PUBLIC HEARING REGARDING

PROPOSED HEAVY-DUTY ENGINE AND VEHICLE STANDARDS

AND HIGHWAY DIESEL FUEL SULFUR CONTROL REQUIREMENTS

LOS ANGELES, CALIFORNIA

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PANEL MEMBERS

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I N D E X

PROCEEDINGS

MS. JORDAN: Good morning. Welcome to today's public hearing. I am Deborah Jordan, acting director of the Air Division of the San Francisco office of the Environmental Protection Agency. We are here to receive comments on a proposal for more stringent emission standards for heavy-duty trucks and buses and new standards for highway diesel fuel.

Today we will briefly present the Agency's proposed action. Most importantly, we will hear your ideas and concerns about efforts to reduce emissions from these mobile sources. There has been great progress in local, state and federal efforts to control harmful levels of ozone in recent years. Yet the Western United States continues to experience some of the most serious remaining ozone and particulate matter problems in the country.

This is reflected not only in the South Coast but also in areas like the San Joaquin Valley, the Sacramento Valley and Southeast Desert, where air pollution levels have not been declining significantly over the past half dozen years. In these areas almost 5 million residents are exposed to pollution levels that can cause or contribute to asthma, acute respiratory problems, decreased lung function and impaired immune systems. California's

Central Valley is also our nation's agricultural backbone, and the continuing smog problems there inhibit photosynthesis and suppress growth of crops and trees, causing our economy millions of dollars.

We need to ensure that we continue to apply rigorous controls to industrial and commercial pollution sources. However, our remaining pollution problems are increasingly dominated by mobile sources. And with the continued rapid growth in vehicle use in the West, we believe that stringent motor vehicle controls are needed.

I now would like to introduce Margo Oge, Director of EPA's Office of Transportation and Air Quality, who will provide an overview of the proposal, and will describe the ground rules for the hearing.

MS. OGE: Good morning. On behalf of the Environmental Protection Agency, welcome to today's hearing and thank you for coming. I am Margo Oge, director of EPA's Office of Transportation and Air Quality. I will serve as the presiding officer for today's hearing. Today we will hear testimony on EPA's proposed rulemaking for cleaner trucks and buses and cleaner diesel fuel.

This is a historic proposal. This proposed program will achieve a dramatic reduction in air pollution in the 21st Century.

Last year we established a new program, called

tier two, to dramatically reduce emissions from cars and light-duty trucks, SUVs, minivans, and pickup trucks. We are now focusing much needed attention on heavy-duty trucks and buses applying the same principles of addressing the vehicles and the fuel as a single system.

This proposed program would protect the public health and the environment of all Americans by reducing the sulfur content in highway diesel fuel by 97 percent to provide the cleanest diesel trucks and buses in history.

This means that for the first time ever, heavy-duty trucks and buses would be able to use pollution-control devices to meet emission standards. Just as passenger cars have been doing for the last 25 years.

These devises are sensitive to sulfur and will not work unless the amount of sulfur in the fuel is dramatically reduced.

Heavy-duty trucks and buses are largely powered by diesel engines. Diesel engines are more durable and get higher fuel economy than gasoline engines, but they also tend to pollute more.

More than 100 million people live in areas with unhealthy air quality. For example, here in Los Angeles heavy-duty trucks and buses contribute more than a quarter of the NOx pollution and 14 percent of the PM pollution from mobile sources

This pollution causes lung damage and respiratory problems, and there is increasing evidence that diesel exhaust may cause lung cancer in humans.

The proposed program would have a substantial impact on these emissions. It is the clean air equivalent of removing from air pollution generates by 13 million of today's trucks.

In 2007 we are proposing a particulate matter emission standard for new heavy-duty engines of 0.01 grams per brake-horsepower-hour. This is a 90 percent reduction from today's standard. These standards would begin in 2007 and be fully phased in in 2010.

We're proposing standards for NOx of 0.20 grams per brake-horsepower-hour, a 95 percent reduction from the current standard and we are proposing that, in mid 2006, sulfur levels in diesel fuel be limited to 15 parts per million. This is a 97 percent cut from the current highway diesel fuel sulfur limit of 500 parts per million.

We estimate that the cost to produce and distribute the low sulfur diesel fuel will be about four and a half cents per gallon.

We estimate that vehicle costs would increase about $1,000 to $1,600, depending on the size of the vehicle. We designed this proposed program to include significant lead time for the introduction of new, cleaner

fuel into the marketplace.

The proposal also discusses various flexible phase-in approaches for the diesel fuel industry, including potential provisions to address special needs of small refiners and farmer cooperative refiners. For engine manufacturers, the proposed program allows phase-in of the new engine standards over four years, from 2007 to 2010.

Before we start with today's testimony, I will introduce the EPA panel and describe how we will conduct this hearing. With me on the panel today are Deborah Jordan, Air Division Director of EPA's regional office here in California. Dawn Martin, Chief of Staff of EPA's Office of Air and Radiation. Chet France, Director of the Assessment and Standards Division. Michael Horowitz, from the Office of General Council.

This is one of five public hearings on the proposal. We expect to hear testimony from witnesses offering a broad range of perspectives.

Please keep in mind that, in addition to the opportunity for oral comment at these hearings, the comment period will remain open until August 14 to allow for written comments.

We are conducting the hearing in accordance with section 307-D5 of the clean air act, which requires EPA to provide interested persons with an opportunity for

oral presentation of data, in addition to an opportunity to make written submissions.

Today we expect a large number of people. We will do our best to keep the process going slowly wanted we will ask you for you help. So that everybody that is here to testify has the opportunity to do so, I would ask that you to keep your comments to the maximum of ten minutes. If you can do better than that we greatly appreciate it.

If you are testifying -- Mike, standup -- there is Mike. Mike is an important person to help us move the process forward. He is sitting here on the front row and he will help you keep track of your time by signaling you before your ten minutes. Please follow his direction.

Because of the large number of witnesses who will testify today, this hearing may go to the evening hours, and we will work through lunch and dinner.

I will conduct this hearing informally. We request that witnesses write their name and affiliation prior to making their statement. Please write your name clearly on the paper provided and place it in front of you. When a witness has finished her or her oral presentation, the members of this panel may ask questions. I would like to remind the witnesses that any false statement or false response to questions may be a violation of the law.

If there are any members of the audience that

wish to testify and they have not signed up, I would ask you to please sign your name with the receptionist outside. I would also ask that all of you, even if you are not testifying today, please sign in at the desk.

We are glad to see the court reporter arriving. Welcome. We were getting a little concerned a few minutes ago. If you would like a transcript of this proceeding, you should make arrangements directly with the court reporter during one of the breaks.

Also, I would like to let you know that all the material, the transcripts of the hearing today, will be available in the docket shortly after we are done with these public hearings.

Before we start with the first panel, we want to know if there are any questions. If not, I would ask the first panel to take a seat. We will start with the first panel today.

I will ask for Mr. Alan Lloyd to please come forward. Mr. Bill Frick, Mr. Michael Walsh, Ms. Stephanie Williams, Reverand Al Cohen and Mr. Larry Barron. Please print the names on the card in front of you.

Mr. Lloyd, let me ask you a clarification question. Are you testifying for the California Air Resources Board and STAPPA/ALAPCO.

MR. LLOYD: Yes. I would like to give some

time to ALAPCO.

MS. OGE: That would be fine. Michael will provide additional time to Nancy Sutley to help out with Mr. Lloyd.

MR. LLOYD: I think this is keeping with your statement, you want to proceed.

MS. OGE: Thank you. Welcome and good morning.

MR. LLOYD: Good morning, Madam Chairman. Again, I am very pleased to be here with my colleague, Nancy Sutley, Deputy Secretary of the California EPA. I am Chairman for the California Air Resources Board and STAPPA and ALAPCO. I want to congratulate EPA on a major step forward and I am delighted to be working with you and your staff on this national problem because it is critical for us in California to balance the environment energy and in fact economic goals. I also wanted to say some words on behalf of STAPPA/ALAPCO.

As some background, the first slide indicates to us why, in fact, the most important source of remaining emissions are from diesel engines. You can see this will be for 50 percent of the NOx emissions in 2010. That's a major amount into the ozone as well as some of the secondary formation. If you look also at how that's partitioned, you have 45 percent of these emissions from onroad diesels but 55 percent from offroad diesels. I will

say some more about that later.

I think, as you all know, our concern for protecting public health stems from the fact that the Air Board identified diesel exhaust particulate as a toxic air contaminant in 1998, and from that stemmed a whole bunch of activity to clean up diesel exhaust.

Based on a recent risk management work here, our staff estimates that these particulates account for roughly 70 percent of the cancer risks statewide. These are consistent with the numbers at South Coast. Our top priority is to reduce diesel emissions from NOx as a particulate. We are delighted to see the govenor's leadership in this area where he is proposing $50 million to clean up emission from school buses.

We also have the Carl Myer's program, which is another 50 million on a voluntary basis, and also the governor has 50 million to address in the congestion management, which we are looking at.

In fact, we have a major commitment here, not only to protect public health but to move ahead with these programs to clean this up. Also, I must say, having just returned from a trip to EMA and several of the heavy-duty manufacturers, I am, in fact, impressed by the spirit here of addressing the problem to clean it up and maybe rather than fighting about this we are moving ahead to address it

so we can reduce these emissions and keep diesel in the next year.

I would like to specifically comment on six topics. The heavy-duty engine standards, diesel fuel sulfur. I guess I don't need to read these. I will go directly to them here. You can see the next graph shows where we are and where we are going to, and you can see major reductions in NOx, which is a dual role, role on precursor and as well as fine particle precursor as well. You have the particulate standard and nonmethane hydrocarbon, which is not a major issue but is important as well.

You can see the next slide the numbers that are being proposed are identical to those already adopted for the California transit buses earlier this year. ARB supports the proposed NOx, PM and hydrocabron standards strongly. We would suggest you have a more stringent formaldehyde standard, as a point of one.

We had put in our transit bus rule it is not a major issue. Obviously formaldehyde is a potential carcinogen as well as a precursor to ozone and other things. If you look at the implemention in the next overhead, I think our recommendation there is that we support the full PM standard implementation 2007.

We feel that the more aggressive three-year

plan should be adopted, that is 25 percent in model year 2007, 75 percent in model year 2008, and 100 percent in model year 2009. What that would result in is an almost 20 percent in 2010. We feel that that is doable and necessary to meet our requirements in California.

