Public Hearing

before

ASSEMBLY ENVIRONMENT, SCIENCE AND TECHNOLOGY COMMITTEE

and

ASSEMBLY HEALTH COMMITTEE

"The public health effects of emissions from diesel trucks and buses"

LOCATION: Middlesex County College
Edison, New Jersey

DATE: August 8, 1996
2:00 p.m.

MEMBERS OF ENVIRONMENT, SCIENCE AND TECHNOLOGY COMMITTEE PRESENT:

Assemblyman Steven J. Corodemus, Chairman
Assemblyman John E. Rooney, Vice-Chairman
Assemblywoman Barbara W. Wright
Assemblyman Reed Gusciora

MEMBERS OF HEALTH COMMITTEE PRESENT:

Assemblywoman Charlotte Vandervalk, Chairwoman
Assemblyman Francis J. Blee
Assemblywoman Barbara W. Wright
Assemblywoman Loretta Weinberg

ALSO PRESENT:

Jeffrey T. Climpson
David Price
Office of Legislative Services
Aides to the Committees

Hearing Recorded and Transcribed by
The Office of Legislative Services, Public Information Office,
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ASSEMBLYMAN STEVEN J. CORODEMUS (Chairman, Assembly Environment, Science and Technology Committee): I'd like to call to order the Joint Committee Hearing of the Assembly Committee of Health and the Assembly Environment, Science and Technology Committee.

It's a pleasure to have Assemblywoman Charlotte Vandervalk, Chairwoman of the Assembly Health Committee, here, with her Committee members. I'd like to welcome my Committee members and everyone here who came out on this beautiful summer afternoon to speak to us about an issue of great importance, and that is, specifically, the clean air compliance and health consequences of diesel particulates to the residents of the State of New Jersey.

This hearing comes on the heels of an Environment, Science and Technology Hearing, perhaps 10 days ago, not far from here in the town of Sayreville where we spoke specifically about clean air compliance. One of the underlying facts that came out of that hearing was that a significant amount of the contaminants -- air contaminants -- that New Jersey will be responsible for compliance comes largely from out of state, from the south, and from the west from prevailing winds. That is not to say that we do not have our own dirty air generators here in the State of New Jersey, but this is a problem that has to be looked at on a statewide and also a regional basis.

Here today, we have various witnesses from the public and private sector, many representatives from the administrative departments, as well as those who are primarily responsible for this and concerned about this as their own industry representatives. With that, I'd like to welcome Assemblywoman Vandervalk for being here with us today and ask her for her comments.

ASSEMBLYWOMAN CHARLOTTE VANDERVALK (Chairwoman, Assembly Health Committee): Thank you, Assemblyman.

I, also, am pleased to see people sitting out there that are interested in this topic as we are. As a matter of fact, the diesel emissions cause a great deal of concern with the average citizen. Because when they see that we're trying to clean up the air and we have all these requirements for automobiles -- talking about pollutants that you can't even see with the naked eye -- they always question me why isn't something done about the black smoke that is pouring out of vehicles. It's a great concern, and it seems to me, it seems to them that it's very obvious that we do something about it. Up until a year ago until that legislation was passed, there really wasn't anything that was really happening to control those emissions.

So, hopefully, this will start to make some sense of the system, and we want to be sure that we are moving forward as quickly as we can.

Thank you.

ASSEMBLYMAN CORODEMUS: Are there any comments from the other Committee members? (no response)

Thank you.

We have, in addition to the State department representatives-- We have perhaps a dozen citizens and representatives from various groups that are here to testify. If you could please keep your statements short. If you have written statements that you'd like to supply in text, you could just touch on the highlights. After the representatives from the various State departments testify, we will open the panel for questions to the department, to the various

departments, and then we'll hear from the citizens and other representative groups to testify before the panel.

With that, I'd like to invite Scott Allocco and Michael Berry from the Department of Health to testify. We're going to put everybody on the stage here. The purpose of that is to keep our amplification and recording. There is a transcript being made of this hearing and will be available to the public.

Welcome.

S C O T T A L L O C C O: Thank you very much.

Mr. Chairman, my name is Scott Allocco, Director of Government Affairs of the Department of Health. I wanted to introduce Mike Berry, one of our researchers who's very familiar with clean air issues.

Is my microphone on?

ASSEMBLYMAN CORODEMUS: I think the center one is the amplifier, so perhaps you pull that closer to you.

MR. ALLOCCO: He will be providing testimony on behalf of the Department for us today, and I'd like to turn over the stage to him.

M I C H A E L B E R R Y: Thank you.

Good afternoon. My name is Michael Berry. I am a research scientist with the New Jersey Department of Health and Senior Services. I am also the Chairperson for the New Jersey Clean Air Council, an advisory body to the Commissioner of the Department of Environmental Protection, which was established by State air pollution law to provide counsel on air pollution issues. Thank you for the opportunity to address this important public health issue.

Exhaust from diesel vehicles is a complex mixture of many different chemicals. In considering the potential health effects arising from exposure to diesel exhaust, it is helpful to view the exhaust as being composed of two phases: gaseous and particulate. The gaseous phase of diesel exhaust is composed of carbon monoxide, oxides of sulfur and nitrogen, and unburned or partially burned hydrocarbons.

Diesel engines also emit particles in the amount of 50 to 80 times greater than gasoline vehicles. These particles are small in size, easily inhaled, and contain a myriad of different chemicals adsorbed on their surfaces that typically represent 15 percent to 65 percent of the mass of the particles. The remainder of the particles are made of carbonaceous material. One group of chemicals found on diesel particulates are polynuclear aromatic hydrocarbons, also called PAHs. They are made up of a number of different chemicals including benzo(*a*)pyrene, anthracene, and fluoranthracene. The importance of these PAH compounds is their potential toxicological significance which have been identified in diesel exhaust emissions. Many of the species of PAHs listed -- that I've mentioned before -- have been demonstrated to be carcinogenic or cocarcinogenic.

Epidemiological studies have reported associations between particulate air pollution and respiratory disease. Early studies focused on severe air pollution episodes, events where the air pollution levels were thought to be far above the considered safe limit. Although few data were available regarding concentrations of air pollutants during these episodes, large increases in sickness and death demonstrated severe health effects of air pollution.

By the 1970s, a link between respiratory disease and particulate air pollution had been well established. The leading scientific view was that particulate air pollution at high levels pose hazards to human health, but that the health effects of particulate pollution at lower concentrations, such as those commonly found in much of the United States, could not be disentangled from health effects of other factors. It was this scientific evidence that led the United States Environmental Protection Agency to establish the National Ambient Air Quality Standard for total suspended particulates.

An opposing scientific view contended that the weight of scientific evidence supported the belief that particulate pollution may adversely affect human health at relatively low concentrations. They argued that the smaller, inhalable particulates are a more significant health risk for humans than the larger particles. In 1987, concern over the inhalable fraction of particulate matter led the EPA to replace the total suspended particulate standard with the PM10 standard, particles measuring 10 microns or less in size.

Since the late 1980s, a substantial body of contemporary epidemiologic research has evaluated the health effects of particulate air pollution, especially the very fine particulate fraction, at concentrations that are common in the United States and in metropolitan areas around the world. From this research, the accumulated knowledge of the observed health effects due to respirable particulate pollution include increased incidence of respiratory symptoms, decreased lung function, increased hospitalizations and other health care visits for cardiopulmonary disease, increased respiratory morbidity as measured by absenteeism from work and school, and increased cardiopulmonary disease mortality.

Because of the increasing understanding of the importance of the relationship of the very fine particulate fraction to human health, the EPA is again in the process of reevaluating the health standard for particulates. EPA has issued a preproposal which is under review by our Department.

In conclusion, I would like to give my colleagues at DEP and DMV an opportunity to discuss the measures they are taking to address this important public health issue.

Thank you.

MR. ALLOCCO: Mr. Chairman, what I'd like to suggest is that I step aside and Michael stay. Then, the other two representatives from the departments could come up, present their testimony, and then you could ask questions to all three.

ASSEMBLYMAN CORODEMUS: Sure. Okay.

MR. ALLOCCO: Thank you.

ASSEMBLYMAN CORODEMUS: Thank you.

Welcome.

J O H N C. E L S T O N: Thank you, Mr. Chairman.

My name is John Elston. I'm with the Department of Environmental Protection, and this is Steve Robbins, who will present testimony after myself for the Department of Transportation.

As you remember, last week I was here as well. Cathy Cowan, Assistant Commissioner, gave testimony, and she used some large-print overhead-type material. I think I will try to do the same if that is okay with you. I also wanted to indicate that I have a handout, a pamphlet on the air in New Jersey. Okay. These are-- We put one of these out every year. It shows

the air quality in the State of New Jersey for the previous year. This is, even though it's printed in 1996, it's for the air quality in 1995.

If I may issue a plug, there's an insert in here which is color coded, and on NJN, *New Jersey News*, every night at 6:00 they have a map which shows the air quality which tends to show the day we actually transmit the data from the field directly into the computer at *New Jersey News*. Then it's printed on a map scale, a map which then shows the air quality. We provide this for people who may have some problems with ozone, and they can read this at their leisure and take appropriate action. So with that little plug for both DEP and *New Jersey News*, I'll proceed.

What I would like to do is spend a few minutes on examination of a report that came out in May sponsored by the Natural Resource Defense Council, and there's an abridged version of that you have as well. The full report looks like this. It's called *Breath-Taking*. It came out -- you might have remembered that in the news -- and it said something like 63,000 excess deaths a year. And I thought we'd probably give you just a little briefing of what that report actually says. It's a very good report, we believe, because it does collaborate some of the work that has been going on over the years and is now before us.

I would also like to indicate that there is two ways to look at particulate matters: particulates, particulate matter. This is, in the common language, smoke, soot, and particulates. And you can define it by the size as-- particulates are PM10, for example, as opposed to PM2.5, or we could also define it as by composition, composition being what is on the particle, what is it made of, is it cancer causing, is it just a nuisance, or what is it. And as Mike

indicated a few minutes ago that the variability in these is much. He mentioned PAHs, polycyclic-armanic-hydrocarbons.

It's interesting to note that in the news yesterday that this was the molecule that was found on the meteorite from Mars. It has implications-- I don't know about the implications on Mars, but -- for life on Mars -- but it's found in diesel exhaust. It's a potential carcinogenic, and certainly it reacts, therefore, with living cells and bacteria as well. That's why this excitement was about this meteorite that was found on Mars. It's formed in combination both in exhaust because of the temperature and because of its complexity. Someone asked me this morning, when I found this out, whether Martians drive diesels. I'm not going to answer that question.

Essentially, the report is based on associations that we have. And by associations, it means epidemiology studies. These are studies where you take many, many thousands of people and look at the data, and we say, were they inpatients during high-particulate days or they not? This is the basis for the NRD study. It's based on epidemiology, not cause-and-effect studies. Cause-and-effect studies like ozone, when you expose a person to ozone and they breathe it, there's a reaction. It's a direct cause and effect. Particulates is more of an association. I'm not meaning to ridicule or-- Epidemiology studies are just as important as cause-and-effect studies, which are more toxicology oriented.

The NRD study quoted a Harvard six-city study and American Cancer Society study linking-- The American Cancer Society linked air pollution data from over 151 metropolitan areas and found that there was a 17

percent greater risk on high-particulate days versus low-particulate days, a very statistical significant number.

The data also broke this out by MSAs, metropolitan statistical areas. That's the handout that you have in front of you. New Jersey ranks in the upper third of the 151 statistical areas that were so analyzed according to this. So if we use the basis for the NRD study, we can say that New Jersey ranks in the upper third, or the worst third, of that as far as particulate matter goes.

I also mention that this individual study did not look at specific particles, nor did it look at carcinogenic activity. Thus, we believe the overall figures cited in that report on mortality and morbidity are probably conservative, and they could be worse than actually was displayed on that.

I'd like to now turn to the -- what Mike had talked a little bit about, what it means in New Jersey. He indicated that the particulate matter standard is now set at a 10-micron size, a fairly small molecule. In the handout there's map that looks somewhat like this, on Page 3 I believe. In it, it shows that the dirty areas of the nation -- you'll see that New Jersey is not one of them. So we have a dichotomy here. We have an issue by which the current standard--

You have it there, it's on Page 4 of the document. Okay, I see you have it now.

ASSEMBLYMAN ROONEY: Too many documents.

MR. ELSTON: Too many documents, okay.

But this is the current situation, that we do not need a State implementation plan. There is not a program to reduce particulate emissions

in New Jersey, nor do we need one today, because quite frankly, we are in a compliance with the PM10 standard. Now, where you look at this, you'll see that most of the noncomplying states are in the West cause they're susceptible to the dust -- the windblown dust and other type of particles. Also in the Northwest, it's smoke, lumber, smoke in various other areas. In the Midwest, which is steel mills essentially, steel refining mills like that. In the East, we do not have that.

To put that in the framework, let's go to the very next page on Page 5 where you see two maps. This is the NRDC report. It shows that when -- the top map is that -- when you monitor for particulates using the PM10, the squares show the relative levels across the nation. The bigger the square, the higher the number of particulates. And again, the East and particularly Northeast is very low, and the Midwest is somewhat higher, and the far West, particularly in California, is very large.

But the health effects are on the bottom map. This is what NRDC is, and these are what is attributed to particulates. So we have as a mismatch between what the particles are we're monitoring and what the EPA nonattainment is saying to what actually the effect on human health is happening. That's the bottom-- That's what NRDC is saying, what this bottom figure would look like. And that is the reason why EPA is about to change its standards and to look for a more accurate type of standard.

Essentially, what we're saying and what EPA has said is that they have found that the number of studies has shown increased mortality among both the elderly individuals with preexisting respiratory cardiovascular disease. Also EPA found that the particulates aggravate -- the aggravation of the

respiratory and cardiovascular disease, particularly among children. They've emphasized where they've monitored hospital emissions, school absences, work-loss days, and restricted activity days. There is also an effect on lung functions, particularly the fine particulates which reach into and deeper into -- and deposit deep into the lungs.

And finally the last major bullet is that the risk assessments have shown that there is not a threshold. As you reduce the amount of particulates in the air, there are fewer and fewer people susceptible to those, yes, but there's always-- There's no risk threshold which means, if you get lower and lower, there's still someone susceptible to it. So there is no one -- what we call -- bright line that we can say below this level the public is safe.

What this does is that it creates a dilemma, a judgment that government has to do, and the EPA is in the throngs of doing right now is drawing this line, who to spare and who not to spare, so to speak, from this issue.

I might also say that particulates have another effect, and that's an effect on welfare. This is visibility. Is less important maybe in New Jersey than in other states of the nation, but the visibility aspect is very important nonetheless. It's the brown haze that you see in the mornings and late in the evenings, and the white that you -- on high-humidity days.

On Page 7, we bring out a summary of the welfare effects. And on high-humidity days like, for example, yesterday, particles actually grow in size when they absorb water -- the sulfate. They form this white haze that you're familiar with on hot, humid days. It's-- The particles are the beginning of the process of where our visibility problems lie. And when we get to, for example,

in California, where you can't see your mountain range from your house, property values have been shown to drastically decrease in areas. So there's actually a property value issue that is not described necessarily with public health, but it's certainly part of the economy that we must view.

