sometimes. So better management of our ports would do a lot for air quality. Better fuels not only for trucks, but for vehicles that are off road to the ports themselves.

We can use our ports and our warehouses. It is there as well to promote clean energy by doing green roots and solar roots and things like that to mitigate for

pollution problems we get from our ports. There are so many other things, potential things that are out there, we just have to think a little more outside the box. But we also have to think about the communities around them.

As part of growth in our ports and airports we need to develop a system of mitigation and pollution offsets for the communities around there that is getting the disproportionate impact of pollution. Things as simple as planting trees and having buffers and health studies and health department to help those communities adapt or deal with the pollution that they are impacted with, but more perfectly is to develop strategies to help lower the pollution overall.

There are power plants in the same areas that could be switched from coal to natural gas to help lower overall pollution for that reason and, therefore, a lower ports to grow without having the same kind of impact to the public. There is other things that we should be looking at. We shouldn't just look at the port by itself. Look at the region where can we get reduction so the ports grow and not

get this the kind of bubble of pushing more and more toxins in our communities.

Quite frankly, there is a tremendous amount of resource there and we need to try to tap into it as we have done in some of the other problems with the port with the dredging. We are looking at doing wetlands restoration, buying open space. We take that same kind of energy and look at our ports and dealing with pollution from air as well as trying to help the communities around it and not be a problem to the communities.

Again, I will use another good example of end cap site, old landfill five miles from the port to be served by electric diesel. Instead we want to build condos. A garbage dump would be a great place for a warehouse an distribution. Conrail main line right there as well as the Turnpike so, again, I think we need to look at regional planning in the way of making our ports better because as we do that we will actually help air quality overall.

So there is a disconnect between what happens at the ports, what happens in the region around the ports and the rest of New

Jersey. We need to keep our ports growing, but need to do it in a way that's green and deal with the pollution problems that come from it.

Thank you.

MR. EGENTON: Thanks, Jeff, I appreciate it.

Before we formally close this portion of the public hearing, as I said and I will say again, the written comment period is open for another month and we welcome those comments.

I do want to acknowledge my fellow Council members, particularly the ones that helped put this hearing together today, Chairman Blando, Toby Hanna, John Maxwell. What did you do with Jorge Berkowitz, he left and, of course, the other Council members that stayed here today, Dr. Bielory, Dr. Zhang, Joe Constance, Ferdows, Pam, really appreciate all your support and work.

The intent here is for the Council to convene for the next two months and we will give a recommendation, consideration here today and we will discuss it amongst ourselves and there will be a report issued at our July

meeting to the Commissioners and possibly at that event in New York that the EPA is putting together. So we will keep people in time of where that venue will be, but appreciate everyone hanging in there and we will take everything into consideration.

So I will formally make a motion to adjourn.

DR. BLANDO: Second.

MR. EGENTON: All those in favor.

(Whereupon, everyone voted in favor.)

MR. EGENTON: Thank you very much folks.

(Whereupon, the proceedings were concluded at 3:45 p.m.)

C E R T I F I C A T E

I, ANTHONY HOFMANN, a Certified Court Reporter, and Notary Public within and for the State of New Jersey, certify that the foregoing is a true and accurate transcript of the stenographic notes of said witness(es)who were first duly sworn by me, on the date and place hereinbefore set forth.

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ANTHONY HOFMANN, C.C.R.

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