If we look at the sulfur limits, obviously we strongly support that as we did with our transit bus rule. We support the nationwide 15 ppm sulfur standard and full implemention on June 1, 2006. We are hoping in California maybe we can work cooperatively to reduce that number.

Again, it is a great pleasure today, one of the first times I have Stephanie Williams from the California Trucking Association sitting side-by-side and we are going to battle side-by-side, in fact, on this issue. It is a real delight and hopefully it is a sign of the times.

I think, again, I wouldn't say I would define this low sulfur fuel should be for offroad engines in the same time frame. Clearly, I think we are committed to do that. In terms of not to exceed the 1.25 federal test proceeding emission standards from 55 to 95. We agree with that. 1.25 multiplier. We understand the need for that.

However, we also recognize you can get above 95. We think we can go to 105. That's particularly true when you get in times of high ozone and the San Joaquin

Valley where 95 may be a cool day.

As we look at the crank case we feel that proposal to eliminate the exemption which allowed crank from two diesel engines, we support that exception very strongly. The combined dates we think could be moved up to two years to model 2005 engines resulting in reduction of toxic diesel particulates. We have a major focus, as we see coming before the Board in September of this year on that focus.

Anything that you can do to help us out there is going to be much appreciated. We also like the idea of enduring existing innovative technologies. We really like your Blue Sky program. We think that's very important to be cooperative within the industry.

We have a couple of suggestions there of how you quantify that. That you could require certified emissions to be no more than 50 percent of emission standards as one way, or you can look at early phase as another way of trying to encourage that. Both of those were from technology.

We also support the Allerton Banking and Trading Program because it provides flexibility and it encourages the use of advanced technology.

In summary, I think the proposal will result in significant emission reductions and we strongly support

the proposed rule that suggests strengthening in several areas. We feel that the key to success is the 15 ppm diesel fuel sulfur phased in in 2006. We feel that gives adequate time for gearing up to that area. If we look at the rest of the world we can see the train going to low sulfur fuel. We feel this is critical for the aftertreatment and, in fact, to keep diesel in the mix there. This is very important.

Hopefully we can work with our colleagues in California to accelerate that program to help us there. We also feel it is very important to extend that 15 ppm sulfur limit to offroad vehicles. 55 percent of the NOx is due to offroad. That's a very important aspect of that.

That officially concludes my statement on behalf of the Resources board. I would like to -- maybe what I will do is turn it over to the secretary here to make comments and I will come back.

MS. SUTLEY: Thank you, Alan. Good morning. I am Nancy Sutley, Deputy Secretary to the California Environmental Protection Agency on the behalf of the State of California. I would like to welcome you to Los Angeles and express our appreciation for you coming here to hear from us directly about an issue of great importance as to all Californians. I am going to echo a lot of what Alan said, but let me start by describing the California

Environmental Protection Agency.

We oversee six state agencies, including the Air Resources Board, the Department of Pesticide Regulations, Department of Toxic Substance Control, Office of Environmental Health Assessment and State Resources Control Board and Waste Management Board.

California's Environmental Protection Agency is the environmental organization responsible for overseeing these agencies and to improve environmental quality to protect public health and the welfare of our citizens. I am pleased to be here to offer our comments in support of U.S. EPA's proposed rule.

I wanted to talk briefly, as Alan did, about the importance of reducing diesel emissions to public health in California. As you can see from the slide, over 50 percent of the ozone precursor emissions from man-made sources in California are from local sources. The top two pie charts illustrate the projected percentage of mobile source emissions in the South Coast air base in 2010.

As you can see for both the reactive organic gases and the oxides of nitrogen, that onroad heavy-duty vehicles account for a large proportion of the total mobile source inventory. You can also see that there's a large contribution of offroad diesel emissions. If you add together the on- and offroad diesel emissions in

conjunction with the existing emission standards, you can see that these will contribute to a significant level of reactive organic causes and NOx inventories here in California.

The bottom pie chart shows the distribution of heavy-duty vehicles to diesel particulate matter that onroad engines account for about a quarter of those emissions and offroad engines account for about 75 percent. Diesel particulate matter is responsible for about 70 percent of the known airborne toxic risk. It is clear in California heavy-duty emissions are a major part of the emissions inventory and toxic risks and additional reduction are needed. Reducing diesel emissions is the top priority for the California EPA and the Governor.

Just to make some brief comments, California EPA supports the reduced NOx, PM and formaldehyde standards consistent with ARB's comments. California EPA is strongly supportive of the proposal of the diesel fuel and California EPA encourages the EPA to extend the proposed onroad, low sulfur diesel fuel to onroad applications.

Let me just conclude by saying that we would like to emphasize the importance of the proposed fuel diesel sulfur standards with the significant amount of oxides and nitrogen and particulate matter emissions that can be reduced by new aftertreatment technologies. It is

imperative that the standard be approved as proposed. In doing so, U.S. EPA will help protect the health not only of all Californians but everybody in the United States.

MS. OGE: I would like to thank you both, Mr. Lloyd and Ms. Sutley, for your testimony and welcome Mr. Bill Frick. Good morning. Mr. Frick, just one second, please. Mr. Lloyd.

MR. LLOYD: I think Mr. Becker has a short presentation.

MS. OGE: You have one more testimony. Please go ahead.

MR. LLOYD: I will go ahead.

MS. OGE: Let's give Mr. Lloyd ten minutes or less.

MR. LLOYD: I will take less. What I would like to do, I am appearing in this case on behalf of STAPPA, which represents air quality agencies, including Air Resource Board of the States and on behalf of ALAPCO, Association of Local Air Pollution Officials, which represents air quality agencies, more than 150 major metropolitan areas nationwide. I am pleased to have this opportunity to provide associations task on EPA recent proposal to set more stringent emissions standards for onroad emissions on all sulfur onroad diesel fuel.

What I would like to do is read the major part

of this into the record. You can use that for the written testimony and put it into the record. I would like to pull a few highlights here.

On behalf of STAPPA and ALAPCO we would like to comment for its continued leadership your promulgation on last December due to motor vehicle emission standards and the national low gas program, which are a remarkable accomplishment to the benefit of the entire country. This month's heavy-duty engine and low sulfur diesel fuel further demonstrates the Agency's committment to efficiently and cost-effectively produce a wide variety of mobile source-related emissions to achieve meaningful movement in air quality across the nation.

We applaud in this initiative and the system which addresses both the engine and the fuel upon which this is based. I think what I would like to do is to skip, in fact, to the last overhead there which highlights the major points that we support STAPPA/ALAPCO. This is of vital importance nationwide.

As indicated before, the emissions from heavy-duty diesel engines bring with them adverse health defects. These are responsible for 125,000 cancers over a life time. Again, this is the STAPPA/ALAPCO estimate. We strongly endorse the emission standards the EPA has employed and the ability to comply with the standards are

dependent upon the availability of ultra-low sulfur diesel fuel. I would say low sulfur diesel as a personal opinion.

We vigorously support the proposed 15 ppm cap. We also recommend the adoption of similar engine standards and sulfur cap offroad heavy-duty diesel vehicles. That's similar to my comments earlier.

In the coming weeks STAPPA/ALAPCO will more fully propose comments on the diesel engine rates. STAPPA and ALAPCO looks forward to working closely with the Agency as it continues to define this extremely important program on behalf of our association our continued cooperation and partnership as you move ahead.

Again, I would like to reiterate and again congratulate you and your staff on a lot of the work and the leadership you show and we are delighted to be working with on you this program.

MS. OGE: Thank you. Mr. Frick. Good morning.

MR. FRICK: Good morning. My name is Bill Frick. I am vice president and general counsel and secretary of the American Petroleum Institute, a national trade association representing all aspects of the petroleum industry, exploration, production, refining, transportation and marketing. We appreciate the opportunity to participate in this.

Our members will be obviously significantly effected by this rulemaking and we have submitted a statement for the record. I would like this morning to emphasize five points for the panel and for the audience.

First of all, this industry is not opposed to reductions in sulfur. We concur it will benefit air quality. We came forth when EPA began discussing it. A proposed to them a 90-percent reduction in sulfur in diesel, which was EPA's original objective. Sulfur levels are going to come down. The issue is how fast and how far.

Two. In considering how fast and how far, we want the Agency to take into consideration that the industry is facing some significant daunting challenges at its refineries. This rule cannot be looked at in isolation. We have got to look at all the other issues that are facing the fuel system that is the part of the nations economy and to the consuming public.

Currently we are facing significant reduction in gasoline sulfur. Then, at this rulemaking there are a number of boutique fuels that have been created throughout the country in order to meet a number of clean air requirements, reducing MTVE, and California knows this.

To the extent that oxygenation continues to be required, the use of ethanol represents significant logistic and handling issues for the industry. There

will be very toxic regulations, face new source review regulations, and finally the unical patent is also putting a strain on the system as to how members prepare this mix of fuels that we now have.

Each of these affects the constituents of fuel. Whether it is gasoline or diesel. Each of these requirements does that. It affects the amounts that can be reduced at refineries. This patchwork of fuels is very, very challenging to our industry. It is not just three grades that are on the pump when people go to a gas station. We now have at least ten areas in the country with different formulations.

This puts a strain on all parts of the chain, both production and also transportation and marketing. It also as we make all these changes we are soaking up capital in a segment with very low return on capital. It is also a challenge to find the resources to install all of the equipment that is going to be necessary as we do all of this to make the changes necessary to comply with this mix of requirements. Finally, as I have said, the different formulations put a strain on all parts of the chain of relation of these fuels.

There's a recent National Petroleum Council study. It is a group of industry and government officials in response to requests of the Department of Energy asked

to look at refining capacity given all these requirements. DOE and EPA participated in that.

That studies confirms the concerns that I have addressed here. "The National Joint Council concludes that the refining and distribution industry will be significantly challenged to meet the increasing domestic product demand with the substantial changes in fuel quality specifications recently promulgated and currently being considered.

The timing and size of the necessary refining and distribution investments to reduce sulfur and gasoline and diesel, eliminate MTVE, and make other product specification changes, such as reducing toxic emission from vehicles are unprecedented in the petroleum industry."

The effect of all this is taking flexibility out of the sytem. Some of the recent concerns in the upper Midwest, where the prices have gotten much higher, is due to the inflexibility of the system when slight interruptions take place.