Currently, the levels that we have, have been set in 1987, as Mike brought out earlier. And I want to jump now to where they may lie in the future if I can. It's very likely that we will retain the particle matter -- the PM10 standard because it is a very good standard, particularly for those in the west coast. But it's also very probable that EPA will establish a PM2.5. This is the small, finest particulate standard, both on an 24-hour averaging basis and on an annual basis. And that the numbers will be fairly strict and will probably bring around some type of impact upon New Jersey.

What I'd like to do is just maybe discuss some of the potential impacts. On the very last page, you'll see a bar chart that looks somewhat like this. And you'll see all the monitoring sites that we now have in New Jersey for particulates. And the top one-- The top line is the PM10 line, and the darker bar is the PM2.5 lines -- what we believe will be. Now, if you look on the ordinate, the numbers-- This is the annual average. In other words, these are averaged over a course of one year, 1994. The standard will probably fall between 10 and 20. So you can see that we will probably have some violations in some areas.

I'd like to just briefly mention a few of these monitoring sites for you, where they're located. For example, the highest one is in Newark, and it's located near the Military Park downtown Newark. There is also one at -- we called it the Elizabeth Lab, which is pretty high, which is-- These are

alphabetical so you go to Elizabeth Lab. That's fairly near the New Jersey Turnpike. There is one called, right next to it, called Fort Lee. That's located about several blocks from the overpass near the George Washington Bridge.

What I'm suggesting to you-- Just by looking at these monitoring sites and looking where the high values are, they are -- all the high ones are associated with high-traffic areas, particularly freeway-type traffic, particularly which have heavy-duty vehicles such as diesel vehicles.

Therefore, we believe that the diesel inspection maintenance program which was established under S-1701 will become a very important component of any program that's needed in the future. We believe it will have a significant influence upon improving air quality, particularly as it relates to the smaller particulates.

New Jersey is a leader in this. We'll be just starting up our diesel roadside inspection program next year. During this period, we'll evaluate the consequences of that. As the Federal standard gets into play and finally gets adopted, we'll be in a position to evaluate the potential inspection program which could be part of that program. But with more of that information, I'll turn the podium over to Steve Robbins.

S T E V E R O B B I N S: Thank you, John.

Mr. Chairman, Madam Chairwoman, honorable members of the Committee, Mr. Climpson, Mr. Price, majority and minority staffs, ladies and gentlemen, my name is Steve Robbins. I'm here representing the Department of Transportation on this very important issue.

We are here to provide you with some information and discuss with you recent initiatives and incentives that demonstrate New Jersey's

commitment to reduce particulate emissions, or black smoke, from diesel vehicles.

While New Jersey is not currently compelled to reach specific reductions because we are in attainment, we have taken the lead among the states in setting up a program to reduce diesel smoke emissions. Our program has taken many forms.

For example, improved truck and bus technologies are improving the emissions performance of new and rebuilt fleets. New Jersey Transit has recently purchased 319 new transit-style buses. These buses replaced some--

I'm sorry.

ASSEMBLYWOMAN VANDERVALK: Excuse me. Could you pull your mike just a little closer. Thank you.

MR. ROBBINS: These buses replace some of their older 1981 models. Is that--

ASSEMBLYWOMAN VANDERVALK: Yes, thank you.

MR. ROBBINS: The current fleet is about 1850 transit buses. Private carriers in New Jersey have also obtained some of these new buses. New Jersey Transit is also currently ordering 175 new buses to replace the 1983 model-year buses. All these new buses will substantially reduce smoke emissions from the bus fleet. By the way, I ought to point out, I think they're about -- the commercial carriers -- 4000 buses.

All these new buses will substantially reduce the smoke emissions. We are also requiring all rebuilt engines to comply with Clean Air standards. About 200 buses a year will be retrofitted with catalytic converter mufflers, which reduce particulate emissions by 25 percent to 40 percent depending on

the vehicle. By the way, these catalytic converters also reduce other kinds of emissions which are SIP-related emissions for which we are not in compliance. So we get a bonus on the hydrocarbon side and with other emissions. We've installed 128 of these to date. DOT is also taking action on its fleet of trucks by undertaking a program to retrofit 200 diesel trucks in the DOT fleet with catalytic converter add-ons. And again, these have probably an even bigger effect on the trucks than they do on the buses because the particulate level from the buses is probably a bit less than it is on the trucks.

Now, on the better fuel side, since November of '94 -- and by the way, when I say November '94, I think that was the latest reduction in the sulphur emissions -- New Jersey has been burning a lower sulphur fuel since 1987. We're burning lower diesel fuels in our fleet which will not only help to abate the particulate problem, but should to some extent address the particulate runoff problem that is nonpoint source emissions. We understand that there are additional fuel improvements coming. The diesel fuels will improve so that the sulphur content will be reduced over time.

On the testing side and maintenance side, we have an aggressive program to inspect our fleet and the fleet of commercial buses we test, in which we pay particular attention to items like air filters which can clog and contribute to smoke emissions. The reason for that is that simply vehicles tend to emit particulate emissions when they are running a little bit too rich or running very much too rich. All of the fuel isn't burnt efficiently, and so you get particulate emissions in addition to other kinds of emissions. So if you have a clogged air filter, you're not going to get as good a draw in, and, therefore, you're going to run -- the fuel is going to run a little rich.

We also test our own fleet once every six months. The private commercial buses are tested twice annually, once by us and once by the motor bus industry. If a bus fails for smoke, we issue an out-of-service order until it is fixed. This is a strong tool, but we believe a very effective one.

We also have a bus quality control staff which performs roadside inspections on New Jersey Transit buses to ensure that any bus exhibiting excessive smoke is taken care of in maintenance.

Since the adoption of A-2457 on June 30 of last year, the Department of Transportation's been working with the New Jersey State Police in a cooperative effort to test heavy-duty diesel vehicles in several roadside sites for excessive particulate matter emissions, or smoke. Based on the results of that roadside testing program, MVS and the Department of Environmental Protection will, within the next few weeks, propose regulations to fully implement a roadside testing program and a voluntary periodic testing program for particulate matter emissions.

During the testing period, the State had conducted more than 40,000 smoke tests on heavy-duty diesel trucks. Of these, slightly over half were conducted on in-state trucks, while slightly less than half were conducted on out-of-state trucks.

As you know, no other state has a program quite like the New Jersey program. We are literally leading the way on this initiative. Utah has a program-- Their cut points on their roadside program are quite a bit higher than ours -- are anticipated to be. I would also add that they have some particular problems in Utah that we don't have as much here, namely, altitude

differences, and so on. So ours is certainly not a mirror of theirs. Their fuels burn differently at different altitudes.

We have been thorough in our approach because at least one other state, the State of California, has had a program that was successfully challenged in court. The issuance of the regulations is advancing in full cooperation with the DEP.

I thank you very much. If you have any questions, I'm sure that we'd all be glad to try and field them for you.

ASSEMBLYWOMAN VANDERVALK: John Elston, when you talked about Page 4, you had mentioned that New Jersey was not really negatively impacted, but it seemed to me--

MR. ELSTON: By the current standard.

ASSEMBLYWOMAN VANDERVALK: Right. But it seemed to me there was a little tiny black mark over the section of the northeast section of the State. Now, I don't know if that's just the way the drawing came out or if that really is a bad area? I was wondering if you could comment on that.

MR. ELSTON: Certainly. Yes. It looks like it's a misprint. This is an EPA document. The shaded states are those states which have to have plans. You see Connecticut has one, but not New Jersey. So that little dot--

ASSEMBLYWOMAN VANDERVALK: That's just a typographical kind of thing?

MR. ELSTON: A mismark. Right.

ASSEMBLYWOMAN VANDERVALK: Okay, thank you.

Is there much happening with biodiesel fuel?

MR. ELSTON: Biodiesel.

ASSEMBLYWOMAN VANDERVALK: Biodiesel.

MR. ELSTON: Biodiesel fuel has been tried in a number of states and has been used in demonstration programs, I believe, in New Jersey and, I believe, under a Clean Cities Program, work that we're going to examine it in southern New Jersey. The results are not in as yet on these programs, but there has been one, I believe, on the New Jersey Garden State Parkway where the State Police have used it and continue to use it. I do not know the results from an air quality perspective on the use of that fuel, however.

ASSEMBLYWOMAN VANDERVALK: But it's not something that happens with any-- I mean, there's not much volume and there's not much quantity of vehicles that would use biodiesel right now.

MR. ELSTON: Well, *A*, its availability is a question. *B*, probably more is cost. My understanding is that it's somewhat more expensive than typical diesel fuel is today. And how to bring about a match of the fuel cost will become a problem, because already, as you may know, the product is subsidized through Federal regulation, in any event, not biofuel per se, but the effect of farmers in general are subsidized. Question to whether that transfer to fuel, the question may be whether that subsidy would be removed in order to make it a more equitable playing field.

I'm not an expert on this. I know it's being used. It's being used fairly successfully, I'm told, in the Midwest because of distribution in the Midwest and the availability of farm products out there.

ASSEMBLYWOMAN VANDERVALK: All those cornfields.

Thank you.

Excuse me for one moment, I see that our whole Committee is here now, and I don't think they were introduced earlier. So let me start at that end just for the benefit of the audience. We have Assemblyman Reed Gusciora, Assemblywoman Loretta Weinberg, Assemblyman Frank Blee, Assemblyman John Rooney, and Assemblywoman Barbara Wright.

I thank all of you for being here.

Is there anyone else on the Committee that has any questions?

ASSEMBLYWOMAN WEINBERG: If I may, I just have a question.

Did you say that over the last year, your Department has conducted 40,000 tests on diesel vehicles?

MR. ROBBINS: Yes, that's correct.

ASSEMBLYWOMAN WEINBERG: And do you have the results of those tests?

MR. ROBBINS: What would you like to know specifically? I'll be glad to give it to you.

ASSEMBLYWOMAN WEINBERG: Well, not on vehicle by vehicle, but in terms of what we would consider a pass-fail ratio.

MR. ROBBINS: We've got a slightly higher failure rate for the in-state vehicles than we do for the out-of-state vehicles. Overall, the total vehicle-- It looks like it's-- The in-state failure rate is a little bit in the twenties. It looks like it's about 24 percent, and the out-of-state failure rate is about 19 percent.

ASSEMBLYWOMAN WEINBERG: Can you tell me what the breakdown was on the 40,000 between instate and out of state?

MR. ROBBINS: I don't have the exact number, because we discovered a slight glitch in the program yesterday. We're double-checking the count on this, but it's just slightly over half of them. So it's 20,000 and several hundred.

ASSEMBLYWOMAN WEINBERG: And what happened to those vehicles or those companies or drivers that you discovered failed?

MR. ROBBINS: Well, they were given-- In many instances, they were also checked for safety, by the way, because the police were there. So there were some safety summons issued. But with respect to diesel, they were given information about where their trucks stood and given information on what the program was about and told that a full enforcement program would be going up. And that if during the enforcement program if they failed, they would receive a substantial fine.

ASSEMBLYWOMAN WEINBERG: Were they given any idea when that full enforcement program would be going up?

MR. ROBBINS: The full enforcement program will be going up probably, I guess, November of this year is when we expect to be on line.

ASSEMBLYWOMAN WEINBERG: Thank you.

ASSEMBLYMAN CORODEMUS: Gentlemen, I have a few questions. Just to put the whole issue in perspective, I was just conferring with Jeff from OLS about the particulate part of the equation relative to the whole Clean Air Act and the Clean Air amendments. It is my understanding that the particulate-- There is no particulate inspection component of the Clean Air Act or the Clean Air amendments. Now, when the EPA promulgates a

regulation such as the PM10 or PM-proposed perhaps 2.5, under what basis do they do that?

MR. ELSTON: Okay. There are two different processes. The first from the Clean Air standards, the health standards themselves are promulgated by EPA with the advice of a science advisory committee. It's kept apart from the regulatory cite for obvious reasons. So there's an influence of the regulatory perspective with the health standard. So when they come up with a standard-- And right now, they're in an advanced notice of public rule making, as Mike just indicated that the State will be evaluating very, very shortly. They're on schedule that of June next year they will adopt a new particulate standard. That then starts the process on the regulatory side of the house, where if a state finds itself worse than the standard, it must develop a state implementation plan for that specific pollutant, just as we have done for ozone, for example, where we have a State implementation plan for ozone.

We do not now have an active plan for particulates, because we're in compliance. That process will then lead through the how much, where is it coming from where, and end up with the point of looking at mobile sources, stationary sources, how much is blowing in from other states, and then getting to a point of how to divvy up the problem of how to control that different pollution.

ASSEMBLYMAN CORODEMUS: I have another question for you. Referring back to Page 5 of the handout that you gave us, there are two maps. The top map shows the compliance with PM10, and the bottom map shows mortality rate that they associate with air pollution.

MR. ELSTON: Yes.

ASSEMBLYMAN CORODEMUS: It seems that there's a disproportionate effect between the two maps in that the top map indicates that there's great compliance on the East Coast as opposed to the West Coast. The bottom map seems to show that there are disproportionate amount of deaths in the East Coast, the opposite on the West Coast.

MR. ELSTON: Here we get-- That's a very good observation. It goes to the nature of the particulate to some degree. I mentioned in the West, particularly in the upper Northwest and parts of California particularly, along the San Francisco-Sacramento area -- a lot of that is arid country, and a lot of that is windblown type of particulates out there, which cause problems in public health but are relatively inert because they are dirt after all.

In the East where you have relatively smaller numbers, but they're of a more industrial type, a more of a combustion product orientation. And here we get into it -- when Mike was earlier referring to the compositional makeup of some of these-- There are sulphates, there are PAHs, there are benzineapyrine, and various other components. They are also smaller, which means they can go into the lung deeper and deposit deeper into the lungs. So the effects have become more of a problem.

It is this dichotomy that you pointed out, Assemblyman, is exactly why EPA wants to change the standard. One, to make the size ratio smaller, looking at smaller sizes, and two, to lower the value, to tighten up the standard in order to reduce the health problems.

ASSEMBLYMAN CORODEMUS: If you were to do a pie chart -- I don't know if this is an unfair question, I should have asked you in advance but -- if you were asked to prepare a pie chart to show the percentage of

particulates generated from diesel trucks and against relative to all diesel, all particulate producers, what would it look like?

MR. ELSTON: That's a very good question. It depends where you are.

ASSEMBLYMAN CORODEMUS: How about New Jersey?

MR. ELSTON: Okay, even in New Jersey. New York City, for example, did such a chart, and they showed that 50 percent was diesel related. EPA has looked at a cross section of the nation and showed that particulates is about 5 percent of the particulate problem from man-made sources.

New Jersey, fitting between those extremes and being urbanized -- and remember going back to that table or that bar chart I showed that when we were in the center city Newark or when we were in Fort Lee, the higher value seemed to be associated with traffic-- So my guess is that we're closer aligned to the New York City numbers, probably not as high as midtown Manhattan, but maybe in the 25 percent to 35 percent of the particulates at street level would be associated with vehicles, in general, a large part of those diesel vehicles.

ASSEMBLYMAN CORODEMUS: I've lost the-- Where you were testifying about the, Mr. Robbins, about the population of trucks, diesel trucks-- Newer trucks I must assume are cleaner burning than the older trucks.

MR. ROBBINS: That's quite accurate.

ASSEMBLYMAN CORODEMUS: Is there any-- Do you have any perspective on the amount of cleaner truck -- cleaner-burning diesel trucks versus the older, smokier ones? When did this new technology come on line, and what does it look like today?

MR. ROBBINS: Well, I guess the first thing I should say is that the technology, much like the technology for automobiles, has come on kind of gradually. Although, you can look at some specific points. I guess prior to 1970 there were no manufacturing standards for diesel trucks that measured opacity. In other words, they didn't have to meet a specific standard prior to that. And in 1970, they were required to meet a, I guess it was, 40 percent standard. And then, it's gradually dropped down since then.

I think I have a chart with me that I could make a copy of for you that would give you that exactly--

ASSEMBLYMAN CORODEMUS: Okay.

MR. ROBBINS: --that information. But it is true that and within that category of opacity the acceleration opacity is measured, peak opacity is measured and different kinds of opacity. In other words, you measure it while you're pressing down on the accelerator at a hard time, and then you measure the peak opacity, and so on. The standard started off with just average opacity and then gradually added what is called low-go opacity and peak opacity. I'll give you the chart that shows what those requirements were at those times. So that the standards that we are setting are the cut points which we are setting. DEP is writing the rules on this particular aspect of the program -- will bear a relationship to what that truck can do. We're not going to say to somebody who's got a 1972 truck, "You're going to have to meet an opacity level that would be impossible for your truck to meet under today's technology standards." But at the same time, we're going to write cut points which are better than Utah's standards certainly.

MR. ELSTON: And in fact, your legislation authorizing this test uses the word reasonable, and it uses accurate. We've-- Those two sometimes can be a dichotomy of terms because sometimes when you're reasonable, you're inaccurate and sometimes when you try to be so accurate that you fail too many vehicles. But I can assure you as I did the sponsor last year, Maureen Ogden, that we're not going to invent an IM240 test. We're going to try to do a test that's both reasonable and accurate.

MR. ROBBINS: I might add that there's another thing that we've been somewhat interested in over at the Department of Transportation. We don't really get any SIP credits now because we're in attainment. We get SIP credits for reducing opacity levels as we do under the IM program for reducing specific other emissions. There are no studies in the country. In fact, there are relatively far fewer studies related to diesel fuels as opposed to gasoline fuels. The whole strategy of EPA was to take on gasoline-fueled vehicles first and then move into the diesel area. There are no studies that show a correlation between other kinds of pollutants and particulate pollutants, and there may be a direct correlation between particulate and hydrocarbons, for example. So if we were able to establish something like that, we could probably look to pick up some credits to the State.

ASSEMBLYMAN CORODEMUS: Let me ask you this. I think we all commute up and down the highways all day. In what and-- All these laws and regulations give the consumer an opportunity to report the big smokers that we see going down the highways or our side streets or the turnpikes. It's obvious that some of the newer trucks hardly emit a puff of smoke. You can barely see the heat coming out of the exhaust pipes. And

some other trucks, it's like they're a fog machine. I mean, you have to turn your headlights on to get through the smoke that comes out after they gear up after a standstill. If I'm a concerned consumer, a legislator, and if I really feel aggrieved by something I see, what can we do?

MR. ROBBINS: Well, that's what we're setting up is a way that somebody could do that in addition, of course, to the roadside program.

ASSEMBLYMAN CORODEMUS: I mean, if I called your Department and said, "I saw this truck, and this is the license plate, and this is where it was, and this is what I saw," is there any follow through on that?

MR. ROBBINS: Well, right now--

ASSEMBLYMAN CORODEMUS: Or who do I call?

MR. ROBBINS: --right now we don't have a specific standard adopted by the Department by which we can say you have failed this standard. All we have is a self-testing program which requires, in very general terms, for the vehicles to be kept up to -- I don't know the exact term--

ASSEMBLYMAN CORODEMUS: In other words, a civilian component for-- If there's some type of a spill in the State, we have a hot line where we can call.

MR. ROBBINS: We have a statute which is a kind of a nuisance statute, I guess -- John, isn't that 39-370 or--

MR. ELSTON: Point 2, yes.

MR. ROBBINS: --point 2 or something like that, which requires two different things to be wrong with the vehicle in order for the person to get a ticket.

MR. ELSTON: Perhaps I can, Assemblyman-- Yes, we do, do what you're suggesting. Okay. Yes. I -- because one of our supervisors is out in the audience, and I wouldn't want to give his phone number, but we do have an office phone number-- Yes, I will give it out, it's area code 609-530-4036 -- where people can report excess emitting vehicles. What the Department will do-- We're doing this in cooperation with DMV operations, and then we send the company a letter indicating that-- It goes to the company itself, and it says that you may be in violation and that we ask that they take a look at that truck. It's a voluntary system, but it does involve the public, and it does involve the operator. It goes right to the operator's company. Often we get replies back from the operator that, that vehicle was pulled out of service, and they have taken a look at it.

ASSEMBLYMAN CORODEMUS: I'm not going to monopolize the time for the Committee. Perhaps they have questions about the voluntary compliance.

Assemblyman.

ASSEMBLYMAN ROONEY: Just yesterday, I get hit with an automobile. I mean, it was right in front of me and stopped at a light. It took off from the light, and I just couldn't even see in front of me -- so much black smoke there. What are we doing on auto emissions -- diesel auto emissions? I know we're not testing them at DMV. They get a free ride on emissions testing. It seems to me that they're the worst polluters for the simple reason that they're right at my level. It's coming right into my vehicle. Whereas, if you have a truck, you get the 40-foot trailer between you and the diesel emission, and it's 12 feet up in the air. That to me is less offensive than the

bus that's coming right out the back, right into my space -- and a car. So there's got to be something to include automobiles in this program.

MR. ELSTON: The Department has -- and Steve alluded to it -- a nuisance rule on those standards. And yes, at the inspection station they do observe for excessive smoke. It's a judgmental -- but if it's there, they will go after it. You should also know if a car is putting out blue smoke--

ASSEMBLYMAN ROONEY: This is black.

MR. ELSTON: Black smoke, okay.

ASSEMBLYMAN ROONEY: Blue is oil.

MR. ELSTON: Blue is oil. Blue-- That car is going to be in trouble within a couple of miles if it's too much.

ASSEMBLYMAN ROONEY: That I know. Black is definitely we know as bad combustion. That's--

MR. ELSTON: It's bad combustion, yes.

ASSEMBLYMAN ROONEY: Absolutely.

MR. ELSTON: But we don't have any intra-, between inspection-type program, but in the inspection station they do observe for excessive smoke, and they will -- my understanding -- reject a vehicle for that.

ASSEMBLYMAN ROONEY: Oh, by the way, you must be from California, because there are no freeways in New Jersey. You pay all the way.

MR. ELSTON: I'm sorry. (laughter) I'm from New Jersey.

ASSEMBLYMAN ROONEY: Just had to throw that in.

MR. ELSTON: Misstatement on my part.

ASSEMBLYMAN CORODEMUS: Are there any other questions from the Committee?

ASSEMBLYWOMAN VANDERVALK: I-- Go ahead, Reed. Go ahead. Assemblyman Gusciora.

ASSEMBLYMAN GUSCIORA: Yes. I understand that part of the holdup in this legislation is that DEP has done its part, but DOT seems to be dragging its feet. Is that correct?

MR. ROBBINS: That is absolutely inaccurate.

ASSEMBLYMAN GUSCIORA: What is the holdup at DOT?

MR. ROBBINS: Are you speaking about the regulations?

ASSEMBLYMAN GUSCIORA: The implement of the regulations.

MR. ROBBINS: We have a set of regulations which are getting some final reviews. I believe that DEP is at about exactly the same level, and within the next couple of weeks, we are going to be publishing regulations. But I would say that we're both at about the same level.

ASSEMBLYMAN GUSCIORA: Can you describe the proposed test with regard to the test itself from the standards for the periodic inspections that will be up and running in November?

MR. ROBBINS: Well, the inspection program that will be up and running in November is going to be a roadside examination.

ASSEMBLYMAN GUSCIORA: My understanding is that the legislation established the implementation of a periodic inspection program and a roadside enforcement program. Why one and not the other?

MR. ROBBINS: That's correct, Assemblyman. What we're doing is-- We're phasing up a program. This program will not only be a roadside testing program, but it will also be a voluntary periodic program in which we are giving an incentive to businesses to purchase test equipment, become

licensed by the Department of Transportation, and get into the business of testing people's vehicles. There's an advantage for someone to get the vehicle tested.

The roadside examination program is going to be an aggressive program. If an individual comes into the test area and has a timely sticker -- which they've gotten from having the vehicle tested by a licensed tester -- then, unless there's some obvious problem with their vehicle, they'll be allowed to move out into traffic again.

ASSEMBLYMAN GUSCIORA: Where in the legislation is it a voluntary periodic inspection?

MR. ROBBINS: Well, in the legislation, it doesn't clearly define exactly what the terms of it are. It gives a great deal of discretion to the Department to develop the exact program.

ASSEMBLYMAN GUSCIORA: What is the basis of that interpretation that the Department can develop a voluntary program with the plain reading of "establishes a periodic inspection program"? I don't understand where you can come up with an interpretation--

MR. ROBBINS: Well, it will ultimately be a periodic testing program, but what we're not doing is saying exactly what we expect that program to be right at this moment. It doesn't say that you have to come up with a periodic program right at this moment.

ASSEMBLYMAN GUSCIORA: And frankly, I'm surprised that you establish a voluntary one when your own data shows that New Jersey trucking is in worse shape than the out-of-state trucking.

MR. ROBBINS: Well, first of all, individuals have been required to certify each year when they get their vehicles registered that they have inspected the vehicles. What we see this initial program as is a way of putting a real strong check on that with the possibility of serious fines to the vehicles that are not in compliance. So in other words, we expect that the vehicles will suddenly realize that they're going to have their feet held to the fire over this roadside program. Therefore, they would want to come into compliance, because they won't want to get these steep fines.

ASSEMBLYMAN GUSCIORA: Okay, and what are the proposed fines?

MR. ROBBINS: It would be $700 for a first offense, which is reducible to $150 if the individual can certify when they, to the court, have had the vehicle repaired and that it is now meeting the appropriate standard. Second offense would be a $1300 fine reducible to $700, again, under the same conditions. So it's not something that somebody in the industry would want to experience, at least not more than once.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Just one cleanup on that so that no one leaves this Committee hearing thinking that the administration was not desirous of completing the regulatory process. I'm sure you've seen the newspaper articles. The whole administration has been criticized for not having regulations in place one year after the bill was signed into law. Has it been sitting on the shelf? Can you tell us what's been happening since that time?

MR. ROBBINS: No, it hasn't been sitting on the shelf. We've been very actively working on it. As you know, we're also working on the inspection and maintenance program for vehicles as well. But it--

ASSEMBLYWOMAN WEINBERG: Could you speak just a little louder, please?

MR. ROBBINS: I'm sorry, Assemblywoman.

It has not been sitting on the shelf. We've been working on it. We've been working on it a way that we hope it will be the most effective. In fact, we're working with DEP right now to resolve one of the remaining issues of exactly how we deal with a class of vehicles -- one of the early classes of vehicles because of concerns we have over the standard and whether exactly -- the extent to which the trucks will be able to meet the standard.

One of the concerns we've had is that-- As I've said before, California had a roadside program that became active, and the trucking industry went to court over it. They were successful in knocking out the program. We're very concerned that that not happen here in New Jersey. We want to reduce particulate matter emissions, and we want to do it the right way. We want to do it at a very efficient way, but we don't want to risk running into a challenge that could give us difficulties down the road in actually reducing the emissions. We want it to be right.

ASSEMBLYMAN CORODEMUS: It's August now. Can we expect this process come to closure by the end of the year?

MR. ROBBINS: Within the next couple of weeks. As I say, they will be proposed, and sometime, I guess, in November they will be adopted. We'll try and get you the exact date on what we expect the adoption to be.

ASSEMBLYMAN CORODEMUS: Any other questions from the Committee?

Yes, Assemblywoman Wright.

ASSEMBLYWOMAN WRIGHT: Can we ask questions of the DEP?

ASSEMBLYMAN CORODEMUS: Yes.

ASSEMBLYWOMAN WRIGHT: Mr. Elston, on Page 3 of your report, when you discuss that the overall -- the highest risk is in urban areas with the highest population density and the greatest number of combustion sources-- I'm referring back to your comment on Page 3 in terms of the highest risk in urban areas with the highest population density and the greatest number of combustion sources. Even though these areas may not have the highest particulate concentrations, does this tell us that we should be thinking in terms -- I mean there is a quality of life issue -- about how dense a community is? I realize we can't regulate some of these things, but what I'm thinking is, is we're kind of chasing our tail in a sense of, if we have enough automobiles -- or I guess unless we can control the combustion-- We will eventually control by changing the catalytic converters.

MR. ELSTON: Assemblywoman, you bring up a very good issue particularly as it relates to transportation. There are four categories of reducing emissions. One is technology. I think we've tried to pursue technology first if possible. The second one is fuels -- cleaner, better fuels. The third is through better habits such as maintenance. This is where the auto inspection and the diesel inspection come in. Any system wears out sooner or later, but it should be brought back to its design. That's number three. And

the fourth one is that maybe the transportation network can be modified somewhat so that we don't have to have dense traffic. Abutting, for example, apartment houses in dense areas, land use considerations, or use of better mass transportation or incentives along those ways which opens up a whole host of other ideas -- it's that area that's been the most difficult, because it socially derived-- The public at large has not wanted to pay the cost nor the inconvenience of mass transportation relative to the freedom of an automobile.

But on the other hand, an awful lot of dollars and funds both federally and State are going into mass transit, and there is a sharp increase in ridership, particularly to and from work during the highest peak hours. I'm optimistic enough to believe that, yes, we can make a dent in those areas. And that, yes, we can relieve and get better healthful conditions in all areas of the State as long as we look at those four criteria and work accordingly.

ASSEMBLYMAN CORODEMUS: Gentlemen, thank you for your testimony. I understand you will be able to stay with us for a little while longer in case there are other questions.

MR. ROBBINS: Could I add one thing to what I said before, Assemblyman. I guess I wanted to add to what I said to you. You talked about the extension of the demonstration period. One of the reasons that we extended the demonstration period was that there isn't a large base of testing equipment out in the State for diesel vehicles. In other words, the particulate matter testing machinery is not out there in any great quantities at all.

One other considerations that we wanted to take into account was that people might not know, as well, exactly what they needed to do or exactly -- more importantly, exactly where they stood with respect to the emissions.

And so we extended that period, because what we wanted to do was give everybody an opportunity. That's part of what we gave out to individuals, openly invited them to come into the testing areas. We even offered to give us a call down at DMV, we'll tell you where we're going to be testing that day, and you can come in and get your truck tested. You'll know exactly where you stand. If you know anything about the trucking industry, the word gets around, CB, and so on, about that.

We were concerned to give people an opportunity to know exactly where they stood. Also, we didn't have as large a national test base of results as you do for gasoline fuel vehicles. As I say, we're kind of in the forefront on this so we wanted to feel a little more secure exactly where we were on that.

ASSEMBLYMAN GUSCIORA: Well, sir, my consternation, I guess, is that there's a leadership vacuum on this issue that residents in my area, in central New Jersey -- because we have the missing link in 95. Truckers have found the missing link. It's 206 and 31. Each day, as the truckers drive the missing link through neighborhoods and roads that were never able to handle traffic, they're spewing a lot of emissions. They're creating safety problems, and there doesn't seem to be any response from the State that we're looking to solve transportation problems. All around us -- other states -- there is leadership; even Governor Pataki has just enacted a Transportation Bond Act for alternative fuels.