The third point I would like to make is that I am speaking here on behalf of the entire industry. There are some companies, some refineries, which can make the fuel that EPA has proposed. However, the costs, we believe, are much higher than EPA estimates. They estimate 4 billion. We think it is closer to 8 billion. That comes

on top of the 4 billion necessary to make the gasoline sulfur reductions.

There is also a significant ramp-up in cost as you move from the 50 we propose to the 15 that the EPA has proposed. It is not a straight line but rather a step up. The NPC study that I mentioned earlier confirms what I said again about the strain on the system.

"There is a significant risk of inadequate supplies should on-highway diesel sulfur levels below 30 ppm be mandated." This may be less of a challenge in California which has severe requirements currently.

When you look at the entire country, that is what we are concerned about. This is a nationwide rule. We see a different story. In some cases there may be some refineries that will not make this fuel. They will not be able to justify the investment given their product slate in the market. That will tighten potential supplies in low sulfur.

There are already many fewer refineries than there used to be. They are larger, but they have to deal with the multiple product slates that I mentioned. It is a more expensive and more complicated distributions.

The fourth point is that the particularly severe level that EPA has proposed, 15 rather than 50, is being imposed in great part to accommodate what we believe

is unproven technology. The technologies they discuss, they cannot confirm that they will, in fact, work. There is, however, other technology that is proven and in use that is more sulfur-resistant. Forcing severe changes to the entire diesel system, speculation that some technology will work, we think is unwarranted.

The desire to have the fuel that would accomodate light-duty diesels in the future is not a sufficient reason to impose such an onerous requirment. There is no evidence that that market is going to develop. We believe about the level that the EPA has proposed is a risk to the overall system that need not be taken.

Fifth point, it really is not necessary from an air-pollution perspective to reduce sulfur this low. One of the terms I used when the joined the industry, you have to focus on the delta. What is the difference between what we have talked about is doable and what EPA has proposed. We are not talking about going from current levels down.

The difference is between the 90 percent in sulfur reduction we propose and the 97 percent they have. As the engine manufacturers will point out, there is already significant reductions from diesel emissions. They are much lower than previous regulations.

The difference between the 50 cap and the 15

cap due to the technologies that can be used is very small. We believe the proven technologies can deliver equivalent emission levels but at half the cost and without strains to the fuel system. Even a slightly less effective the marginal increase in emissions is dwarfted with the high marginal cost with strain on the fuel system. EPA documents the modest contribution of heavy diesel to total inventories after these controls are in place and confirming the very slight difference in total emissions achieved by going to 15.

In summary, these five points that are in our written, I want to emphasize we are prepared to undertake a limitation of the 90 percent reduction. Even that will be difficult, however, given all the other challenges. This proposal presents a serious risk of short falls in some areas. It is not necessary from a technological standpoint as the air quality impacts are the same.

This industry takes great pride in having a good reputation providing high-quality products that are highly available and work. We don't want to endanger that performance that the public expects and demands of us. We will certainly work with the Agency and others towards the reductions. We think it has to be looked at in the context of what else is happening, taken into consideration what is necessary to go that low that fast, given available

technology and air quality benefits.

If we can achieve equivalent benefits without extra cost burden on the industry and the consumer, we think we should take that path and not drain the system.

I appreciate the opportunity to participate.

MS. OGE: Thank you. Mr. Walsh, good morning.

MR. WALSH: Good morning. Thank you very much for the opportunity to be here with you today. My name is Michael Walsh. I am an independent consultant in the field of motor vehicle pollution control. I am speaking here today on behalf of the American Lung Association. I will summarize my statement in an effort to stay within the ten-minute time frame.

The American lung Association strongly supports EPA's efforts to reduce emissions from large diesel and gasoline trucks and buses. We also strongly support reducing sulfur and diesel fuel, both because we believe it is necessary to enable the cleanup of new engines and vehicles, but also because it will facilitate state and local efforts to retrofit and cleaning up the diesel vehicles, many of which will remain on the nation's highways for many years to come.

The emissions reductions from these initiatives from our view are long overdue and are necessary if we are ever to achieve healthy clean air

across the United States. I would like to focus on a few special issues.

First of all, diesel particulates we know is especially last hazardous. In 1998, as Dr. Lloyd pointed out, and California concluded that diesel particulate is a known human carcinogen. It is a toxic material. EPA has referred a similar conclusion that it is a probable human carcinogen several times. The World Health Organization as far back as 1988 also reached a similar conclusion and all of these bodies are looking at more than 30 human epidemiological studies that are done consistently finding this effect.

Diesel particulate is not only a concern because of its constituents but also because it is admitted very closely to the breathing zones of many people in our urban areas and cleaning up heavy-duty vehicles is especially critical. Without the anticipated reductions from these proposed standards there's a significant risk that an appreciable number of current nonattainment areas across the country for both ozone and particulate will continue to be nonattainment for the foreseeable future.

Because heavy-duty vehicles are such a large emission source, it is impossible, I think, for many areas to ever attain without the substantial reductions that this package provides. By 2007, EPA estimates a heavy-duty

vehicles will account for 29 percent of the mobile source NOx emission and 14 percent of mobile source PM emissions.

As Dr. Lloyd pointed out, and this is true in the other urban areas, the proportion in cities and metropolitan regions is much higher. In this case, approximately 50 percent of the NOx in the South Coast. In addition, trucks and buses tend to aggregate in many of our poorer urban sections, exposing the population in those areas to very, very high levels of emissions.

Finally, this goes to one of the points Mr. Frick made. The EPA estimates from the emissions from the vehicles by your own admission is low. There are studies that have been carried out. Most recently a study done for EPA which shows large deterioration rates for existing heavy-duty diesel engines.

EPA has indicated that they will account for it in the final ruling, but it is not accountable for in the current system. The proposed heavy-duty vehicle and engine emission standards along with the diesel fuel sulfur standard would have a dramatic impact and probably a more dramatic impact than estimated in producing these emissions. That there are complications as well in analyzing the impact of these emissions on air quality.

Just to highlight the one recent example, we know that the science of ozone tells us that many of the

chemical reactions that are part of the ozone-forming cycle are sensitive to temperature and sunlight. The federal government just in the last week issued a major report, a major congressionally mandated report, which indicates that temperatures across the northeastern part of the country are going to increase.

If they do, that would indicate that for the same amount of NOx and hydrocarbons we are going to have higher level of ozone in our air. This is just one of the factors, along with the lower deterioration rates that we use in the modeling, that indicate to us that the problemis probably going to be worse rather than better than estimated.

I would like to highlight a few major points.

One is that the control of emissions mandated by this rule is necessary if the diesel engine is to remain a primary power plant in this country. Here in Southern California we saw last week a significant move away from the use of diesel engines. In response to the serious toxic risk which current diesel engines cause. New York City with its buses moved in the same direction just a short time earlier.

This is not limited to this country. The Governor of Tokyo in an active effort is on the way to trying to back the use of diesels. In the city of Beijing

they have recently replaced 800 diesel buses with CNG. The supreme court of Dehli, the supreme court of India, has an active effort underway to handle these buses and replace them with CNG. This is a worldwide phenomena in response to the current toxic effect of diesels.

The point is that current diesel engines here in the U.S. and around the world are increasingly considered hazardous and only substantial control along the lines of their proposal will enable us to reap the full advantages of diesel technology, especially with regard to the very significant fuel economy advantages that this economy contains.

Unless we have clean diesels a suspect we will have fewer diesels, and the converse is true. If we have clean diesels I think we will be able to take full advantage of this very effective and useful powerplay.

Secondly, the U.S. has become the laggard with regard to control of emissions from heavy-duty vehicles, not the leader in mobile source control that we have traditionally been. The U.S. has been the innovator that has brought us catalytic convertors, on board diagnostics, reformulated gasoline. I could go on and on, especially here in California.

At this point one would have to say candidly that Europe is well ahead of us in terms of controlling

emissions. The Euro-4 and Euro-5 standards, which were adopted a year ago, will result in the installation of many of the advanced technologies that we are talking about here today. At least will be installed in the 2005 to 2008 time frame across Europe, if not earlier.

Sweden has relied on diesel fuel for several years, which has less than 10 parts per million. And Germany will have such fuel across the entire country in 2003. I expect -- it is not on the books yet -- but I expect that the European Parliament when it has an opportunity to react to new fueling provisions later this year, will mandate 10 parts per million as a maximal level across Europe in this approximate time frame.

As a result of the availability of these low sulfur fuels at the present time, in places like Sweden, they have successfully implemented a mandatory retrofit program for trucks and buses, including most recently a retrofit program for offroad vehicles which also use this very low sulfur fuel.

The mandatory introduction of fuels with sulfur levels of 10 ppm or less and advanced particulate and NOx controls are necessary if we are to regain our preeminent role as the world's leader.

The third point I would like to make is unless low sulfur fuels of 15 ppm or less are mandated nationally

we will see -- the very point that Mr. Frick pointed out -- more and more of these boutique fuels. If we don't want to see each local region adopting their own fuel, we have to provide them a clean natural fuel. I am sure that many areas will mandate these fuels on their own, unless we have a national requirment.

Fourthly, more than sufficient lead time, in my view, exists for the technology to be available to achieve these proposed emissions levels. The manufacturing new emissions control association has stated that, "They believe the emission standards proposed for highway diesel-powered heavy-duty engines standards can be achieved in a cost-effective manner within the lead time provided, if very low sulfur fuel is available."

Others have reached a similar conclusion. As we know at the time early, many new technologies, especially for PM control are already being introduced in Europe. I want to particularly applaud several of the diesel engine manufacturers who have stepped up to the challenge in this proposal and have committed to, in the words of the Engine Manufacturers Association "dramatically reduce the emissions of the most fuel-efficient, reliable and durable source of motive power available today and the backbone of or nation's transportation and delivery system."

International Truck and Engine Corporation is to be especially commended for committing to commercialize their green diesel technology within the next year as long as clean fuel is available in certain localities.

Let me conclude by saying that 15 parts per million sulfur is the maximum that should be allowed because it is technologically feasible and necessary. We have heard in Europe there's a movement that 15 ppm is adequate.

I would like to quote from the recent proposal from the German government to the European Commission which states that "A sulfur content of 10 ppm compared to 50 ppm increases the performance and durability of oxidizing catalytic convertors, de-NOx catalytic convertors and particulate filters, and, therefore, decreases fuel consumption."

"There are also lower particulate emissions, due to lower sulfate emissions, with oxidizing catalytic convertors. For certain continuously regenerating particulate filters, a sulfur content of 10 ppm is required for the simple reason that otherwise the sulfate particles alone would overstep the future European particulate value."

Thank you very much for an excellent participation and for a package that I think will go a long

way in cleaning up our air.

MS. OGE: Thank you. Miss Williams, good morning.

MS. WILLIAMS: Good morning. I am Stephanie Williams and I am here representing the California Trucking Association. The California Trucking Association has nearly 2,500 members and we represent trucking companies within California and companies that operate into and out of California. We are in complete support of this proposal and have been on the road trying to convince other states that this is the right thing to do.

I don't want to duplicate the comments that we have made in Manhattan where we talked about the need for this proposal in SIPS, and when you look toward 2010 you can see that more than half the states will need diesel fuel reformulations, so it is the right time to do this today.

Also in Chicago we talked about the maintenance debacle of going to a 15 ppm fuel which we are opposed to was because of the addition of urea to the fuel that would require our drivers to become chemists and add an additional fuel at the time of fueling. And that would not be appropriate for the trucking industry and we hope that 50 ppm is taken off the table.

Today I am lucky to have with me some of our

members. Our member companies that will be affected by this proposal. We have a petroleum tank truck carrier. Two interstate carriers, one a very large international company that will tell us about boutique fuels and the problems going from state to state, and also a smaller interstate carrier that will also talk about that.

We have the chairman of our environmental policy committee who has helped develop policy of a national fuel standard for California and the nation. But we actually would like to see that in 2004. We believe that the technology is closer than 2007. We think nationwide that will help with SIPS, and when you look and evaluate the PM traps, I have my little picture here of the PM trap of today's technology on the top. That is the exhaust test.

In the middle I have the 15 ppm fuel. You can't see it because it is completely clear. You also can't see the bottom one because it is a clean filter. I think that by being able to test that, we know the technology is there. We see the PM traps out on the green bus, the NOx absorbers are being used in the south and other areas and on gasoline turbines. We believe in national, clean fuel standard as soon as possible is best for the trucking industry and everyone else.

With that said, there are two other local

carriers that will speak to you today on the next panel. People who live and work in Southern California only delivery freight here and I am happy to see these people coming in from other places, including Mexico, including the bordering states. And I am happy to compete on rates on people who can use other fuels. We have a nice mix of the trucking industry here today. You can hear the story from their mouths.

I would like to talk about first sulfur. When we say reduce sulfur to 90 percent versus 95, 97 percent, sulfur isn't the issue here. The issue is emissions. How much are they going to emit. How low can you get PM and how low can you get NOx. You are not going to have the same emission reduction with a 90 percent reduction as you are with the proposal as it is today. We would hope that emissions are what you look at. Not the level of sulfur.

Also, the preemption issue. That's what it is. When you hear patchwork fuels, patchwork fuels are a problem for this nation. Everyone wants to have clean air but everyone wants to have low fuel prices. What happened is regional fuels, and we see this in California, and it is a danger for our entire economy nationwide. We see fuels going into areas that aren't really that clean.

Texas is considering adopting car fuel. Why won't Texas adopt this fuel standard. If you are going to

go in 2004 or 2003 or whatever the year is, to a fuel standard that is not anywhere near as clean as this one, you are going to put a strain on the system in Texas.

Same with South Coast air quality transfer district coming in and reformulating fuel now not in line with EPA creates a regional fueling problem. It creates bad press. It makes the fuel prices jack way up, and the public thinks clean fuels cost a lot of money. That is not the case. When we have one fuel nationwide, the cleanest fuel possible, and we put it through the distribution of today's pipelines, it is a seemless introduction. We have seen this in 1993. The sulfur level federally went to 500 ppm, and there were a few glitches with the resistance, but that had nothing to do with supply.

In California, on the other hand, we restricted supply with the regional fuel and had supply issues. On a number of occasions we have had supply issues. If we had a nationwide fuel, those supplies would not be a problem. We would not see fuel strikes. He would not see in Chicago $2.10 for gasoline because of a regional fuel supply. They are not getting a really clean fuel like we could have with this proposal if we had a nationwide fuel standard.

We would like to see EPA preempt other states from going to anything except this fuel standard. In the

best of all worlds move forward with the nationwide standard quicker, bring the scale to the market so the public gets clean air and a reasonable price of fuel.

Also the capacity and distribution. We believe that the distribution system is fine for this fuel. As the trucking industry, we are hauling this product and we have a petroleum carrier to tell you about it. We have got gasoline in the system right now. We have got all kinds of different fuels, specialty fuels, that go through the pipeline. And this is not going to be an issue.

We are going to have a different order in which the fuel goes through the pipeline or is distributed, but it is not going to be a disruption to supply. Believe us, the industry can get it to market. The market system will handle these problems.

Also, unproven technology. That is something that I want to really concentrate on because this technology is here. You have the test that shows the PM traps. California has been key in forcing technology. We have electric vehicles, we have had different things that force technology.

This time we have the technology sitting on the tables, sitting on a bus outside, working in the air districts on stationary equipment. The technology is here. It is just a generation moving at the fourth generation of

the diesel engine. The generation where we have the aftertreatment controls that cars have where the trucking industry gets an engine just as clean as a car and we can go back to doing what our specialty is, moving freight to retail outlets, to grocery stores, keeping this country moving. That's what we want to do with clean technology.

I would like to say one thing in closing. There's a delta involved in this. But I don't know how many of you realize this, but the delta is the California trucker. Because California, Manhattan, many of these other big cities need this fuel to keep trucks clean. But the difference is the delta, who is going to be hauling freight in these places. The California trucker wants to be put in the mix. We believe we are the delta. Thank you.

MS. OGE: Thank you, Stephanie. I would like to ask for Reverand Al Cohen to testify. Good morning.

MR. COHEN: Good morning. Thank you. I would like to change the mood here and take a larger view. We are in support of the EPA suggestions. My name is Albert Cohen. I am Executive Director of the Southern California Ecumenical Council, which is a regional church agency representing 19 denominations plus other religious partners. We have been active in environmental affairs since 1971 and have been represented at all of the United

Nations environment conferences beginning in Stockholm in 1972. Furthermore, I drive a Honda EV plus electric vehicle.

I am speaking for thousands of church people who understand pollution of the environment as a moral and ethical issue. We accept the scientific conclusions that the atmosphere of the earth is being severely damaged and that serious questions have been raised about the viability of life on the planet as we know it.

In November, 1997 the Ecumenical Patriarch Bartholomew said in an address in California, "To commit a crime against the natural world is a sin and for humans to degrade the integrity of the earth by causing changes in its climate, for humans to contaminate the earth's waters, its land, its air and its life with poisonous substances, these are sins."

We know perfectly well that the internal combustion engine juggernaut drives a substantial part of the economic system and diesel fuel contributes to that momentum. On the other hand, is life itself and the future of our children to be held hostage by the success of current technology or is it incumbent upon responsible people of our generation to make the hard choices. People who can chart human DNA can reinvent transportation and power production so that human DNA has a future.

We believe it is appropriate to ask forgiveness for our sins and then to go out and behave differently. The Patriarch, a practical man, said in his same address: "It is appropriate for us to seek ethical, legal recourse in matters of ecological crimes."

I would urge the EPA to use its authority to restrict the use of diesel fuel, to change the composition of diesel fuel, and to impose whatever regulations are necessary to clean up the air. There are alternative sources of power available now in production today. A modest investment in research and development will broaden the field of choices for us in the years ahead. Let's stop doing the same old thing and be creative with new opportunities.

Thank you for this opportunity to participate

MS. OGE: Thank you. Good morning, Mr. Barron.

MR. BARRON: Good morning. Thank you. My name is Larry Barron. I am vice president for the western sales region for International Truck and Engine Company, which many of you may know was formerly called Navistar. I am here today on behalf of Patrick Charbonneau who is vice president of Engine Engineering at International to discuss EPA's proposed model year 2007 emission standards for heavy-duty engines as well as the Agency's proposed

onroad diesel fuel quality requirements.

At the outset International commends the EPA for its landmark proposal to address heavy-duty engine emissions through a "systems approach" involving both fuel quality and engine technology. There is no question that diesel engine technology is making dramatic strides in emissions control.

As we know, the availability of ultra-clean diesel fuel is a prerequisite toward meeting the challenging new emissions standards beginning in model year 2007. With clean diesel fuel, we can count on the advanced NOx and PM aftertreatment technologies needed to achieve unprecedented emissions reductions. For that reason, we are pleased that EPA is mandating fuel that will enable these advanced technologies to be used on all heavy-duty engines.

International is investing hundreds of millions of dollars in the development of new technologies for all the markets where our engines are sold. We are reinventing all of your engine lines through revolutionary engine redesign and development of advanced aftertreatment technologies. Our technological breakthroughs will allow us to achieve unparalleled emissions reductions. Indeed, we are developing green diesel technology that with clean fuel, has already demonstrated the capabilities of

particulate filter technology to reduce hydrocarbon and PM emissions to levels that are at or below EPA's proposed standards.

In that regard it is important to note that progressive oil companies already are making 15 parts per million diesel fuel commercially available. These oil companies have earned recognition and applause for their efforts to bring clean diesel fuel to the marketplace early. With this ultra-clean fuel available so soon, International will commercialize its green diesel engine technology next year and thus achieve EPA's proposed model year 2007 hydrdocarbon and PM emissions standards six years ahead of schedule.

We have outside a school bus today that has this technology using 15 ppm fuel if you would like to take a look at it. It is right outside the front door. The tailpipe faces the street, so if you go to look at it please be careful. That has been in service for six months and the tailpipe has no soot in it. This is just one example of the impressive environmental benefits that accrue from a symptoms approach involving both clean fuel and clean engine technologies.

I also commend the Agency for its willingness to phase-in the proposed NOx standards. We strongly support a NOx system and approach which underscores the

challenges facing in meeting NOx control targets EPA proposal goes far in addressing these categories. We believe that even more can be done without compromising important environmental objectives. In that regard, I am pleased to say that in your International along with EMA soon will be presenting to EPA a new NOx phase-in proposal.

Under this proposal, there would be a single NOx emission standard for all the engines in model year 2007. The NOx model standard for 2007 would be significantly below the NOx standard applied to the model year 2006 engines. Then in 2010, the NOx standards will be stepped down to a new and significantly tighter NOx standard.