Another point that was raised that New Jersey has the second largest bus operation, but yet you talk about buying more diesel buses when other states such as Texas, California, and New York are using alternative fuel buses. So I guess I'd like to see better leadership from DOT and a response to

the public that we are trying to address these issues and we're trying to cut down emissions. And I'm really disappointed that we're not implementing the statute fully to require the periodic inspections to send the message out to the community that we care about the emissions that are going out from these sources.

MR. ROBBINS: I can assure you, Assemblyman, that the statute will be implemented, and we will have a periodic program.

ASSEMBLYMAN CORODEMUS: Thank you, gentlemen.

I'm going to call the next two witnesses. Rich Brandstetter and Fred Brown, if you'd come up. And on deck will be Carol Katz and John Solomita. Thank you.

Richard, perhaps you could introduce yourself.

R I C H A R D B R A N D S T E T T E R: Yes, I'm Rich Brandstetter from Tinton Falls, New Jersey. I'm Chairman of a group called Friends of Pinebrook, so I've gotten involved in a lot of environmental issues -- water testing. We're doing some air testing once we figure out what the program should be.

Do you want me to continue? Okay.

My concerns are -- sitting in the audience I had things I was going to say, but -- as a resident of this State I'm rather upset with the fact that trucks seem to have a different standard as far as inspections are concerned. I know in the Borough of Tinton Falls we have a Monmonth County Reclamation Center. In the late '80s they did a series of inspections, and I turned that information over to the SWAC, Solid Waste Advisory Council, in Monmonth County. At that time, I was on it.

Off the top of my head, about one-third of the trucks inspected were taken out of service not necessarily for pollution, but for safety reasons I assumed, because apparently there were no standards for pollution. There's no standards for pollution, and one-third are taken out for safety. They are supposed to be self-inspected. I believe that this law was supposed to change that. Apparently, it hasn't. One truck is a lot more dangerous than one Chevy.

My mother-- She had a car. She put maybe a thousand miles on it a year. She would have to go through inspection. She would have to make sure that car was functioning. A truck, how many miles a year continuously running? The incentive for a truck to run-- I've worked in the construction industry. My father was a diesel mechanic for many years. The incentive is to get the job done. If that dozer isn't working at 8:00 that morning, you get it running no matter what you have to do, and you don't care what's coming out of that stack, to a degree, of course. Because you've got a whole line of people behind you that you have to pay, or you have to get the job done.

I think we should have one standard. These trucks should be inspected. We should be inspected. We're going through a higher standard of inspection now which I question. I don't know if it's going to do us any good.

I think the whole issue of the quality of life in this State -- whether you're talking about a bus or truck, that stack is only a few feet further away, whether it's a bus or a truck. We have air pollution coming from Ohio. So 30, 40 feet isn't going to make a difference. We need to change the way we handle these vehicles.

A year ago I tried to get some inspection done within our own town and was told, "No, we can't do that. That would" -- I've got the letter at home, I can get it to you -- "be a problem because there have been court cases and random testing."

These roadside tests, the incentive-- I wonder what the incentive is. That's about it, because I'm--

Oh, and as far as Mars is concerned, sometimes I think we may have been on Mars. We just sort of finished it off, and now we moved here.

ASSEMBLYMAN CORODEMUS: Can I ask you this, Mr. Brandstetter? You said that you had smoking trucks going in and out of Tinton Falls, and they were reported to whom and they were taken out of service.

MR. BRANDSTETTER: Back in the late -- I'm going to say -- '88, '89 period, the Borough of Tinton Falls, State Police of Monmonth County, Sheriff's Department stopped trucks on Shafto Road, which is pretty much the entrance to Monmonth County Reclamation Center, and were doing inspections of those vehicles.

ASSEMBLYMAN CORODEMUS: Emissions inspections?

MR. BRANDSTETTER: I'm thinking more safety. I don't think there was too much in way of emissions, because of the problem of testing-- I mean if the standards aren't here now and this is almost ten years later, I don't think that there were much in the way of standards then. But there was over 100 trucks inspected. There was approximately 300 citations for various reasons issued. One-third of the trucks were taken out of service, which means for brake problems, major, major problems.

ASSEMBLYMAN CORODEMUS: Okay, so I wanted to understand.

MR. BRANDSTETTER: I think if you think the fleet is being maintained for emission problems, all you have to do is wonder-- It's obvious they're not being maintained for safety conditions, which is much more directly contributed to downtown than emission, problems.

I think the figures stated by the gentlemen about the failure of New Jersey trucks correspond to that. I think he was about 28 percent of the trucks failed.

ASSEMBLYMAN CORODEMUS: Are there any other questions for the witness? Anybody from the Committee?

Thank you very much for joining us.

MR. BRANDSTETTER: Thank you.

ASSEMBLYWOMAN WEINBERG: Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Yes, go ahead.

ASSEMBLYWOMAN WEINBERG: If I understand what your concern is, is that you thought, as I assume some of us thought, that the legislation says that there is going to be a periodic inspection program. Doesn't say a self-inspection program.

MR. BRANDSTETTER: Correct.

ASSEMBLYWOMAN WEINBERG: So you assumed by that that the State was going to do an inspection.

MR. BRANDSTETTER: Yes. I think if the residents of this State have to be put through hell once a year, I don't know why the truckers can't be, too. I'm not knocking the truckers. I'm just saying put everybody on the

same playing field. I mean my mother went through it. I've gone through it. The issue of diesel cars going through inspection, that there aren't tests as far as hydrocarbons-- You look at the tests, it will tell you whether or not that car has failed. I don't see how hard it can be to have a system of tests to see if diesel -- to see if they're putting out too much soot or other hydrocarbons in the air or whatever.

ASSEMBLYWOMAN WEINBERG: Through the Chairpersons--

ASSEMBLYMAN CORODEMUS: Sure.

ASSEMBLYWOMAN WEINBERG: --if I may, I think that's one of the things perhaps this Joint Committee could look into. It appears to me, if I just understand plain English, that the legislation intended for a State inspection and not a self-inspection. I think perhaps these Committees could look into that and go back to the Department of Transportation with that information if in fact everybody is in agreement that that's what the legislation intended.

MR. BRANDSTETTER: I think--

ASSEMBLYMAN CORODEMUS: Excuse me. I think that's-- We're here today to do just that, just see how this program is unfolding.

ASSEMBLYWOMAN WEINBERG: I'm a little late in catching on then. I'm sorry.

ASSEMBLYMAN CORODEMUS: No, that's okay. We're here to see how this program is unfolding, and actually, it's difficult at this juncture even to make an assessment, because we don't have the regulations in place to monitor the program.

ASSEMBLYWOMAN WEINBERG: I think, if I may, even though we don't have the regulations in place, our representatives of DOT did say they were only talking about self-inspection not a State inspection.

MR. BRANDSTETTER: I'm going to throw one thing in here. I know individuals that have done this. I've talked to other individuals that know individuals who have done it. The self-inspection issue now with trucks -- at least it was a few years ago -- once you reach a certain weight limit you became self-inspecting. I know of individuals that -- I don't know if it's falsifying but -- they just simply said that their truck weighed a lot more. They registered at a higher weight. As far as I know, that's all they did, and that kicked them into the fact that they don't have to be inspected by the State. They did it for a reason. For whatever reason, I'm not quite sure what their reason was.

ASSEMBLYMAN CORODEMUS: Okay. Thank you.

Mr. Brown, perhaps you can introduce yourself.

F R E D E R I C K F. B R O W N: My name is Frederick Brown. I appear here as the President of the Board of Governors of the Rossmoor Community in Monroe Township. They have not the technical, but the personal side. Our community, at Exit 8 and 8*A* on the New Jersey Turnpike, or that -- it's sort of a reference point -- is surrounded by roads bearing a tremendous amount of diesel-powered truck and bus traffic. We are greatly concerned by the impact on our health and longevity from those exhausts, as you heard all the data earlier.

I say this concern is highlighted by the recent NRDC study citing the health effects, the fine particulate matter -- you heard about that -- such as

in diesel emissions. That's reinforced in a report on the environmental and human health risk assessment prepared for Rossmoor by GHR Consulting. I've included a copy of that report with some other more extensive written testimony.

To exemplify our concern, I'd say that in a suit that Rossmoor and others have brought to overturn a zoning change in Cranbury, a neighboring community, which would bring hundreds of diesel trucks to a large warehouse adjacent to Rossmoor, we sought to have the health impact of this traffic considered as a part of the suit. That was turned down by the judge. While we think it might be overturned on appeal, I think it's an example that we're greatly concerned by the health impact of diesel emissions both for ozone and the particulate matter.

In repeating what you have already discussed, we'd urge to move forward to the regulations for the diesel inspection, regular not voluntary, which were called for in the recent legislation to minimize this fine particulate emission and the emissions of ozone-generating pollutants. We also urge you consider the reduction of the elimination of diesel power in public transit buses.

Thank you.

ASSEMBLYMAN CORODEMUS: If I may, are you in a position, Mr. Brown, to offer any testimony about the effects of particulates and the health of your community at Rossmoor.

MR. BROWN: The-- Not in detail familiar with the study. We had started to prepare such a study, and it's obviously very large. We have 3600 people in our community, and it takes a lot of research. We have some

amount of research background data available from the Rutgers Continuing Health Study that's been running for the last four or five years where they track the impacts of various lifestyle factors on individuals. But it would obviously be a very large and comprehensive study to try to isolate the impacts of these things. Suffice to say that in a community with 3600 people, everyone of whom is over 55, therefore, the average age is more nearly 70, they have a variety of things which are-- Even-- As one of the speakers said earlier, there is no threshold. I think it was John Elston said, "There's no risk threshold."

So the amounts that we see and the amounts more that would be generated obviously have some impact-- Very difficult to establish that, and I don't have that data.

ASSEMBLYMAN CORODEMUS: Any questions from the Committee?

ASSEMBLYWOMAN WRIGHT: I just want to acknowledge Mr. Brown's presence, and the fact that we have been communicating with him and with a number of groups in our district. This is a very difficult issue, and it's not unlike the one that I raised before the DEP. That is, it's a zoning issue that generates the pollution. The problem is, is will the technology address the issue as Mr. Elston responded to me? If we could improve the technology, then we'd probably have another problem in our community of Monroe. Just even if we didn't have the air polluted, we have the danger of the seniors' community having that level of traffic. So we have several problems on this issue and none of which there are easy solutions to.

So we are particularly grateful for your coming today and participating in this dialogue and raising the issue in one more place because it's very important to all of us. My office is right down the street, so I know the neighborhood very well.

MR. BROWN: Thank you, Assemblywoman Wright. We appreciate it very much, and I'm very delighted that you're aware and working with this group to help us in any way that you can. Thank you.

ASSEMBLYMAN CORODEMUS: Thank you.

ASSEMBLYWOMAN WEINBERG: Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Go ahead.

ASSEMBLYWOMAN WEINBERG: Along those lines Assemblywoman Wright said, I happen to-- I visited friends yesterday, by the way, down in that area, not in Rossmoor but in another area, that you represent.

I'm looking on the chart that was given to us by the Department, and it shows very high levels in Fort Lee, which is a town that I happen to represent and live right near, which is home to the Port Authority and the George Washington Bridge. Along the lines of what Mr. Elston said earlier, it has many, many apartment buildings with thousands of people, literally, living in that area around the bridge. In term of zoning, I don't know which came first in that particular case, the diesel trucks, the bridge, or the apartments. But the fact is they are all there. In fact, on the New York side, there is even an apartment house -- I guess we are all familiar with-- If you drive over the bridge, there's an apartment that's actually built right on top of the George Washington Bridge. It's on the New York side of the river, but there it is with

heaven knows how many people living in it. The kind of health hazard that we are looking into -- and I compliment both Chairs for having this kind of a joint hearing -- really jeopardizes huge numbers of people that might not even be aware of it.

I compliment you, Mr. Brown, that your community has become so aware of what this might mean in terms of the health of your particular residents. But I think we have to maybe react to this in a lot more quicker fashion than we seem to have done in the past.

MR. BROWN: I hope so, too, and I thank you very much for that concern.

ASSEMBLYMAN GUSCIORA: Mr. Chair, I just wanted to add, having grown up in Jamesburg, I was familiar when Rossmoor used to be called Leisure World, and after all the emissions from the truck, they changed it to Rossmoor. I'm sympathetic to your plight.

MR. BROWN: Thank you.

ASSEMBLYMAN CORODEMUS: Thank you. Thank you very much for coming here today.

MR. BROWN: Thank you very much, Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Carol Katz and John Solomita, and Marie Curtis and Benita Jain are on deck to testify.

Is there anybody else that is interested in testifying that hasn't turned a slip in? (no response)

Good afternoon.

C A R O L K A T Z: Good afternoon, Mr. Chairman and Madam Chairwoman. I'm Carol Katz from Public Strategies Impact. I'm here today

on behalf-- I'm only going to talk for about a minute, if that. I'm Carol Katz from Public Strategies Impact. I'm here today on behalf of the New Jersey Motor Bus Association. We very much appreciate the Committees' reaching out to us and asking us to attend today. Our members are committed to running clean vehicles. With me is John Solomita from Independent Bus Company, a member company. He's going to talk about some of our current practices toward accomplishing that goal.

J O H N S O L O M I T A: Thank you very much.

One thing is we support, as an industry, the diesel emissions inspection legislation, the Clean Air Act, and the Bus Safety Compliance Act. We want to, as an industry, draw a line between us and some of the vehicles that come in from out of state that have some unfortunate situations, most notably the Vernon accident.

The one thing that I can say -- and I've said many times -- is the DOT from the State of New Jersey, which does inspect and regulate us, do a really excellent job. And for people who have to deal with the DOT inspecting your vehicles, you can be very impressed with the type of work they do. It's difficult, as sometimes it makes it, for us to do our job. They do a really good job. I think people can be very comfortable from what they're getting from them.

We are subject to inspections twice a year which include opacity checks both times. We're subject to roadside checks. We're subject to be taken out of service by DOT if we have any problems. Though some of our buses are owned by New Jersey Transit, they have the same authority over us.

So as an industry, we have so many checks and balances. It's amazing sometimes.

MS. KATZ: I should add that the periodic inspections to which we are now subject and which include this opacity test once a year -- for most bus companies once a year -- the inspection is conducted by the DOT, and once a year it's a self-inspection still subject to roadside and the annual inspection by the DOT.

MR. SOLOMITA: And subject to audit by the DOT also to make sure that you're being good. If you're not, then you lose the self-inspection part of your inspection. As the independents and most of our members are smaller, looking at being the size of a New Jersey Transit, my company itself we operate about 50 buses. But we found there are certain elements that we found to be the way you have to approach maintenance to keep the engines clean.

There's our technicians first of all. We feel the best defense against emissions is proper training of our technical people. We support the ASE certification of all technicians, and we promote in-house and out-of-house advance training to all personnel. Our staff, for example, successfully completed certification in gas engines, diesel engines, and CNG engine applications through the ASE.

One part which a lot of people don't really think about is the engine oil. You think that the pollutants are what's coming out the tailpipe, which is most visible, but there's also engine oil that must be taken into consideration because that often is burnt and passes as soot as well. We use low-ash oils and low-sulphur ash oils as part of our program.