Importantly this proposal will meet and perhaps exceed the Agency's NOx reduction targets in this rulemaking, while at the same time providing manufacturers with needed flexibilty to meet those targets. For these reasons, we believe that the Agency will find this proposal to be a win-win for consumers and the environment alike, and look forward to discussing it in greater detail.

In closing, I wish to reiterate International's strong support for EPA's proposal to reduce diesel fuel sulfur levels which will enable the use of the NOx and PM aftertreatment technologies needed to achieve the Agency's objectives. we look forward to discussing in

our written comments these and other technical details of the EPA's proposed rule.

I thank you for giving me and International the opportunity to present International's views today and I would be happy to answer any questions you have concerning my testimony

MS. OGE: I would like to thank all the panelists for their testimony.

Mr. Barron, let me make clear that I understand your testimony fully. What you are saying is that with clean diesel fuel, 15 parts per million, the aftertreatment technologies that we envision to deliver cleaner emissions will be commercially available and you are not calling them unproven technologies?

MR. BARRON: No, ma'am. We propose to release that bus that is outside with a couple more modifications commercially next summer particularly for the California market and for wherever the fuel is available that will enable that technology to work which is 15 ppm diesel fuel.

MS. OGE: Mr. Frick, I am somewhat at a loss with your statement that these technologies that we are proposing will be unproven. Do you want to comment?

MR. FRICK: I don't know what technology he is referring to. When you look at technology that is

currently being used in Europe. If you go down to NOx and others we think the verdict is still out. They have demonstrated and your record basically says the same thing. If that's what he is talking about, then we will look at that record.

MS. OGE: Do you have any response to that?

MR. BARRON: I would prefer to have Mr. Charbonneau address those comments with the exact numbers. I would not like to quote those numbers off the top of my head. There is significant reduction in both NOx and particulates below the levels that are proposed.

MS. OGE: Mr. Frick, obviously one of our most challenging issues in this regulatory program is the appropriate level of sulfur and diesel. In our view, we have stated in our proposal the difference between a 90-percent reduction that your industry has suggested and a 97-percent reduction. The delta is a significant loss on public health protection.

As we have stated in our proposal, we will be left with the 50 parts per million problem in place. You can only achieve 20 percent reduction so the public health won't be affected. That's the dilemma we have here.

In your testimony, both written and oral comments, you have suggested that there are other technologies that are more proven and they are sensitive to

sulfur that they can get us this same end results as far as public protection. Could you elaborate about those technologies?

MR. FRICK: That's correct and we have advised you and I believe your testimony in New York you received additional information on that. It is not only a 20 percent, but you can be in the 85 to 90 percent reductions from the SCR and other technologies that are available. So your assumption of 20 percent, we disagree with there are technologies out there.

MS. OGE: So the technologies that you are referring to is the urea SCL technology?

MR. FRICK: I agree. The issue is the emissions. The sulfur is merely a mechanism to get this to those emissions. That's why we are saying that we believe there are technologies out there as at a higher level will get essentially the same level.

MS. OGE: EPA's proposal, so I understand, your proposal is for us to move forward with an SCR type of technology in order to achieve the NOx reduction.

MR. FRICK: As you know, the Agency sets the emission standards and the industry will decide what technology it wants to use. We believe that that technology can be implemented without the problems that the lower level present to achieve the emission reductions.

What ultimately the trucks choose to use would dictate that we only feel one is available.

MS. OGE: I would like to ask Ms. Williams to respond to this.

MS. WILLIAMS: Why would you want to shift the burden to small companies like trucking. Here we have a proposal that says we will have either a clean fuel to get the emissions or we are going to have a dirty fuel with duct tape and a couple of bandadesdates. That's not fair to us.

The California truckers have already taken the brunt at this fuel reformulation in 1993. We have been operating in a noncompetitive environment and they made all the money. I think it is fair that it is our turn to be first. You looked at them in '93. Put us first this time.

We want 15 ppm. In Europe we already know what happens with 15 ppm sulfur. It is 10 percent maintenance failure on the traps. That means our guys have to take the trucks off the road and figure out how to fix thing. I don't think that is a fair thing to ask small businesses to do. And I do not believe that technology that they are requesting gets you down as far as 15 ppm. When you have the industry asking for something clean and you have the suppliers fighting over which technology to use, I think that you should divert the industry and go for

what is clean and easy.

We are not chemists. We are truckers. We don't want to put a hazaradous waste -- we are going to take ammonia and have a truck driver putting it into a truck. What is the regulatory of that. What is the liability to the trucking company. It is not fair.

MR. FRICK: If you don't mind, she said 50. 90 percent reduction is dirty. That's a huge reduction. You are talking about ultra-clean.

MS. OGE: I would like to ask for, Mr. Walsh, your experience with Europe because some of the European countries are considering SCR.

MR. WALSH: Thank you. First of all --

MS. OGE: Will you please state your name before you speak.

MR. WALSH: This is Michael Walsh for the American Lung Association. I won't repeat the quotation that is in my written testimony from the German government on the difference between 15 ppm and 10 ppm in terms of how much it allows different fuels and different emission level to be achieved by different technology.

With regard to SCR threat I will he say a number of things. One, I hope and hope and I am optimistic that SCR will find some applications. I think it is an encouraging technology, but only so far I think in fleet

applications where you have a centrally fueled environment and not going across the entire country in one move that we heard earlier from going from the East Coast to the West Coast or vice versa.

Secondly, the experience in urea with SCR is, of course, in a limited prototype stage and is not achieving the NOx levels that are being proposed by EPA.

Thirdly, I think that the Europeans are still wrestling with and have not yet solved the problem with infrastructure. We have not cost it out and I don't know anyone who has yet cost it out what it would entail to put a urea infrastructure across the entire country. I think that's a very difficult challenge.

I think you have an issue that I am interested if Ms. Williams wanted to comment it on it from a trucking standpoint, but the European solution that is being talked about and the problem of refilling is the urea tank after 50,000 kilometers, is a difficult one. What they are planning, at least in some cases -- and this is the only solution they have been able to come up with so far -- is to have a mechanical and electrical system that will die between the engine when the urea runs out and basically force the trucker to limp home to some facility where he can put the urea in.

It will not completely shutdown the vehicle

but it will not be a very useful vehicle other than just to get to some place. I am not sure how the trucking industry in this country will react to such a solution.

Finally, the whole issue of toxics. Again, Ms. Williams made reference to it, but it is not limited just to ammonia. Ammonia is an issue. But there are other toxics which have not been fully characterized from the SCR that will need to be characterized, as we learned recently with another fuel additive, that we have to look carefully at fuel additives to make sure we are not creating more problems when we solve one problem.

To the extent there's an ammonia slip the solution does seem to be to put an oxygen catalyst after the SCR system if you do not have to worry about what is the implementation of the sulfur on that oxygen catalyst that is after the SCR system.

Finally, with regard to that, if you have to add that your oxygenation catalyst lowers the ammonia, oxygen catalyst can increase NOx emissions again. If you are trying to get down reliably in use over the lifetime of heavy duty vehicles to these very low levels, it seems to me that there are very substantial challenges that make it difficult to see how in the short term if in the long-term we are going to be able to see this as a mainstream technology. I hope that answers your question.

MS. OGE: Thank you. Mr. Lloyd, I have a statement here -- I am reading from Mr. Frick's testimony. "I also note that CARB, which has adopted a program to reduce urban bus emissions that involves cleaner diesel formulations, has indicated that it can be flexible if EPA decides against a 97-percent reduction."

I was wondering if you can elaborate for us what does that mean, being flexible if you decide against a 15 parts per million. Were you planning to go higher or lower or is this an accurate statement?

MR. LLOYD: Are you talking about the transit bus rule?

MS. OGE: I have no idea. Maybe Mr. Frick can elaborate. The first page of your testimony.

MR. LLOYD: Are you talking about South Coast or ARB?

MS. OGE: I don't know. I am reading from Mr. Frick's testimony.

MR. LLOYD: I got some clarification from executive officer. I think what that was referring to was that we clearly in our rule we were looking at 15 ppm sulfur diesel. I think the issue here is that if, in fact, EPA didn't come in close to that we would your degree to some flexibility. That flexibility, however, would not exceed going above 20 ppm sulfur, certainly not as high as

15 ppm. We didn't want to quibble over a small amount. My original testimony stands. We strongly support the 15 ppm or lower.

MS. OGE: I was wondering if any of the other EPA panel members have questions or clarifications? No additional statements from the panel members before we close. Mr. Lloyd?

MR. LLOYD: The only statement I would make to Mr. Frick's comment here is one of the things we are fortunate to see these days is that with the development of technology we are seeing a whole menu of technology which can also use a huge diversity of fuels. We are fortunate in saying not only do we have the low sulfur diesel we have all the fuels that can play a role.

Just a reminder that was the industry that came forward in response to methanol, natural gas, which is stepping forward. We have propane, we have obviously ethanol and the electric vehicle. We have electricity. If we get into the fuel cell, that can use a whole variety of fuel cells. While understanding some of the constraints the beauty is that we are entering a whole new area. We have a much greater menu than we had before.

MR. OGE: I would like to thank you all of your testimony. Now I would like to call the following individuals to please come forward.

Ms. Valerie Liese, Mr. John Nieyes, Mr. Dave Berry, Mr. Al Nunes, Mr. Frank Smith and Ms. Roberta Barbalace.

Ms. Liese, we will start with you.

MS. LIESE: My name is Valerie Liese. I am the president of Jack Jones Trucking, Incorporated in Chino. I have got 104 employees and 48 of them are drivers. We operate directly in the Southern California area from San Diego up to Santa Barbara. I commend the EPA for everything they are doing to protect the future of California. California Has always led the rest of the states in various ways and with clean air being top priority at this time. We are all for it.

I would do anything in the world to protect the future of this state. I am going to use whatever fuel is mandated by the State. But we want an equal playing field. We need to be able to compete with the trucking companies that operate from other states. We have a very thin bottom line of how we can operate and make a profit. We do have lower rates than a lot of other trucking companies to be able to pay for the higher cost of fuel in this state for the high cost of insurance and many other costs. It is well worth it.

I just want to let you know that we are going to do what it takes to make sure that we survive in this

industry too. I have got a lot of competition out there. I have to deal with a male-dominated industry and being just a little guy on the end of the totem pole. We have a lot of wolves on our hands, but I just commend all of you for what you are doing to help us too. That's all I have got.

MS. OGE: Thank you. Mr. Berry, good morning.