Then the fuels itself-- As we've discussed, most diesel engines are made to run on D2, number 2 diesel. That's fine for a lot of types of application. My personal business-- We run intracity operations corner-to-corner service. We find, for that type of operation, low-sulphur number 1 diesel is really the only way to go, and the way it should be run.

We found-- This year when the price of diesel was exorbitantly high, we still resisted any temptations of switching to a blend, or number 2. It makes good financial sense, as well as keeping the emissions clean, because at one point we did an analysis on it. We found it was really cheaper to run a good quality number 1 diesel. Otherwise, we're changing fuel injectors every day and obviously from pollutants. Even when the price of the oil got very high, we stayed with our program. Then there are the engines itself. On our older buses, we are changing fuel injectors now. We're upgrading them. They burn with a different fuel mixture and actually burn less fuel. We do engine oil testing on every bus that comes in for preventive maintenance, which can show you problems regarding pollutants before they happen.

I had a report faxed to me today showing one of my buses has a higher soot content in the oil. That bus immediately gets pulled out of service, that goes to my maintenance supervisor and to find the problem with that immediately. It's the only way to really do proper maintenance.

The DOT was mentioning, very important, changing filters and such. It has to be part of a regular maintenance cycle. If all of these things are done, the bus can run up to spec. I'm not a technical person. I'm a general manager. But I have a brochure here from Detroit Diesel, which is most of our engines, showing through the upgrades to actually make an engine fairly close

to newer designs where particulate matter can be cut by 50 percent, nitric oxide by 6 percent, and carbon monoxide by 64 percent. The technology is there, and we're all supporting and using these upgrades as we rebuild engines.

We support the diesel emissions inspection legislation. The only thing we ask that if people are considering changes to it, we take into account that motor buses are mass transportation. Just very briefly, probably in a rush hour, we're eliminating, with each bus that goes down the street, 50 passenger cars. A bus gets approximately 3 miles per gallon. So if I'm taking these people 10 miles to go to work, I'm burning 3.3 gallons of fuel. The cars that we're taking off the road, if they get 20 miles per gallon, they're burning 25 gallons of fuel. So we are reducing-- Pollutants are going into the air as well.

That's all we have. Thank you.

ASSEMBLYMAN CORODEMUS: I have a question. Perhaps, Mr. Elston, if you're still here, I'll ask him later on about diesel fuel. Is diesel fuel the same as number 2 heating oil for houses?

MR. SOLOMITA: It's similar. That's one reason they had to start dyeing fuel, because in the summer you may not tell the difference. In the winter, there's a lower cetane value which is similar to an octane. If you get that, it will cause more pollutants and were some unscrupulous fuel dealers that were selling that under the guise of being number 2. I think that's one of the reasons they began dyeing the fuel, so you'll know the difference.

MS. KATZ: I think it's also dyed -- and the DEP can answer this better than we -- but I think it's dyed, too, as evidence that it is the low-sulphur diesel that we're now required to use. The diesel number 2, I think, it's called red-dye fuel.

ASSEMBLYMAN CORODEMUS: The only reason I asked the question is because I'm trying to figure out that pie of particulate producers. If diesel trucks are going to be half of it, how much are home fuel furnaces producing the other? I'm not sure.

MR. SOLOMITA: I know that it is a dirtier fuel, because we eliminated certain suppliers from our list, because through testing, we found out at one point, when certain companies that are over the road are using number 2, they were getting home heating oil at times. So we've got a number of suppliers who we don't use anymore.

ASSEMBLYMAN CORODEMUS: Let me ask you this. You're from the New Jersey Motor Bus Association. This is an organization that represents all the private carriers?

MS. KATZ: Not all, but many of them.

MR. SOLOMITA: Most of them.

ASSEMBLYMAN CORODEMUS: A lot of the private carriers.

MS. KATZ: We estimate that we carry about a third of the State's bus passengers.

ASSEMBLYMAN CORODEMUS: If you were-- Were you able to testify about what percentage of the trucks -- the buses, in your association, members own that are more up-to-date, modern, clean burning as opposed to some of the older buses in use?

MR. SOLOMITA: I really couldn't testify on that accurately. I know a lot of our members who are over the road have a much more newer fleet. They run maybe a five-year cycle of replacing their buses. Certain of-- The intra-city operators are in a program with the Federal government and

New Jersey Transit operating the basically 1980 flexibles. There's a large percentage of those on the road in intra-city operations.

ASSEMBLYMAN CORODEMUS: Okay.

MS. KATZ: We think it's great that New Jersey Transit is making the effort to replace some of the older buses. We think that anything that can be done to expedite that and to the extent we share and participate in that program that benefits our passengers and those people whose neighborhoods we ride through as well. So we think that that's a good way to proceed.

ASSEMBLYMAN CORODEMUS: Okay. Who sets the standards right now for the inspections in your shop when you have to test the emissions, the particulates, and such, that come out of the exhaust from your buses?

MR. SOLOMITA: We have to comply with the DOT.

ASSEMBLYMAN CORODEMUS: And what-- No standards are in place now?

MR. SOLOMITA: Yes, they are. They've been in place for quite a while. They're very strict about how our buses apply to that.

MS. KATZ: These are the same standards I believe -- John, correct me if I'm wrong -- that we've been testing for emissions for some time. Even prior to last year when new legislation was passed, right?

MR. SOLOMITA: I've been with this company about eight years, and we've been testing that entire time twice a year.

ASSEMBLYMAN CORODEMUS: Maybe when we recall some of the other witnesses, they can clarify-- I'm having confusion here with the difference between the regulations on the books now for the buses, the regulations we're waiting for, for the trucks, and after the new truck regulation

comes on board, do we have new regulations for the buses as well? I'd like to get that clarified before we leave today.

Mr. Elston's on his way down. As he comes here, is there any other questions from the Committee for this witness?

Assemblyman Rooney.

ASSEMBLYMAN ROONEY: A while back when the casinos were dedicating buses to a casino, you'd have-- Like Tropicana had a bus with all the decorations on it and everything else. I didn't notice when I was coming down the Parkway -- well actually the Turnpike quite a bit-- And I noticed that a lot of these buses were registered out of state, and yet, they were dedicated to a particular Atlantic City casino. So at the time, I had put in some legislation stating that, if that bus was dedicated to a casino, it should be registered in New Jersey. I think, it may have passed. I'm almost positive it did pass, because it's many years ago. But since that time, I haven't seen one bus that's dedicated to any casino. I guess they figured since they would have to register in New Jersey they -- by having those decorations on them -- would rather not register in New Jersey.

But we still find that there are many, many buses that go to Atlantic City that may come from, let's say, Rockland County, New York. Their trip in New York is maybe 10 miles. The trip in New Jersey is 100 and some odd -- 150 miles. Most of their activity is back and forth to Atlantic City. I'm concerned whether our laws in New Jersey -- you know, as far as inspecting for opacity and for diesel type of trucks and buses -- is the same as it is in New York, or is New York much more laxed in their application of their laws. So with that, you're getting buses that are saying, "Hey, I'd rather

register over there. It's cheaper. It's easier, and we don't have to put up with New Jersey's silly laws." I mean is that the case?

MR. SOLOMITA: I can't really speak to--

ASSEMBLYMAN ROONEY: Long involved question.

MR. SOLOMITA: Well, I really can't speak to New York's rules, but these buses as I understand will be subject to roadside inspections. What I understood, that was a big part of the purpose of a lot of this legislation. It was really to deal with the out-of-state vehicles more so than us who are subject to DOT as it is. And we've supported the legislation as long as the passengers aren't inconvenienced, because the idea is to get people to want to take the bus. We've said all along that if you had a good location by Atlantic City where a bus would be pulled over and told, "Okay, unload your passengers and come back," unless you saw a safety problem, that they should do that.

MS. KATZ: My understanding -- and it's just from anecdotal comments made to me -- is that New York does have pretty strict safety inspection standards. I think their inspections also include some emissions inspections. So we can try to check on that for you.

ASSEMBLYMAN ROONEY: Yes, if we can get some comparisons with neighboring states-- Because I'm sure we're getting from Pennsylvania-- We're getting people coming in, again, using the casinos on a regular basis. These are the kinds of things-- And I think that's an excellent idea with Atlantic City if we have a -- Motor Vehicles studying the inspection station down there, having the bus pulled over and have to report there after he discharges his passengers. That's a good idea.

ASSEMBLYWOMAN VANDERVALK: Thank you very much.

MS. KATZ: Thank you.

MR. SOLOMITA: Thank you.

ASSEMBLYWOMAN VANDERVALK: Assemblyman Corodemus stepped out for a minute. So, Mr. Elston, if you could just hold that thought, I think, until he comes back, because I'm sure he'll want to hear your answer.

In the meantime, there are three people from the Owner-Operator Independent Drivers Association, Tom Tumelty -- excuse me if I mispronounce your name -- Robert Driscoll, and Theodore Huyser. If you'd like to come up and testify, we'd love to hear what you have to tell us.

ASSEMBLYWOMAN VANDERVALK: Good afternoon.

Who's going to start?

R O B E R T D R I S C O L L: Good afternoon, I guess I'll start. Good afternoon, Mr. Chairman, distinguished members of the Committee. My name is Robert Driscoll. I'm the General Vice President of Owner-Operator Independent Drivers Association. I reside here in New Jersey and have for most of my life.

Our organization represents about 1100 small family businesses in this State and approximately 35,000 small-business operators across the country. About 82 percent of the trucks that run across the country are owned by small-business families that run maybe six or fewer trucks. Just like most small businesses, our members are vulnerable to government regulations that increase costs and make them less efficient in serving the public needs no matter how well-meaning these regulations may be intended.

While OOIDA supports efforts to compel owner-operator of heavy diesel engines to repair higher emitting engines that have been improperly maintained or tampered with, our organization is adamantly opposed to our members being singled out for enforcement of emission regulations that are neither reasonable in scope or equitable and fairly applied. We have serious concerns with the directions lawmakers now seem to be heading for diesel truck emissions.

While engine and emission technology has steadily improved over the past 15 years, the reality is that the vast majority of trucks used today are from 5 to 15 years old. The overwhelming majority of these trucks are regularly and routinely maintained and repaired. They have never been tampered with; however, many will not pass the Department of Environmental Protection opacity standards.

We believe that State lawmakers are premature in their efforts to establish a roadside enforcement program for commercial vehicles. A roadside effort will simply target the almost always well-maintained trucks passing through the State while totally missing trucks that emit significantly more emissions, because they operate exclusively on local streets and highways.

OOIDA believes at this time there is not adequate data on the in-use performance of heavy-duty diesel engines to qualify the impact of the proposed regulations on truck owners with well-maintained equipment. Without adequate information, this attempt will fail.

We urge lawmakers of the State to follow the example of Utah by implementing an annual vehicle inspection program prior to the implementing of a roadside program. Initially the opacity standard for the annual inspection

program should be in the 70 percent to 80 percent range to develop significant data for the in-use vehicles. Obviously, once the adequate data is generated on what opacity standards can be achieved by older diesel engines that have been properly maintained, these standards can be modified and applied if necessary in roadside enforcement programs.

We believe taking a phased-in approach of this program is sound public policy that will avoid needless disruption in interstate commerce, costly litigation, while furthering the State's interest and our own interest, as well as lowering emission standards.

I have approximately 35 years in this business in all phases of trucking industry. Myself I have over 3 million miles. I would ask you not to consider us disingenuous in our concerns and consider the fact that our people driving the trucks eat all these emissions. They eat it the most. We're very interested in maintaining their health and making sure that they come back to their families every night. We're concerned about our families also.

I will submit to any questions that you may have.

ASSEMBLYWOMAN VANDERVALK: Why don't we just go on.

MR. DRISCOLL: Okay.

ASSEMBLYWOMAN VANDERVALK: Mr. Tumelty are you next?

T H O M A S T U M E L T Y: Yes, okay.

Good afternoon. My name is Tom Tumelty. I'm an owner-operator. I live and work here in the State of New Jersey. Nobody wants cleaner air more than me. Like Bob says, I'm in that truck every day breathing it. I have-- My eldest son is an acute asthmatic. I have five

children. I have grandchildren. I want them to have clean air when they grow up.

I don't have a problem with inspecting my truck. My problem is with the fines. I think they're exorbitant. Seven hundred dollars is a lot of money for a mechanical defect. They're assuming that I tamper with my truck. I have no problem with a yearly inspection, even roadside inspection, as long as it's fair. Now, I've been tested four times. I've had readings from 64 to 84, 61 to 84 -- the 61 and 84 were only two weeks apart -- same truck, same-- Nothing done to it.

The other thing is-- The fine would be exorbitant for me. I've raised five children with this truck. It's getting down to a point where it's just a-- Like I say, I wouldn't mind complying with the law. This fine is what bothers me and the fact that the second time they do it, they want to double the fine.

Now, I have four different things that can affect emissions on my truck. I can fix one. Go to a shop. Get it fixed. Get it qualified. Okay. Go out a month later and something else could go wrong. 'Cause there's smoke, and they want double the fine, that's what I don't think is fair. I'm willing to comply with the emissions. I think the fines are exorbitant.

Thank you.

T H E O D O R E J. H U Y S E R: Good afternoon. My name is Ted Huyser. I apologize for being woefully underdressed here, but unfortunately I just found out at this last minute. I live in Pennsylvania. I was born and raised in New Jersey, Weehawken, raised in Mahwah. All my family, with the exception of my wife and child, live in New Jersey.

The majority of my hauling is in New Jersey and Pennsylvania, the surrounding states here. I also was tested twice. I don't have a problem with meeting emissions. Like Tom here, I want clean air myself. The emissions, as Bob said-- The standards that they set are somewhat on the strict side. It is a very expensive proposition when you're talking about the fines. I think it should be something along the lines closer to your auto emissions where you get checked, and you'd be given a warning. Say, I fixed this and passed through the emissions again.

The only way I can go with this -- with the emissions the way it stands now -- is if I get tested, and I fail, not only do I have to take off time from work to go to court to show that I did something to repair the defect-- However, the only way I can get retested and make sure it corrected the problem is to go and get tested again and possibly fined. The only way I can test it before being checked by DOT is by taking the little pamphlet that they give me which has nine blocks on it with different colored -- different degreeing of gray and black and compare that from eight feet away with what comes from my pipe. In the meantime, the DOT inspectors are going in there with sophisticated equipment right at the stack opening and testing it with their meters. The deck is stacked against me essentially.

I noticed-- I listened to the gentleman from the DEP and the DOT talking their sensors. I noticed that all their sensors -- that they mentioned -- are from Fort Lee down to Newark and out to Elizabeth. There is a very large network of rail tracks there that a majority of freight on the rail come through in this area, as well as the ships that come into the port. These

are all powered by diesel just as the trucks are and use vast more quantities than we do.

Right now, my truck, I have an ′87. It's a 1987 truck. I try to keep it maintained. I just bought-- Excuse me, I'm picking up tomorrow a new fuel pump and new injectors for my truck. This is costing me $1000. It is not cheap to maintain these things, and we do the best we can.

We have improved on mileage in the industry from an average of, what, about 4 miles to the gallon about 12 years ago. Now we have trucks these days going 7.5 or 8 miles to the gallon. That right there, we're using half the fuel that we were using and, therefore, emitting a lot less emissions.

One time I was on a bulletin board service with computers. I was in a, shall we say, a heated debate with a gentleman on-line about the mileage of trucks. I know somebody had mentioned something about cars getting 20 miles to the gallon. I figured it out on a distance -- taking a certain amount of weight a certain distance. It's not scientific, I admit, but I figured out that in order for a car to equal what a truck does, it would have to get about 150 miles to the gallon. I haven't seen any cars, yet, on the market that are doing that.

Like Tom said, if you have an emissions program, I'm more than happy to comply with it. Less emissions to me means more money in my pocket, because fuel is the biggest cost that I have. The better my emissions, the better my power, the amount of fuel I'm using, and the better mileage I get. That means more money in my pocket. However, when you have a fine structure that is set up the way it is, it is very detrimental to my income.

The other thing that I have a problem with is, on the emission testing, is -- they call it the snap throttle test. What they do-- I don't know

how many of you would like to do this with your car, but what they do is they tell you to put your foot to the floor and leave it there for five seconds. Now, I don't know anybody who would want to do that with their car and just overrun the engine and have it blow up in their face. But I'm not to fond of that thought. I mean, these things can rev up and I can bend a valve if it goes too high. There's got to be a better way.

Thank you.

ASSEMBLYWOMAN VANDERVALK: If I may just comment on that. I have no way of knowing whether these types of situations were mentioned to the Departments when they were trying to put the regs together, but there will be a comment period once those regs are published. I would suggest that you look at that very closely, and perhaps at that point, you will be satisfied with what you see in the regs. And if not, then it would be very appropriate that you enter your comments for the record so that those items can be responded to.

MR. HUYSER: Being in Pennsylvania, I do not-- I was never even informed of this meeting here except I happened to be talking to the editor of our magazine. How would I find out when these regulations are published, what they are, where to get a copy, and who to contact?

ASSEMBLYWOMAN VANDERVALK: Please, I don't mean to be snide when I say this, but whatever way you found out about this--

MR. HUYSER: By chance.

ASSEMBLYWOMAN VANDERVALK: Well, you must belong to some trade association that would certainly be aware of what's happening

with the regs. I'm sure you'll be hearing through whatever organization you belong to that, you know, they have been published, and they are available.

MR. DRISCOLL: Madam Chairman, he's a member of our organization. We're the largest independent truck organization in the world. We're based in Oak Grove, Missouri. Our concern with this is not the testing. It's the standards by which we're held.

There are no standards for these engines. No one can tell you what this engine is capable of doing, so, therefore, you cannot say it is not in compliance. That's one of our problems.

The fines are excessive. Seven hundred dollars is an excessive fine for something that you really don't that it's happening. If you go down the road in a truck, and the State pulls you over, and they put a probe down inside your exhaust pipe and use a computer to determine whether you're in violation or not, how would you know?

These trucks are well maintained. It's in our peoples' interest to keep them well maintained. The more well maintained they are, the more efficient they run.

Someone spoke earlier about self-inspections. Tom was inspected by our State Police five times this year and once by Pennsylvania and passed every time.

MR. TUMELTY: Except for emissions.

MR. DRISCOLL: Except for emissions, he failed every time. Just prior to the first time he was checked, he spent about $2500 repairing his system on his own without any regulation in effect.

These are overly burdensome fines. We have a problem with that. We don't have a problem with clean air. We breathe the same air. I'm an asthmatic myself. I have emphysema, triad asthma. The medication has ruined my bones. We're in the same boat as everyone else. We live here, we breathe the air, and we want it as clean as we can. But as long as we burn fossil fuels, we're going to have this problem. We'd be very happy if we could burn water. It would be a lot cheaper. But unfortunately, that's the quagmire we're in.

You mentioned methanol fuels a while back. As I understand it, to run engines on these types of fuels, you need exotic metals inside the engine. Our people don't regulate the places of freight. That's regulated by the industry that does the shipping. So we're kind of stuck in the middle between paying for regulations and not being able to adjust the rates accordingly and trying to comply with the laws. It's a quagmire that we're in. We're perfectly willing to comply with the law provided the law is reasonable.

ASSEMBLYMAN CORODEMUS: Questions?

Assemblyman Rooney.

ASSEMBLYWOMAN WEINBERG: Just to clarify something, we did some quick research over here in terms of the penalties. The legislation allows that the first violation may be reduced to a $150.

MR. DRISCOLL: That's correct.

ASSEMBLYWOMAN WEINBERG: It wouldn't be $700 once you produced a certificate that the necessary repair had been made. It could be reduced to $150. The second violation once the certification again is supplied could be reduced to $500.

MR. DRISCOLL: That's correct. That brings to mind, if you will, an old cliché, don't believe anything you read, only half of what you see.

In order to take your truck down and put it in compliance, you have to take it out of service. That could cost you anywhere from $200 to $500 for the day. There's no guarantee that you're going to be able to pass it again. Okay, because then you have to resubmit it, you have to go back to the court and resubmit it.

Where you were comparing before with automobiles and the emission that trucks put out in comparison, we'll take that comparison any day. We'll submit our trucks on a yearly basis, and if it isn't in compliance, we'll go get it and bring it back in compliance. We don't feel as though we should be fined for something -- a crime that we're not committing. I mean, you fine people as a penalty, and you penalize people that are committing something egregious to our society. This is not the case. This is something we do unwittingly and unknowingly. We feel as though that any fine structure would be out of place.

ASSEMBLYMAN CORODEMUS: Assemblyman Rooney.

ASSEMBLYMAN ROONEY: As far as a fine structure, that's already been enacted. I mean that's law right now. Right now we're looking at regs and what's going to happen in the regulations.

You made a point I guess, Mr. Tumelty. It said that you had some inspections that ran from 61 to 84. We've got this *Asbury Park Press* article that, basically, the New Jersey Motor Truck Association, Mr. Sam Cunningham, the Executive Director said, "The Association supports the law because the emissions test is fair." It goes through and says, "Trucks older

than 1991 models are permitted 55 percent opacity." Cunningham said, "Newer trucks are permitted a 40 percent opacity." Now, you're saying that you're running 61 to 84, and you can't meet the standards and can't keep it within standards. Something is wrong with that truck.

MR. TUMELTY: Well, I'll tell you. The first time I was tested, I ran an 81. Two months before that, I spent $2000 on the truck. I put in a new fuel pump on it. I put a new turbo, and I paid $180 extra for what's called a air-rated turbo. It throws more fresh air into the system. I completely redid the emission system which is two annerator valves and all the air lines -- $480 just for the emissions. It came to $2400. Two months later I flunked the test.

ASSEMBLYMAN ROONEY: What level was it at that point?

MR. TUMELTY: I think that was 81. Now, the problem with the test--

ASSEMBLYMAN ROONEY: What year truck?

MR. TUMELTY: Oh, 1981, I'm sorry.

ASSEMBLYMAN ROONEY: It's a 1981?

MR. TUMELTY: Yes. The problem with the test-- There are five parts with the test. I only failed one, the snap idle, everything else I passed. What they do is they make you snap your thing down. The harder you push it, the more you have a chance of failing. If the inspector-- When I had the lowest one, he wasn't all that particular. He just let me push it down. Now I think I have a problem with my truck. Now, that might be it, but there's not many trucks here-- Depending on how hard they make you slam that accelerator down, like this gentleman said, you could even ruin a valve or eat

a valve. That's what decides the opacity. If there could be some sort of a standard where how hard you-- I mean, I don't slam it down when I drive my truck. I'm sure you don't slam your car down like that.

MR. DRISCOLL: When you push your foot all the way down on the accelerator, what's happening is you're dumping fuel into the engine. You're dealing with a truck that was engineered to pull 80,000 gross pounds up over a mountain, and that's an unfair test for that truck. If you take and slam your foot into the accelerator, you're placing that much fuel into a truck that standing still not doing anything. There's going to be a humongous amount of unburned fuel coming out of there.

ASSEMBLYMAN CORODEMUS: Let me ask this question. Is it fair for us to assume that the newer trucks are burning more efficiently than the older trucks with regard to particulate production?

MR. DRISCOLL: I would say that's a fair statement. Yes, sir.

ASSEMBLYMAN CORODEMUS: Perhaps when we recall the State's witnesses-- Other areas of the law, when it comes to compliance of environmental standards, there's been some grace periods in that if you're found to violate the law, you're given *X* amount of days to rectify the problem. Let's say, in your situation, bring it back to compliance standards. But if you don't, then the fine goes retroactive to the day of the violation. Is that something more agreeable to you gentlemen?

MR. HUYSER: Are you saying something along the lines of-- If we fail, that we have 60 days to make it right, and then there's no fine?

ASSEMBLYMAN CORODEMUS: I'm not plugging in a particular day.

MR. HUYSER: Well, I'm just using it as an example. That would be better. That wouldn't be, in our minds, that wouldn't be the solution -- the end solution -- but that would certainly be better. It would give us equal time to schedule and take it down and take care of it.

Now, two things I wanted to bring up. When we're talking about-- Bob was talking about how we dump fuel in when we step on the throttle. Same thing happens with a gas engine in a car, you just can't see the emissions because it's a different kind of combustion.

ASSEMBLYMAN CORODEMUS: I think we all understand that.

MR. HUYSER: And also the reason the newer trucks and newer engines are burning less, as showing less particulates, burning cleaner is because they're computer controlled. So when you snap the throttle down, the computer regulates how much fuel goes in, and it gradually feeds it in, as opposed to a mechanical where it's dumped in. And that's why they're coming up with less smoke. If you take a mechanical engine and just run it down the road, where you just keep your steady foot on the throttle, you won't see any emissions. But if you take it off first, second, or third gear, you're feeding more fuel in than that engine can handle, because you're only human. That's where the black smoke is. That's where the particulates are.

ASSEMBLYMAN CORODEMUS: How long-- If the older trucks, the older engines, are causing more problems than the newer engines, how long do you think we'll be with this problem? How long would a typical operator hold on to his 1981 truck?

MR. DRISCOLL: It depends on the economy, which is very poor at the time. As a caveat to what you said, Mr. Chairman, if you were to gather information through a State inspection, when you submit the trucks to it, and get a database down on exactly what that truck can achieve, from that point on, with that database, you would know whether a truck was in violation or not. We have no problem with that. We just don't want to be held at standards that the truck can't achieve. If you could establish a database on what a truck-- What pollution level a truck is capable of attaining, and then if the truck fails, as you suggest, then give him the opportunity to fix it and come back in a good faith manner. And then, if not, then you would set the fine. We don't have any problem with that at all.

ASSEMBLYMAN CORODEMUS: My last question is, it seems to be a problem about the actual testing equipment in that you're referring to your chart that you have to eyeball it from the stack. Is there no testing equipment that's out there affordable for you?

MR. HUYSER: I live in Pennsylvania. I would say, in New Jersey probably not, because of the cost of the equipment. I don't know what the cost is, but I'm sure it's a high dollar amount. A shop would have to warrant purchasing such equipment as putting the money out. They would have to see that they get a financial return on it. In Pennsylvania, we don't have it.

ASSEMBLYMAN CORODEMUS: You don't have what?

MR. HUYSER: There are no opacity tests. There are no emissions testing in Pennsylvania. In New York, I believe, in response to Mr. Rooney's question, does not have any time that will pass the standards either. There's only a few states starting to do this. There is no place in Pennsylvania

other than having somebody get in my cab and hit the throttle down and me holding this little piece of paper with a couple different colors on it which could vary from printer to printer for me to say, "Oh, yes, okay, it looks like it's under 50." And then when I go to the emissions testing, it's 56 percent and I get hit with a fine. The deck is stacked against me. I don't have the equipment. I don't have access to the equipment, except my pulling in and possibly risking a fine.

ASSEMBLYMAN CORODEMUS: Assemblywoman Vandervalk.

ASSEMBLYWOMAN VANDERVALK: Yes. Part of the problem that we're running into, as a State, is because this is new territory. There are-- This type of thing is not being done elsewhere, so we do have a problem. That's one of the reasons it's taking a while getting it off and running. But as I mentioned earlier to you -- I really think because the technical nature of your complaints -- that it really should be brought up when the regs are published and respond to the professionals at that time to the Department at that time and let them know your concerns. The regs may not be as bad as you think they are.

MR. HUYSER: That's what we're hoping to help here is, if we can get to some of this stuff before they publish the regulations, then they don't have to go back and change them and avoid a lot of confusion and a lot of money for us frankly.

ASSEMBLYMAN CORODEMUS: We'll get the regulations.

Assemblyman Rooney's been waiting to ask a question.

ASSEMBLYMAN ROONEY: One of the things is I don't want you to leave here thinking that you're going to change the fines, because I

don't think anybody on this Committee would ever vote to reduce those fines. We've had extensive testimony on this prior to the law being passed. We had the New Jersey Motor Truck Association agree on this. The only hope you have is to work something out on older trucks the same way we did per se with older cars. And that's only for a period of time. I think you're going to wind up with about a four-year period of time. In New Jersey, if your car can't comply with air emission standards, you're going to have to lose the car. That's what the law is. I don't like it. I didn't vote for it, but that's what the law is right now, because of the very strict air quality act that we have that was imposed on us by the Federal EPA.

I don't want you to leave here with any misunderstandings. What you can look at doing is getting some sort of relief from DEP and the Departments as to how much a period of time, how much investment you should have to make, because that's the way we do it with automobiles. Because if you put in so many dollars worth of repairs, and you still can't meet the air emissions, then you're given a buy for at least for one more term, which is a two-year term. So those are the kind of things you've got to look at.

MR. DRISCOLL: Mr. Assemblyman, I've omitted reading the other document we've submitted to the Committee, and we've addressed that. I guess we'll just have to address the fine situation in another manner.

ASSEMBLYMAN CORODEMUS: But I don't think Assemblyman Rooney speaks for the whole Committee about the fines. There might be some of us open to consideration for the fines.

Assemblyman Gusciora.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Chair.

Regarding the possible test for the roadside inspections, do you have any comments or preferences between the -- I understand the choices are the snap idle, the rolling acceleration, the stall test. Do you have any comments on what would be best for a roadside test?

MR. DRISCOLL: Well, the snap idle test as far as we're considered is really not a relevant test. That's the one that was challenged, and the challenge defeated the State of California in the courts. It's called the California Snap Idle Test. It's really not-- It's not something that will hold up under challenge. As a taxpayer in the State of New Jersey, I hope you don't.

ASSEMBLYMAN GUSCIORA: And any comments on the rolling acceleration or the stall test?

MR. DRISCOLL: No problem with that.

ASSEMBLYMAN GUSCIORA: No problem with that, okay.

Should there be a sliding scale for the age of vehicles?

MR. DRISCOLL: Yes. We believe there should be. We believe that the scale should be whatever that-- There should be a data established, and whatever that truck is capable of and it meets that, fine. If it doesn't, then it should have to be repaired. But we think that it should be afforded the same as the rest of our citizens with our automobiles: Get it fixed or we're going to fine you. Then you know you're in violation and now you're committing a violation of law and an egregious violation of the people of New Jersey.

ASSEMBLYMAN GUSCIORA: Mr. Driscoll, you commented before about there was some problem arose once the inspection went from local control to State control. Do you have any comments of whether that should

be returned to local control during the enforcement of road and safety stops? Should that be returned back to local control?