MR. BERRY: Good morning. I am Dave Berry with Swift Transportation. We also support the EPA's proposed rule. Swift Transportation is the nation's third largest truckload carrier. We have operations throughout the United States and we have very significant operations here in California. We are sometimes the person that is referred to as from out of state.

We also very strongly support the clean fuel concept nationally. Our concern is that if we end up with this patchwork quilt of boutique fuels across the United States, that there will be no one viable fuel and then how do we conduct and better serve interstate customer. Two, we have 50 different tanks on the truck and the driver switches the valve when he is from state to state. So we very strongly endorse the concept of one nation fuel.

We also recognize that many of the nonattainment areas around this country are having to come up with state implemention plans that are due before this

had become a regulation, before 2007. So we are concerned about this boutique fuels coming up as a strategy to deal with these nonattainment areas prior for 2007. That is, we wholeheartedly endorse this proposal and I am really very excited about what it can do for our engines and the air.

MS. OGE: Thank you. Mr. Nieyez. Good morning.

MR. NIEYEZ: Good morning. Thank you very much for having me here. My name is Joe Nieyez and I am President of Quikway Trucking Company. Quikway Trucking Company came into existence in 1946 when my dad started the company right after the Big One. I was also president of the California Trucking Association in 1998. I am here to show my support for the EPA's proposed 15 parts per million fuel standard.

I have three concerns and as a native Californian -- and I think I am going to be staying here for the rest of my life. My number one concern is the health factors for the State of California. There's no question in any mind that 15 parts per million helps toward the health of California citizen or of anyone in California.

Number two concern is a level playing field. We are in a business what we call an assembly and distribution business, whereas we assemble freight and it

is goes out of state, outside of California. We also distribute freight that comes in from out of state. Truckload carriers are very competitive and they are my direct competitors because they can go out and make five or six deliveries that my company makes on a local basis.

As it is right now, I am paying a higher cost for car fuel, whereas the out of state trucks are not and they are operating in the same air that I am operating in. The other area of level playing field is from the oil companies. My belief is that the oil companies, whatever they do I am going to end up paying for that plus some, and I am going to try and pass that onto my customers. I pass through the costs that are going to be borne by us from the oil companies.

Third concern is a strategy known in business today that needs to have some sense of structure in how to plan for the future. With the EPA's 15 parts per million standard, that gives us a road to go down. However, AQMD is also pushing for a 15 parts per million standard but they want it tomorrow, whereas the EPA has set a date of the year 2006. This is very concerning to me and it should be concerning to the business community and to the consumers of goods.

Just kind of in closing, my company will support and I am sure the California Trucking Association

will support anything that significantly reduces emissions into the air.

Thank you very much for having me here today.

MS. OGE: Thank you for your testimony.

Ms. Roberta Barbalace. Good morning.

MS. BARBALACE: Good morning. I am Roberta Barbalace. I represent Onyx Environmental Services, which is a division of Gavendi. We are an interstate tranporter approximately 350 diesel vehicles and approximately 237 of which are apportioned. We have terminals in 23 states.

While many of our vehicles are domiciled in states that will likely have state-enforced sulfur limits diesel fuel within a few years, at least a third of them are located in states that will likely not fall under any state regulations in 2007. As an environmental firm, Onyx Environmental Services recognizes our role in protecting the quality of the air, not only in the neighborhoods in which we work and live, but in everybody's neighborhoods. Even in area of the carcinogenic effects of diesel fuel exhausts on respiratory problems. It can likely be attributed to exposure to diesel exhaust.

As an asthmatic and class-A truck driver, I can attest to the effects of diesel fuel exhaust on my condition. Fortunately, my symptoms are completely controlled by medication. Others are not so lucky.

The trucking industry must be very careful not to follow in the steps of the tobacco industry. As such, denial would only lead to deepen the gap between the trucking industry and the general public. I think people can see here today, in fact, that the trucking industry is very concerned. We are certainly willing to take the steps that are necessary to improve the environmental situation.

Regionalized fuel formulation is unfair to the trucking companies and to the public as well. California is a good example. Reformulated low diesel fuel, car fuel, was mandated in 1993. Other states continue to use nonreformulated fuel. Interstate drivers from outside of California fuel up with a cheaper fuel before coming into California and they do their business in California and leave without ever purchasing the reformulated fuel.

The cost of keeping the environment clean in California falls upon the California trucker and not by other people coming into the state. The cost -- if we don't have reformulated fuel across the country as 15 parts per million type of fuel -- the cost of reformulated diesel fuel will remain high and fluctuation in costs will be greatly influenced by availability.

In the end, the individual state regulations will do very little to reduce the diesel exhaust pollution. Our interstate will have even more problems. Predomiciled

states require that particulate tracks will have a tremendous maintenance expense. Tanks will clog up when diesel fuel with sulfur of greater than 15 percent is used.

In addition, fuel efficiency is greatly reduced when interstate vehicles fitted with particulate tracks need to be refueled in states where they only have nonreformulated fuel. The costs of vehicles will increase significantly or maintenance of the vehicles will increase significantly while the fuel efficiency and performance will be compromised.

It will also be difficult for us to transfer our vehicles from one terminal to another because some will be equipped with particulate traps and others will not be. A 7 percent increase in diesel fuel across the country, then the 40 percent gallon increase that some of California trucking companies faced in 1999.

Interstate truckers from all over the country pick up and deliver goods in the metropolitan areas that are being penalized for excessive pollution. Why should they not pay their fair share. Even your interstate drivers in rural states frequently transport the products that are made from materials originally coming from the metropolitan areas of the transport of materials from Los Angeles or New York City or some other metropolitan area results in diesel fuel pollution in those cities. People

living in Montana, Maine, North Dakota use countless products made in Los Angeles and New York. They distribute to diesel exhaust pollution in these cities.

Everyone that contributes to pollution should pay their fair share of the cost of reducing pollutants in the environment. Proposal to mandate a national fuel standard of 15 parts per million sulfur diesel fuel is both fair and environmentally sound. Environmental Services supports the proposal and applauds EPA for taking such a stand. Thank you.

MS. OGE: Thank you. Mr. Al Nunes. Good morning.

MR. NUNES: My name is Albert Nunes, President of A.C. Trucking in Monteca, California. I am a carrier that has many diversities. We do freight from interval to interstate. We do all kinds of different products and/or involvement. We have about 40 some trucks and about 50 some employees. We are not one of the large companies but we are a part of this trucking organization.

Also, I am this year's chairman of the California Trucking Associations Environmental Policy Committee. That committee is one that reviews and works on environmental issues within our state. We have been working with the car and other regulatory agencies over the last couple of weeks to try to come to some equitable ways

of solving the environmental problems that we face.

My colleagues up here all talk about the different things that happen to them and the other issues that are taking place that are important to us. As I mentioned about the trucks that come from out of state, 50 percent of the trucks on California highways are from out of state, and in most cases are not burning the automobile sulfur or car diesel.

What good is all the work that we have done as California truckers to help clean up the air. It is all for nought because we do not have a one-nation fuel. Our committee started early on to work with our national organizations that proposed the nationwide low sulfur diesel. We didn't have the exact numbers that we have today that the EPA is proposing, but we are working around 30 parts per million. Our committee supports the 15 parts per million regulation from most ultra-low sulfur diesel. We feel that it is the fairest way to accomplish the goal of clean air. Thank you.

MS. OGE: Thank you. Mr. Smith, good morning.

MR. SMITH: Good morning. I would also like to thank the board for allowing us to speak here. My name is Frank Smith, Interstate Claims, third generation company that hauls all the gasoline -- not all of it -- but much of the gasoline or diesel in the L. A. Basin. We have a total

of 72 trucks.

We support the EPA regulation of the 15 parts per million. We believe that the distribution system of a nonroad heavy-duty diesel fuel will be seeing one type of fuel sold nation-wide. Replacing the current diesel fuels with ultra-low sulfur diesel fuel will be the most cost-effective approach to introducing fuel. A minimal investment will be required in the distribution system of trucking. Retail stations would carry the same efficiency and no incremental cost to replace the current fuel and distribute a cleaner product.

I disagree with the assumptions related to the trucking contained in the cost impacts of low sulfur fuel submitted by the EPA on February 23, 2000. Clean products like gasoline are currently moving through the pipelines and efficiently transported to market. Introduction of low sulfur diesel fuel nationwide would have a long-term positive economic impact as it would prohibit the use of boutique fuels which will be a long-term problem.

The nationwide cost associated with higher than 15 parts per million places the cost burden on truck owners with the fuel spills emission controls. The environmental benefit of the rule is sacrificed to a 15 part for level and the distribution is that a real concern of the market behavior upon introduction of the 50 parts

per sulfur fuel which like this is a complete replacement for a existent product proved there were already distributions. Only when products are introduced. A regional setting, such as CARB 1093 and CARB reformulated gas in '96 is a distribution concern because economics and scale are lost and alagapolies are created with a handful of suppliers. The recommendation is to introduce so the distribution system and supply centers can be economically addressed. Thank you.

MS. OGE: Thank you. Ms. Fogel, good morning.

MS. FOGEL: Good morning. Can you hear me? I am a teacher with L.A. Unified and I have a couple of visuals. Can we use that overhead? I am Judy Fogel. I am a first-grade teacher with L.A. Unified. I wanted to share with you today. I am grateful you are here.

I wanted to share with you a little bit of our reality of 1,200 children of what it has been like at our school. Last September I started hearing about that diesel was a carcinogenic component and I looked out my classroom window and I have 23 diesel buses outside my classroom and my little children, some of them have asthma. We have 55 asthmatics at our school.

I started calling around and asking my people and the buses were idling and the kids are walking through this gray smoke. I invited the man from the ADOT to speak

to our faculty and he said you are creating what is known as a line source of pollution. It is like a factory you put across from your school. This is four feet from play equipment.

I started at the time looking into the possibility of moving the buses away from the school yard, and you would think my principal would be happy and giving me some kind of a service award for realizing these health concerns. She called me in and put my transfer papers in front of me and she said, "You need to move on to another school." I was stunned and I said after a minute, "If I promise not to say anything about these diesel buses, can I stay at this school?" And she said we will think about it.

That's what my year has been like having asthmatic children breathing. The buses are still in front of our classroom. Some of them are 25 years old.

I am excited that International and these other companies are coming up with other technologies. The reality is we are living with the old technology and will for some years to come. We have been writing Governor Davis to ask for clean buses.