MR. DRISCOLL: No. No. We spoke of self-inspection. The self-inspection, if you will, is kind of like-- It's not actually a misnomer, but it's really not a fact of life. We're inspected all the time. As I said, Tom had been inspected five times this year by the New Jersey State Police. We would prefer it to be inspected by the New Jersey State Police because they're interested in safety, and it's not as it is in many states. It's just a matter of fining to fill a state's quotas. We have no problem with safe trucks. In fact, as I said, we're out there. I'm sure that I want to know that that guy behind me can stop. You know, the State Police inspections are my best assurance that I inspect my truck. But my best assurance is that the New Jersey State Police and other qualified people of that caliber do it.

Our best inspections were when the Federal government did it thereself, but in lieu of that, not in every state, but in New Jersey the State Police do a fabulous job.

ASSEMBLYMAN CORODEMUS: If I may, gentlemen, we have one-half hour left in this room before it's going to be used by another group.

I'd like to thank you for your testimony. I'd like to call you back in the future if we need additional information. We have your written statement. You can keep in touch with the Departments on the promulgation of these regulations. I'm sure the gentlemen will give you their phone numbers, and you can call them to see when the rules will be -- the draft regulations will be promulgated, and you'll have an opportunity-- They tell you when the comment period, who to comment to, and when the deadline for

comments are. But certainly, you know, you can take this opportunity now to discuss with them the regulations. Perhaps negotiate things that are going to be more practical in the industry and participate in the process. Thank you very much.

MR. DRISCOLL: We thank you, Mr. Chairman, and thank the Committee for your time. We will be looking forward to your questions.

ASSEMBLYMAN CORODEMUS: I would like the three Departments to come up for five minutes for cleanup. Are they still with us? John? Just five minutes, gentlemen. Just get down to the bottom line and some of these questions.

ASSEMBLYMAN ROONEY: Steve, as these gentlemen are leaving, one suggestion I would make is that when you were talking about having the test and having them stomp down on the accelerator, it seems to me as a novice and not really involved in this -- I have a little mechanical ability -- that if you went to your own dealer or something, there's a little spring underneath your accelerator pad, if that spring could be made for a higher tension than is presently-- You couldn't stomp down on it. And then when he asks you to pump down on it quickly, you wouldn't be able to do it. You'd be able to soft accelerate. It might be a suggestion that somebody would use.

MR. DRISCOLL: (indiscernible; speaking from audience)

ASSEMBLYMAN ROONEY: I think you should look into it though. If you never stomp down in normal operation, it would be--

ASSEMBLYMAN CORODEMUS: Thank you very much. That will be the end of the spring discussion. Okay.

Gentlemen, real fast, I just wanted-- I didn't want anybody to leave this room, including me, confused about what regulations are on the books now for buses, which regulations we are waiting for truck compliance, and how that affects the buses in the future. Maybe we could just address that one issue.

MR. ROBBINS: Okay. I have with me Paul Kaufmann.

ASSEMBLYMAN CORODEMUS: Microphone, please.

MR. ROBBINS: From New Jersey Transit, I have with me Paul Kaufmann who is the Manager for the Fleet & Support Equipment, Maintenance Support. He can answer any technical questions with regard to that.

ASSEMBLYMAN CORODEMUS: Okay, put it right in a capsule. Let's go, Paul.

P A U L E. K A U F M A N N: We test the buses once for smoke, once every six months.

ASSEMBLYMAN CORODEMUS: These are the private, commercial carriers?

MR. KAUFMANN: No. New Jersey Transit buses and the private, commercial carriers we alternate. We test them once, and then the next six-month period they're tested for smoke by the commercial carriers themselves.

ASSEMBLYMAN CORODEMUS: And you say smoke, we were talking about the particulates?

MR. KAUFMANN: Yes.

ASSEMBLYMAN CORODEMUS: At what standard are those particulates?

MR. KAUFMANN: For opacity.

ASSEMBLYMAN CORODEMUS: Opacity. And what does opacity mean for a layperson?

MR. KAUFMANN: Visible smoke.

ASSEMBLYMAN CORODEMUS: Visible smoke?

MR. KAUFMANN: Right.

ASSEMBLYMAN CORODEMUS: Now, that doesn't get into the micron testing that the EPA promulgates, 10 or 2.5 proposed, or anything like that?

MR. KAUFMANN: No it does not.

ASSEMBLYMAN CORODEMUS: And what does that test do for us?

MR. KAUFMANN: That test ensures that our buses, as well as the private carrier buses, in the State maintain an acceptable level of opacity or visible smoke. That standard has been in effect as long as I've been with Transit, and it's been at 12 percent. In other words, if I had a light on and you saw 100 percent of the light and you pass smoke through it, you would obscure some of that light. And the device that we use allows us to make that determination.

ASSEMBLYMAN CORODEMUS: And right now, it's what?

MR. KAUFMANN: Twelve percent.

ASSEMBLYMAN CORODEMUS: Twelve percent?

MR. KAUFMANN: Yes.

ASSEMBLYMAN CORODEMUS: Now, is that -- I don't want to go back into this throttle issue but -- at idle or is this at fully depressed open throttle?

MR. KAUFMANN: That's actually at fully depressed, open throttle.

ASSEMBLYMAN CORODEMUS: Okay.

MR. KAUFMANN: Yes. It is a very-- It's a difficult task.

ASSEMBLYMAN CORODEMUS: Now, let's jump back to this new regulations that we're waiting for completion. Now, how does that affect the buses that we just heard testimony on earlier?

MR. ROBBINS: As I understand it, the Department of Environmental Protection is establishing some regulations which will establish a new standard for the buses. And that standard, if adopted by New Jersey Transit, would be given the same test we test them at the same time, but it would give us a slightly improved overall picture on opacity, because the test would be done not from the 1600 RPM's up, it would be done from a flat idle out. As I understand that's--

ASSEMBLYMAN CORODEMUS: Let me just--

ASSEMBLYWOMAN WRIGHT: Before he speaks, Mr. Chairman -- they're talking about the word opaque meaning that--

MR. ROBBINS: Opaque is black.

ASSEMBLYWOMAN WRIGHT: Opacity is not a chemical term.

ASSEMBLYMAN CORODEMUS: I understand that much.

ASSEMBLYWOMAN WRIGHT: Okay.

ASSEMBLYMAN CORODEMUS: I'm not part of the laypublic. I understand that.

ASSEMBLYWOMAN WRIGHT: But when you described it, it wasn't clear to me for the record.

ASSEMBLYMAN CORODEMUS: Okay.

MR. ELSTON: One hundred percent opacity, you can't see through it at all. Zero opacity, it's completely clear of those shades between. I think, perhaps, some of the confusion here is that all engines are not the same. Bus engines are very different than truck engines. The last three gentlemen here are involved in truck engines. They're called turbocharged. They carry different type loading characteristics than certainly the buses. The buses are generally naturally aspirating while they're changing, and so they have a different opacity level. So it's probably not fair to compare the bus standard to the truck standard. But I must say that what you heard from the panelists a few moments ago and from what you're hearing now, this is not an easy task. It seems easy, but smoke is smoke, dirt is dirt.

But the fairness issue and accuracy issue, which the law requires us to do, could create a fairly complex set of standards. In order to improve the air quality, there will have to be some give on everyone's behalf, both truckers, busers, and bus companies. Everybody will have to begin to work around this and to begin to have the burden of expense as it were. They'll all have to share it in order to make a standard worthwhile here.

ASSEMBLYMAN CORODEMUS: Time doesn't permit today, but perhaps, you can get back to us about concern about the technology being out there for independents and even fleet carriers to self-inspect when it comes

to opacity, or particulate production, and also, your Department's position on perhaps utilizing a grace period for violations as opposed to the statutory fines and penalties.

Thank you very much, gentlemen.

We're going to call the next panel up: Benita Jain, Marie Curtis, and Linda Stansfield.

ASSEMBLYWOMAN WRIGHT: Mr. Chairman, may I ask you a question?

ASSEMBLYMAN CORODEMUS: Yes, sure.

ASSEMBLYWOMAN WRIGHT: The way in which opacity was described to me, it's particles viewed through a light. I would not be in a position to judge the technology, but it sounds like it might be a rough technology.

ASSEMBLYMAN CORODEMUS: Sounds very crude.

ASSEMBLYWOMAN WRIGHT: Okay, and maybe that would be what I would be interested in hearing if it's appropriate.

ASSEMBLYMAN CORODEMUS: I think we should find out more about the opacity as opposed to the EPA standard which actually measures the particulate size.

ASSEMBLYWOMAN WRIGHT: Mostly that we would-- If we're going to be fining people, we want to be sure that the instruments are accurate.

ASSEMBLYMAN ROONEY: Although the particulate size is very important -- because, as was discussed earlier, the smaller the particle the deeper it goes into the lungs, and that's what the major problem is with the carcinogens. The deeper they go, the worse the situation.

ASSEMBLYMAN CORODEMUS: I think Marie's going to talk about that.

Marie.

M A R I E C U R T I S: You may be right.

Thank you for hearing us this afternoon.

My name is Marie Curtis. I am Executive Director of the New Jersey Environmental Lobby, representing some 150 local and statewide environmental organizations, as well as nearly 1000 individual members. We are pleased to be here today, and I'm very pleased to see two such key Committees working together on this issue that does, indeed, overlap both health and environment.

Several studies have been done in recent years looking at the long-term health effects of exposure to particulate emissions. Since 1987, EPA has monitored and set standards for particles measuring 10 microns in diameter, as you heard earlier from Mr. Elston. The Harvard School of Public Health and the American Cancer Society both discovered, however, that these bits of soot are large enough to be mostly screened out by the human body's own defense mechanisms, those in our noses and throats. The ACS study also used statistical techniques to screen out the effect of other risk factors such as smoking, body weight, and occupational exposures. They concluded that there is a very real danger from smaller particles.

It's these very small, fine particles that can travel deeply into the lungs and, as Assemblyman Rooney just indicated, they cause cell damage there. The particles are a mixture of soot, solids from car and truck exhausts, mostly diesel, and industrial emissions and atmospheric aerosols. These are the

sources for most of these. More than half, however, of all of the problem particles are from coal-fired utility plants and diesel exhaust. With diesels, many times, it's what you don't see that will hurt you. It's the smaller particles, not those big pieces of soot.

In May of this year, the NRDC released a report entitled *Breath-Taking*. I have just given two copies of that report, one for each of the Committees here today. The study was a premature mortality due to particulate air pollution. Some 239 cities were considered with intensive review of epidemiological studies on the health effects of particulate pollution. They concluded that lives are shortened by an average of one to two years in the more polluted areas. These are heart- and lung-related deaths. The elderly and those with heart and lung disease are most affected.

The EPA, as you've already heard, has been reviewing this evidence, as well, with an eye toward establishing new standards both for ground-level ozone and for fine particulates. Currently, there is no standard for these small particles measuring 2.5 microns or less. Yet these are the culprits that destroy cells and damage lung tissue making it fertile ground for a variety of respiratory illnesses. These tiny particles can also carry toxins and carcinogens from the surrounding air into the lungs.

In fact, according to the New England Journal of Medicine in a 1993 report, researchers studying 8000 people in six different locations over 17 years determined that the risk of early death in high-level fine-particulate areas was 26 percent greater than that in low-level areas. At a recent EPA hearing in Philadelphia, we heard health professionals and victims of lung

disease both calling for standards of protection from this particular health menace.

Here in New Jersey, my organization and other members of the Tri-State Transportation Campaign have been urging rapid implementation of the Diesel Inspection and Maintenance law passed by the Legislature last year. This would be a step in the right direction.

We have also been meeting with New Jersey Transit officials trying to convince them to at least begin purchasing alternate-fuel vehicles. Our neighbors in New York State have begun converting to compressed natural gas buses on Long Island and in New York City. Governor Pataki has included $100 million for alternate-fuel or electric buses in the bond issue that he will present to the voters this fall.

We in New Jersey should be doing more. As a corridor state with heavy-duty diesel buses traveling all or most of our roads and with diesel buses filling the roadways to Atlantic City -- I agree with Assemblyman Rooney -- we have a population especially at risk. Moving toward cleaner diesels with stringent inspections as we phase out, hopefully, this destructive technology seems to be a logical first step.

I did submit copies of my remarks for all members of the Committee, but I had a couple of other comments after listening to the prior testimony here today.

One, I would like to mention that somebody -- I think it was on the panel -- raised the question of older trucks that are less well maintained. These are usually, we find, the short-haul -- the short-haul trucks -- the ones that are operating within the State and even within a given urban area. And

as somebody -- I think maybe the last panel of truckers -- pointed out, these are not the trucks that are being stopped on the highways. These are the trucks that are operating on a day-by-day basis. They're the trucks that are perhaps registered in New Jersey that should be inspected, because they are normally the worst offenders. Yet, these are the ones that we do not think are going to be even included in the regs. From our understanding, we don't believe there's going to be provision for periodic inspection of New Jersey-registered trucks. This particular segment of the trucking populous, I think, is going to be overlooked. Certainly they will know how to stay away from the highways where the roadside inspections are taking place. Truckers communicate with CBs and other means these days. So that's a problem as well.

I'd also like to point out that I thought I heard that there was insufficient equipment available to test diesels in this State at this point. That's one of the reasons that it had to be phased in. Then I would like to ask, how can these people certify that they've been inspected each year when they reregister if we don't have enough equipment to do the job? It seems to me that we have an anomaly there.

And the only other thing I would like to just mention in passing is that there was concern expressed about trucks and automobiles being on the same, even playing field. I think that that is true, that they should be on the same playing field. But I think that when it comes to that question, we have to keep in perspective the fact that the trucks are used to make a profit for the owner. The automobile is not being used, in general, to make a profit for its owner. It's a matter of necessity in most cases. So I think there is a little bit

of a difference there. I do, however, think that the fines being reduced with certification to $150 is certainly a reasonable way to go about doing this.

I thank you.

ASSEMBLYMAN CORODEMUS: Thank you, Marie.

We're going to permit the other two speakers to go, to present their testimony. And if you're available for questions, we'd like to ask you questions.

MS. CURTIS: Absolutely.

ASSEMBLYMAN CORODEMUS: Go ahead.

B E N I T A J A I N: Good afternoon.

My name is Benita Jain, and I am Transportation Organizer for New Jersey Public Interest Research Group Citizen Lobby. I'd like to thank you for the opportunity today to speak on the effects that diesel emissions are having on our lives.

Trucks and buses are spewing diesel exhaust all over the State, and it's an all-to-common sight as anyone, who's lived in New Jersey for an extensive period of time, knows. For the past year, NJPIRG has been working on determining the effects that diesel emissions are having. In light of strong evidence that they are having devastating negative effects, we are working to decrease the use of diesel in New Jersey.

Today we've heard from numerous people about the health effects of diesel, but we can't voice these concerns enough. Numerous doctors and health professionals have determined that diesel emissions pose a critical health risk for New Jersey residents. Diesel exhaust contains more than 40 hazardous air pollutants and particles. They are small enough that we can inhale them

deep into our lungs where they then begin their attack. They aggravate asthma. They aggravate bronchitis and emphysema and generally decrease effective use of our lungs. Particulates are also carcinogen-attracting particles and they increase our risk of getting lung cancer.

Several people today have already referred to several studies that have been done nationwide. We've heard from statistics from *Breath-Taking*, the NRDC report, from the Harvard Medical School. The American Cancer Society and the EPA have also done studies that have linked particulates to premature death and to hospital admissions. Every year about 64,000 people in the United States have been dying from the ill effects of particulates. People aren't just dying one or two weeks prematurely. People are dying on average one to two years before they would normally die. So there's a lot of evidence that particulates are harmful to us.

Diesel combustion is also contributing to smog or ground-level ozone. Like particulates, this aggravates respiratory problems. The American Lung Association has linked ground-level ozone to thousands of hospital admissions and emergency room visits in 13 American cities.

As you know by now also, we're all affected by particulates and ozone, but some populations are at a greater risk than others. This includes people who already have asthma and other respiratory illnesses. This includes children who have a smaller lung capacity and play outside more. This includes the elderly, people who work outside, and urban residents. Generally, communities of color and low-income families, because that's the sight where most bus depots are located. So a significant proportion of our population is at a greater risk, but we're all affected by this in some form or another.

Across the nation, there's been a dramatic rise in asthma rates. In the 1980s, in fact, in New Jersey the asthma death rate doubled. Currently, about 900,000 New Jersey residents have asthma or other respiratory illnesses. So a New Jersey child with acute asthma can probably tell you of enumerable high-ozone days when they were forced to stay inside, and they were struggling just to breathe freely.

In the summer of 1995, New Jersey air monitoring stations registered 43 EPA ozone exceedances on 14 different days. There is no doubt it rudely disrupted the lives of many New Jersey residents. This impacts not only individual lives, but our State as a whole. The health of citizens, as we know, is directly linked to the well-being of our economy. Healthy children learn better, and a healthy workforce is also a productive workforce. And that's just common sense, we don't necessarily need studies to show this to us.

So I guess the question we have to ask is, where our diesel emissions are coming from? We've been talking about this all day. I'll try to make my comments brief. They are coming primarily from trucks and buses in New Jersey, so it makes sense that we target these vehicles if we're effectively going to deal with particulates and ozone reduction.

Cars are subject to periodic inspection, but trucks which are the largest and most polluting vehicles on our roads historically have been exempt from meeting clean air standards. They continue to unabashedly pollute our air as anyone that has ever driven behind a truck knows. Additionally, New Jersey is also home to the second largest bus fleet in the nation. Out of thousands of buses, we only have three operating natural gas buses. So this also makes us one of the dirtiest bus fleets in the nation, in addition to being

one of the largest. In light of New Jersey's historically strong emphasis on environmental protection, this is shameful.

Over seven million New Jersey residents breathe air considered unsafe by EPA standards, which themselves are not stringent enough. New Jersey is not effectively addressing these problems. Obviously, the most sensible way to tackle these health problems is to minimize to whatever extent we can. This would involve decreasing diesel emissions.

So first of all, New Jersey Transit has to dump diesel and begin to use cleaner, alternative fuels. Given the poisonous fumes that buses emit, New Jersey Transit should be making a real effort to clean up its act. They can set a real example of safety simply by buying buses that aren't needlessly risking our health. Fleet operators around the country have already recognized the necessity of dumping diesel for cleaner fuels. This includes states like California, Texas, and New York. A lot of transit operators in the states around the country have committed to buying only natural gas buses or significantly increasing their purchases of natural gas buses. Something that New Jersey Transit just isn't doing.

So we do support Assemblyman Anthony Impreveduto's bill, A-1714, that would require New Jersey Transit to purchase alternative-fuel buses. This is a crucial step, we feel, towards bringing true accountability to our State for public health.

New Jersey must also implement an effective truck inspection program, something a lot of speakers today have already spoken about. We did support the legislation passed last year that required mandatory inspections to curtail heavy amounts of soot that trucks cough up all around our State.

We believe that we need to have mandatory periodic inspections which would catch a lot of the trucks that wouldn't normally be tested with only roadside inspections. But we also need roadside inspections to catch trucks that aren't necessarily registered in New Jersey that may only be passing through. We also need the roadside inspection program while we're setting up the mandatory periodic inspection program.

Medical treatment cannot reverse the irreparable damage that diesel exhaust does to our bodies and our lives, but we can prevent a lot of it from occurring in the first place. So in light of overwhelming evidence of the health impact of these deadly fumes, we should be doing everything we can to ensure that trucks and buses in New Jersey are held up to a decent standard of responsibility to the people of this State.

Thank you.

ASSEMBLYWOMAN VANDERVALK: Thank you.

Linda Stansfield.

L I N D A S T A N S F I E L D: Madam Chairman, members of the Assembly, and members of the staff: I'm Linda Stansfield, the Program Consultant for Environmental Affairs of the American Lung Association of New Jersey. I ran into a catch-22. Our office is being recarpeted and none of our Xerox machines are available. So I took the material to pass out to you to a retail copying outlet, and they will not copy copyrighted material, even though it's copyrighted in our name. So on Monday, I will provide you with copies of my testimony and the attachments.

Our organization is the oldest voluntary public health association in the United States. We are especially pleased to participate in this hearing

on diesel emissions, because the health effects of diesels have long been a priority concern of the American Lung Association. Recent health studies have increased our concern and our determination to eliminate this life-threatening source of pollution.

Two years ago the passage of Maureen Ogden's bill, which required random inspections of all diesel trucks on New Jersey highways, gave us great satisfaction. We attended the press conference at the Meadowlands where the State Police, technicians from DEP, and representatives of DMV demonstrated how the inspection program would function. The regulatory agencies had designed a program that would allow inspection of both New Jersey and out-of-state registered trucks, and it met with our approval and our goals. After more than a year and half, the program has not gone into effect. While the State Police have continued to pursue their test program, they have been unable to issue summonses, only warnings, because the regulations to implement the program have not been adopted. This situation appears to be peculiar and almost unprecedented. This legislature has both the right and the responsibility to demand rapid adoption of the regulations and rapid implementation of the program to control this urgent health threat.

In order to define the nature of the threat to public health, I would have presented selected paragraphs from a recent publication of our national American Lung Association entitled "Health Effects of Outdoor Air Pollution." The full text will be submitted with this testimony. I urge you to read the section on particulates especially, also, sulphur dioxide and nitrogen oxides. And many have quoted from *Breath-Taking*, NRDC's *Premature Mortality Due to Particulate Air Pollution in 239 American Cities*, which I will submit.

In summation, the American Lung Association of New Jersey contends that control of particulates, sulphur dioxide, and nitrogen oxides from the emissions of diesel trucks, cars, and off-road engines threatens the breathing and, thus, the lives of thousands of New Jersey residents. I am including a breakout of vulnerable populations within New Jersey by State and by county. As New Jersey approaches 8 million residents, it has over 260,000 adult asthmatics, 136,000 children with asthma, 427,000 residents with chronic bronchitis, and 64,000 with emphysema. If any legislators wish to have their county figures, I can read that out to them.

The health costs of -- and I'll submit that to everybody -- this ongoing air pollution defy calculation. We do know that the overlapping effect of more than one air pollutant is greater than the sum of each of the separate pollutants. One for instance, ozone, impairs the immune system defense against the second pollutant, for instance, particulates, and so on for the third and the fourth. Doctors on our advisory board estimate an acute asthmatic attack in New Jersey resulting in an emergency visit costs between $250 and $500. The cost to our medical system and to our residents is enormous. You can make a significant reduction in these costs by instituting stringent inspection controls on diesel trucks. You could do even more by placing stringent controls on diesel autos, off-road engines, and diesel-powered school buses, which are a relatively new and very alarming use of diesel power. Diesel particulate pollution in the student pickup areas of schools is now a very real health threat.

The American Lung Association of New Jersey thanks you for this opportunity to present our concerns about the health effects of diesel engine

pollution. We also join with PIRG in promoting Bill No. A-1714 which would require New Jersey Transit to adopt alternate-fueled vehicles.

Thank you.

ASSEMBLYWOMAN WEINBERG: Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Yes, Assemblywoman.

ASSEMBLYWOMAN WEINBERG: Along with the testimony that's just been presented, since my colleague, Assemblyman Anthony Impreveduto, who is the prime sponsor of A-1714, has given us written testimony which he would like to submit, which I will pass on to you, but I would just like to read the last two paragraphs of this testimony which says:

"New Jersey should be taking the lead in driving the alternative-fuel market. I encourage all the members of the Environment, Science and Technology Committee and the Health Committee to sign on to my Clean Bus bill, A-1714, which requires New Jersey to buy clean, alternative-fuel buses and request Chairman Corodemus post it for consideration by the Environment Committee early this September.

"Another public health measure which should be taken is an expansion of our air monitoring program. A report released this month by Physicians for Social Responsibility documented the high level of air toxins in New Jersey which are linked to a number of diseases and disorders. Although this, too, a significant public health threat, our air program does not even monitor for air toxins. Since these toxins enter the body as attachments to particulate matter, attacking diesel pollution has the double benefit of reducing health threats from air particulates and from air toxins. Thank you."

And I'll pass the complete testimony on to you.

Thank you.

ASSEMBLYMAN CORODEMUS: Are there any other questions?

If not, I'd like to thank our witnesses for testifying. Do we have anybody else?

Therese, did we miss you? I'm sorry.

Are there any other witnesses that have not been called to testify? (no response)

Therese, you're really on the spot now, because you've got four minutes, so--

THERESE LANGER: Four minutes, okay.

In that case, let me submit my written testimony.

I'd like to limit myself to a couple of points mainly in support of testimony that's already been given. I'm Therese Langer. I'm testifying on behalf of the Tri-State Transportation Campaign. I am the Staff Scientist at the Environmental Law Clinic at Rutgers in Newark.

The Tri-State Transportation Campaign is a consortium of 13 environmental, transportation, and planning organizations in the tri-state area -- that is, New York, New Jersey, and Connecticut region -- that is dedicated to the development and implementation of a transportation system that is efficient, environmentally sound, and equitable. The Tri-State Campaign has placed reduction of diesel truck and bus emissions among its highest priorities.

Diesel exhaust plays a significant role in several of New Jersey's air pollution problems, among them ozone, fine particulates, and dozens of other substances that have been classified as hazardous air pollutants. Let me just

say a word about ozone, because people have for good reason spoken largely about particulates today. Reduction levels of ozone has, of course, been a very high priority in New Jersey for some time, because the entire State fails to comply with the Clean Air Act-imposed standard for ozone.

The highway sources in New Jersey are responsible for 27 percent of emissions of oxides of nitrogen which are one of the two main precursors for ozone. And of that 27 percent, 36 percent of the NOx -- that's oxides and nitrogens -- are emitted by diesel trucks and buses. So that means that the total NOx inventory in New Jersey is made up 10 percent by diesel emissions. And given the advance stage at which our efforts to reduce ozones are at this point, each percentage point reduction in NOx is a major step towards compliance with the ozone standard. Therefore, a cut in NOx emissions from diesel would, in itself, be a major step in the right direction.

I want to skip most of my comments in particulates because much of the material has been covered. But I do want to highlight a couple of things. Fine particles have been recognized as a threat to public health, I think, far longer than ozone but have taken a back seat in New Jersey's air pollution priorities recently, because we comply with the current Federal standards. But the realization that those standards really are not adequately protective of human health have placed particulate matters in the spotlight again. And many people have referred to the fact that EPA is in the process of changing the standards.

The level of diesel exhaust particles in the air and their contribution to the total particulate load in New Jersey varies tremendously from location to location. People who are living or working in close proximity

to areas where there's a lot of truck and bus activity are exposed to levels many, many times higher than the regional or even citywide averages of particulate levels reflect. As an example, I think that was cited earlier by John Elston, the contribution of diesel exhaust to particulate matter levels in what's called The Canyon in Madison Avenue, in Manhattan, are over 50 percent of the total.

There is very little information that is available about the breakdown of particulate matter by source in New Jersey. Moreover, we have presently no monitoring system in place for fine particles, that is particles of 2.5 microns or less. Collection of that data and analysis of that data should certainly be among the very first steps taken in tackling the diesel exhaust problem.

I do want to comment, though, that in 1990, New Jersey did have two monitors in place for PM2.5. Those were in Newark and Elizabeth. They reported levels in 1990 of 21 to 22 micrograms per cubic meter. That's an annual average. I want to note that the EPA staff paper that's currently being reviewed in connection with their revision of the national standards recommends an annual average PM2.5 standard of between 12.5 and 20 micrograms per cubic meter. So that is to say that Newark and Elizabeth would both have exceeded the least stringent annual average under consideration presently by EPA. It's important to note that while the overall trend both nationally and in New Jersey is toward lower levels of particulate, that is not the case in many of our urban areas in New Jersey and particularly not the case in Elizabeth and Newark.

Let me move on to refer to two tools that are potentially available to us to control diesel emissions. They've both been discussed today. New Jersey's not taking advantage of either of them at the moment. The first being the inspection law. Let me just say that we need the program up and running now, and that is both the roadside and the periodic elements. Either half the program by itself will be of limited effectiveness. Therefore, we would recommend that the Legislature urge the DEP and the DOT to promulgate regulations for both parts of the program. Again, that is both the roadside and periodic elements before the end of the calendar year.

I would also like to refer to a second important tool that has been discussed, and it's particularly important in our urban areas. That is the purchase of alternatively fueled buses by New Jersey Transit. New Jersey Transit purchased five natural gas buses in 1988 as an experiment and has not purchased another one since. As it has been said before, many transit operators across the country are buying natural gas and other alternatively fueled buses in large numbers, including New York's MTA. They've committed to purchasing several hundred nondiesel buses in the coming years and also to converting three bus depots from diesel to compressed natural gas.

There's also been some mention of Governor Pataki's bond issue coming up, which is providing $230 million for air quality projects. Much of that is to be devoted to purchase of alternatively fueled buses and infrastructure for alternative fuels.

I would say, given New Jersey Transit's reluctance to move ahead on this issue, that the impetus for change in the fuel types for our buses in New Jersey must come from outside the agency.

Let me make one final point, which is that an important strategy in New Jersey for reducing diesel emissions is to improve goods movement by promoting intermodalism and reducing reliance on trucks when that can be done efficiently. Rather than searching for pollution- and congestion-reducing alternatives to trucking goods across the New York harbor, however, many transportation agencies in this area continue to make, in some cases, ill-advised expansion of our roadway network. At present, New Jersey is being asked to stand by while the Port Authority constructs a twin to the Goethals Bridge, which will bring, if constructed, a lot more trucks rumbling through Elizabeth, Linden, Rahway, and on to Middlesex County. These communities already have a very heavy air pollution burden from a variety of sources. They can really not afford the added diesel emissions that this additional truck traffic will bring.

So let me just close by saying that the diesel bus and truck emissions are clearly one of the outstanding public health issues in New Jersey today. We applaud these two Committees' willingness to take on the problem.

Thank you.

ASSEMBLYWOMAN VANDERVALK: Thank you for your testimony.

ASSEMBLYMAN CORODEMUS: Therese, thank you.

We apologize for rushing you in the end. It's never a good way to allocate the time equitably for everybody.

I'd like to thank Assemblywoman Vandervalk, Chairwoman of the Committee, and all the members for coming out here today. Your presence and input in the Committee meeting was very helpful. I'd like to thank all the

witnesses that came here today, our staff, Jeff Climpson, and our OLS staffer being here to transcribe the meeting.

Thank you and good evening.

(HEARING CONCLUDED)