One little girl said to me when we heard that the EPA was passing a rule of making cleaner buses, she said, "When I am 13 that's when we will get the cleaner buses." That's the reality of children's lives. 30

teachers at our school signed a letter to Dr. Lloyd asking if they could include buses. We will see what help we can get.

I was saying to myself, if I call my school district and I said a carcinogenic contaminant was buckling up out of the school yard they would close the school. It is buckling out of these buses four feet from the play yard where the children are and no one does a thing about it.

When I call the school and say can we possibly by cleaner buses, they say we don't have the money. This is after our L.A. District just built the most expensive high school in the history of our nation, $200 million. And I walked away from it. You can see the waste and corruption. Possibly at a local level. That's why we need federal groups like yours to come in and help set standards.

My husband was telling me about Pacific Electric. We had in Los Angeles a rapid transit system at one time called the Blue Line that was beautiful. You could get from Mt. Wilson to L.A. Harbor quite rapidly anywhere around the city and three corporations came in and bought it up. I believe it was Standard Oil, Goodyear Tires and General Motors.

They did this all across the nation. They bought all these rapid transit systems and they dismantled

them. Our government sat by and watched. It did nothing except built more freeways and taxed the fuel that those cars and those tires use up where I do see our government stepping up to the bat. Our local ADOT stepped in on the local issue where the Mayor was going to buy old diesel buses and they spoke up and the Mayor changed his mind.

I am told, I don't know that this is true, in August they are prepared to vote for these low sulfur rules and our air resources board and our governor is not willing to back them up on it. That's what I am being told by them. I find that frightening and I hope someone at a federal level can help us.

Also, in the '60s on Channel 5 there was a broadcaster named Pete Roberts. In the '60s he had a man on who was head of a refinery. This is almost 40 years ago who said we know our sulfur content is too high and we are killing people and we are going to really work on this.

My husband is an engineer and he knows all this. Nothing has happened. This is an old, old fight, the sulfur content in the fuel. I hope you can reduce it. Someone up here said from one of trucking groups that truck diesel engines are efficient. I guess it was someone from the EPA that said how efficient diesel trucks are.

I will tell you what are efficient, trains. If this happened backwards that I told you you can put all

these trucks on rails where there's less drag, hundreds of cars with only five men working them, there's less drag and you only need two diesel engines. We have this great new technology, let's try it out and you say great, but it happened in reverse. We have gone back to these little individual chinzy trucks on the road creating all this pollution. We are killing ourselves.

At one point there was a move to put big trucks on trains and move them between the more common routes in New York and Los Angeles. Some dimwit said no, we can't do that because we will lose jobs. Instead of five men working one train we have all these people being employed killing us.

I want my student to come up. She has asthma. Do you want to tell them what it feels like to have asthma. Maybe her mom would talk. She had a pretty scary incident that happened. I was surprised to hear about it. No. Do you want to show them a picture of a bus. She drew a pretty picture of a bus and wrote a letter.

She wrote to Mayor Reardon: "Thank you for making clean buses because some people like me have asthma and can die." Do you want to tell her about her experience with the paramedics?

MS. OGE: Could you please state your name?

MS. VASQUEZ: Reyna Vasquez. My daughter is

Sylvia Barcabalo. There is nothing more scary than being at work and being called that your daughter is really sick and getting there and not be able to see her because the paramedics are working with her. I would like to see that this things that happen to me, it won't happen to anybody else that has kids. It is very scary. It happened to me like three days, five days in a week.

30 days I have to be with her in the hospital giving her treatments and all kinds of stuff. People who don't have asthma, they don't know what being scared is about your daughter is not going to make it. I was even able to teach my 13 year old to drive my car so in case I have to give her breathing so she can make it to the hospital. I would like to see that they do something about it so it won't happen to other kids and other families with low income like me. Thank you very much.

MR. OGE: Thank you for coming and bringing your daughter forward. We would also like to thank all the panel members for taking the time to share your views with us. Thank you very much.

We would like to move to the next panel. I would like to call Ms. Cheryl Love-Queen, Professor Scott Sherman, Dr. Richard Barbers, Mr. Dennis Firestone, Mr. Reggie Latham, and Mr. Ron Benson. If you could place the names on the cards in front of you. Given the fact

that we are running late and we don't have a full panel, I would like to call members from the 11:45 panel.

Mr. Angelo Bellomo, Mr. Richard Shyu, Mr. David Freeman, Mr. Jim Cameron, Ms. Elaine Chang. We have Mr. Liu. Please print the names on the cards in front of.

Ms. Love-Queen, we will start with you. Good morning.

MS. LOVE-QUEEN: My name is Cheryl Love-Queen. I am the owner of a small consultant business. We train trainers and the best practices for school districts. We also represent community coalition for change, which is a service planning area which some of you are familiar with through the county. This area covers South Central, Compton, Long Beach and Paramount, and I am also a child advocate.

The Los Angeles County is one of the 25 most ozone polluted counties with pediatric asthma affecting 137,128. Excuse me, with children under 14 affected by the rate of 2,146,031, according to the Lung Society. A major hospital in South Central reported that asthma is one of the top two reasons for hospital visits or being in the hospital for children in the clinics. And adding insult to injury studies indicate that while asthma has become a major public health problem affecting Americans of all

ages, race, and ethnic groups children have been particularly severely affected. It is most severe among low income and minority children.

In many areas of America you can find child-care facilities close to large intersections on every freeway. However, I am zoning in today on one particular one in Willowbrook. That is an area close to Los Angeles and it is on Imperial. This child-care center sits at the bottom of the 105 freeway, the Century Freeway, and is nine-tenths of a mile from the Alameda corridor.

Diesel trucks, buses and trains pollute the front, back and sides of this tiny facility. Where you have children and adults playing as usual and having no idea what virtual health hazard trap they are involved in. Imagine if you had a child or grandchild who had to work or play in that area.

In order to protect children are our future we must require drastic reduction in pollution from diesel buses, trucks, and cars post-haste. In addition, the oil industry and engine manufacturers have done very little to curb this pollution. In fact, they have cheated in their emissions in the past resulting in an extra 1.3 million tons of pollution each year. However, because high sulfur fuel will poison the new diesel cleanup technology, we must ensure that all diesel fuel is fully cleaned up and readily

available before trucks are required to cleanup.

Therefore, in order to ensure that all cleaner trucks, buses and cars will have access to clean fuel necessary to run them, CCC, which is the Community Coalition for Change, which I represent, urges the EPA to require diesel sulfur levels for onroad and offroad vehicles with a cap of no more than 15 ppm sulfur nationwide by 2003.

There should be no phase-in period for reduction in smog-forming pollution. In addition the EPA should take measure to ensure that big trucks are meeting the emission standards on the road, not just during the engine test. These provisions are necessary to prevent our future generation of children's health and at school and at home, such as I indicated in my earlier testimony. We ask that you include them in your final rulemaking. Thank you.

MS. OGE: Thank you, Dr. Barbers. Good morning.

MR. BARBERS: Good afternoon.

MS. OGE: Yes, it is afternoon.

MR. BARBERS: I want to thank the EPA for having this hearing today as well as allowing me to have a chance to speak today. My name is Richard Barbers and I am a Professor of Medicine at the University of Southern California Tech School of Medicine. I am also the current

Governor for the American College of Chest Physicians for the Southern California region. I am also a member of the Trigos (phonetic) society of Los Angeles and a volunteer member of the American Lung Association.

I am here to ask you to adopt the common-sense approach to clean up the heavy-duty trucks and buses and also for air pollution in the city of Los Angeles. Nationwide 40,000 people die prematurely each year from breathing soot pollution. Diesel soot pollution has been linked to cancer and has been published in over 37 scientific journals.

In addition, there are several scientific studies on the effects of soot pollution on airway health. There are also several studies that indicate that diesel air pollution may effect allergic individuals. Diesel vehicles contribute more than their fair share to the air pollution problem. In fact, here in Los Angeles when the proposed standards go into effect in 2007, heavy-duty trucks and buses will be responsible for an estimated 26 percent of the smog-forming pollution and estimated 14 percent of the soot produced by all the cities' vehicles. As a commuter who travels about 25 miles each way from my home, I am aware and have personally experienced the effects of diesel soot pollution.

I agree with your proposal to protect public

health by drastically cleaning up big trucks and buses. Also, since high sulfur fuel poisons new pollution-control equipment, it makes sense that you are proposing to produce sulfur to reduce levels of sulfur fuel in 97 percent in 2006 before the vehicle standards go into effect.

I urge you not to weaken this provision by allowing an extended time line of higher sulfur levels. If the newer, cleaner trucks do not have reliable access to 15 ppm sulfur, we will not be able to meet the necessary pollution reductions. Furthermore, these newer, cleaner trucks should be required to meet the newer emission standards as soon as possible.

We are already going to have to wait until 2007 before we see any major reductions in soot pollution. We should not have to wait until 2010 until we can get relief from smog-forming pollution from these trucks and buses.

Finally, cleaning up existing diesel makes sense for our health and environment. By replacing diesel with cleaner technologies makes even more sense. Therefore, you should provide incentives to increase the use of technology for buses and trucks. The health of Los Angeles citizens depend on our efforts. Thank you.

MS. MARTIN: Thank you. Appreciate you being with us here today. We can now hear from Mr. David

Freeman.

MR. FREEMAN: My name is Dave Freeman. I am presently the general manager of the Los Angeles Department of Water and Power. I served as an energy adviser to President Jimmy Carter. I was present at the creation of the EPA in the White House and remember the wonderful feeling we had about creating this Agency and independent -- completely independent -- of pressures for money and polluters.

I served as the Chairman of the Tennessee Valley Authority under President Carter. I have been a fighter in the clean air fight from the very beginning. I remember when the electric power industry said we didn't know how to build scrubbers. The EPA said, damn it, figure out how, and we did.

I think that I would say very candidly as a friend of the EPA, you are much too timid. You are not asserting the public interest with the fierceness and dedication and focus with which this Agency was begun. 2007 is a long time off for these asthmatic children. There is technology that could be developed and implemented sooner than that that would get us off of oil. I think the EPA should remember. It is part of the United States Government which needs to have a crisper energy policy.

We are over 50 percent dependent on imported

oil and we need to learn that there is and can be life after oil in this country. We need to get onto alternative fuels that are both cleaner and domestically produced. It seems to me that there's a lack of focus and concern and crises that exists, especially in Southern California, and nowadays in Houston and other places as to air qualify.

While these proposals that you have are absolutely necessary as a step, they are wholely insufficient. You ought to take your lead from the South Coast Air Quality District and remember that EPA got started because of the grassroots effort here in California to create an Environmental Protection Agency.

I think you ought to take a few steps back and ask yourselves, are you doing everything within your statutory power to provide cleaner air for America sooner. I think the answer is no at the moment. This rule basically says that we can live indefinitely with the oxymoronic phrase of cleaner diesel when your own publications make it clear that diesel in any form is spewing out cancer-causing particles.

We need to develop the fuel cell faster and get vehicles powered by the fuel cells. Natural gas is a fuel that can be used. There are other domestic fuels. Let us have a rule from EPA that gets us off of diesel by 2007. Thank you.

MS. MARTIN: Thank you very much. I think we will take your lead by now asking the South Coast Air Quality Management District, Mr. Liu, to testify. Thank you.

MR. LIU: I have a few slides here, actually. My name is Chung Liu. I am the Deputy Executive Officer for the South Coast AQMD. The District is very honored to have the opportunity to be here to present our positions at this time on EPA's proposed rules. In general we support EPA's approach. The proposed rules go a long way.

We would also ask to expedite the schedule as Ms. Freeman just mentioned, that air quality can be improved faster, and we have shown that in the past and the EPA knows the technology is here and we need to work together to see if we can speed it up.

Also, I want to suggest to expand the proposal to include nonroad engine emissions. There are three principal concerns in terms of air quality from diesel emissions. The diesel engines contribute significantly to the nitrogen oxide emissions, which is a precursor for our ozone problems here nationwide. Also nitrogen oxide emissions contribute significantly to our fine particulate matter as well as directly needed particulate matter.

Lastly, the concern is air toxics. 70 percent of air conditioning systems caused by air pollutants are

contributed by diesel emissions. We need to work on all three.

Any technology in any fuel can only address part of the problem, not all the problems, and they are clean and green. They are just now telling the truth. I want to present some good news. South Coast has gone a long way in the past 20, 30 years. The next slides we show that we do sometimes have very clean air in our areas. This is not a computer-generated picture. It is a real picture.

This is a number of first-stage ozone episodes. Number of episodes first stage in our basin every year. As you can see, nobody can argue, we made a quantum move. I think it is partially the answer to some of the questions why South Coast always moves fast. The results speak for yourself. We can challenge most of the urbanized areas in the United States that may be nationalized standards cannot achieve as much as localized efforts. There's a local government in play here.

I challenge Houston or any other of those areas that can have this kind of fast reduction in episodes. We don't want to make other cities look bad. But as a matter of fact, last year Houston took lead over from us. We feel pretty very good about it. We are very nervous about it because we are riding the borderlines of

first-stage episodes. This year we are looking very closely. We had some high concentrations, but we still maintain lower than Houston so far.

Some of you drive on the freeway close to Los Angeles International Airport that know this wall on the Highway 405 indicates "From Smog to Fog" is the commercial by Air New Zealand. Actually you have to fly to London if you want to escape smog. We want to escape from this image and we will are getting there.

What is the problem from our South Coast point of view. As you can see. This slide has been shown by Dr. Alan Lloyd from ARB. NOx emissions principally contributing to our basin by mobile sources. The red part is onroad diesel. The yellow part is offroad diesels. That's the reason we ask you to also consider your proposal to extend to offroad category as soon as possible.

In terms of proposed EPA standard of PM 2.5 15 microgram per cubic meters, we have almost our entire basin in violation of that standard by a long shot. Also, the red part indicates our calculation. The contribution from diesel source to that composition. We need a significant restriction from both VOC and NOx in order to meet the future in air quality standards promulgated by EPA. If the eight-hour ozone standard and 2.5 ppm we need even higher emission reductions. We are really struggling at this.

As you can see, the picture is probably getting worse when you look at the most recent development. We understand we significantly underestimated NOx emissions and we need more reductions to meet the goal. Also, the most recent settlement, probably years ago, the settlement between the major engine companies, EPA, Department of Justice and ARP really dealing with the engine skills did not go back to really cut down the initial emission costs, and we have come out short on those.

I want to concentrate a little on the air toxics, which is the main driving force between the efforts, and also the environmental justice issues and the next slides will show why this is an A.J. issue to us. As you can see, this picture depicts the diesel toxic effect, the cancer risk, in our basin from air emissions. This picture does not include the contribution from diesel.

This is the one with diesel. As you can see the highest risk level is always associated with major transportation artery, the freeways, the airports and the sources of diesel emissions are very obvious.

The left side of the pie chart indicates the cancer risk of 400 some from emissions other than diesel. The right pie chart included diesels. I want to dramatize. Benzine contributed a lot in the past when we don't deal with diesel toxicities. In California we have gone a long

way in reducing Benzine. It is clear the next one is diesel.

Very quickly, with the implementation we know how to do it by 2010. With our implementation our air quality management plans we can significantly reduce the cancer risks, but diesel contributions are still in there. Our current strategy really doesn't deal with the cancer risk of diesel very effectively.

How can the region come into compliance with the air quality standards. We need to implement the technology. We know how. We also want to promote the technology advancements. The transportation factor we have to factor into our significant gross factor population and travel. Also, we have to consider heavy-duty vehicles really stay on the road for a long, long time. 20 years most of the time.

I want to jump to two more slides. I think EPA and DOE knows very well the data from the study that indicates very clearly at this juncture the U.S. understanding and the technology indicates that in order to achieve 85 percent PM removal, we need 15 ppm sulfur. That doesn't consider the problem of nitrous oxide. If you consider that you need even more.

Basically we come to our recommendations. Second is probably the most important one. That we know

there is a volunteer program in terms of retrofit. We still want to consider EPA to consider retrofit part. That's a portion of our problems and they will stay on the roll for a long period of time.

This slide outlined why the South Coast has to move faster. We need to meet our mandated time schedule to meet ozone standards. We don't know how to do it completely. Also, there's no emission benefit from this proposed rule for us. We need PM standard by 2006.

Lastly, we need to reduce all the exposure as possible. In our rulemaking process in the last several months and made it amply clear the technology is there. The Los Angeles County MTA actually during the process asked their staff to come out to the plant to implement by retrofit by 2001. If retrofit can be done done on buses why cannot it be done on engines.

And also the City of Los Angeles by 2001 to retrofit all their diesel engines. It clearly can be done. We want to propose to EPA not only consider the typical testing cycle. You got to consider the emissions significant differences. We are talking about real exposure, real toxicity here.

The next one. A lot of heavy-duty trucks in urban areas have different transportation cycles. Those communities, for example, school buses, transit buses,

refuse haulers, they are quite a different cycle going through and they stop and go a lot. The temperature change a lot. The performance of those PM trap technology really needs to have a close look on this testing cycle. A typical cycle just won't do.

The last slide, this is why we are doing it partially. The trucks stay on the road for a long time. We want to do something which will move fast. Thanks.

MS. OGE: Thank you. Mr. Sherman, good afternoon.

MR. SHERMAN: Good afternoon. My name is Scott Sherman. I currently teach at UCLA. Over the past decade I have taught environmental courses at UC Berkeley and at the University of Michigan before coming to UCLA. One of the things that I found is that the statistics that my colleagues here have been reading are very powerful. But my students always react much more to a personal story because statistics don't lead. You don't see the human effects of these statistics. And, Dr. Barbers, you started off your speech with a statistic. Can you state it again? About 40,000 people in Los Angeles?

MR. BARBERS: With asthma are you talking about?

MR. SHERMAN: Yes.

MR. BARBERS: Yes.

MR. SHERMAN: 40,000 Think about this in terms of the Big One, the big earthquake that we are all afraid of here in Los Angeles. The earthquake, if it were to hit today, if it were to hit right now, we would declare a state of emergency. We would immediately race to resolve the problem. Everybody would take action.

But in an earthquake, I have lived through several of them here in Los Angeles, in the average earthquake far fewer people are killed or injured than are killed or injured every single year by air pollution, by soot, by diesel pollution, by unclean air.

Think about if a jumbo jet were to crash at LAX this afternoon. Tonight on the news everybody would be talking about how a jumbo jet crashed killing perhaps 300 aboard. But every year the equivalent deaths that occur just in Los Angeles alone is equivalent to one of these jumbo jets crashing approximately every couple of days.

That's why I urge that when we look at these rules -- I agree with my colleague Mr. Freeman here -- I applaud the EPA for those proposed rules. I think they are wonderful. But I think we need to expedite them. I don't think there is time to wait.

If you are in these communities where the children are suffering from asthma. I grew up in the San Fernando Valley. This is a place where you don't have to

die to go to hell. The pollution there is out of control. Thanks to Mr. Liu and his colleagues, it is definitely improving, but the situation is bad. People cannot breathe.

I have read studies that showed that living in Los Angeles is the equivalent of smoking several packs a day of cigarettes. Every single one of us is going through that. The problem is that this is not an emergency situation, or at least we don't perceive it to be an emergency situation. You can't breathe or you don't see all this diesel pollution in an air conditioned ballroom in the Hyatt Regency Hotel. Of course, there's indoor pollution but we will have save that for another EPA hearing.

We need to take this as an emergency. We need to expedite the process. We cannot wait until 2007, 2010. We can't satisfy ourselves with levels of 50 parts per million. We have to have as clean air as possible and as soon as possible. Thank you.

MS. OGE: Thank you. Mr. Angelo Bellomo. Good afternoon.

MR. BELLOMO: Good afternoon. My name is Angelo Bellomo. I've stepped in recently on an interim basis to work with the L.A. Unified School Districts. And I say that because when I walked in the door I was hearing

some stories about Belmar and some past decisions which the District has made which clearly I have been on the outside lobbing my own share of criticism on the District.

I am here today because I really believe this is an area, and it has been adequately stated by my colleagues. It is a problem that is long overdue in terms of a solution. I think that the comparisons to earthquakes and jumbo jets were good, but we can look for something a little closer. And that is, the manner which we regulate other forms of environmental pollution.

Our drinking water standards aren't set anywhere near the levels of excess cancer risks. Even our best efforts would achieve with regard to diesel exposure. When we go to clean up hazardous waste sites or chemical contaminants, we are looking at reduction of risks to the point where we are less than one in a million. The numbers that we see up on the board here, I am looking at thousands and hundreds. It was really appauling when you think about it.

I really applaud David Freeman's comments about what your Agency was first put into effect to do. I think we really have to get back to recognizing here that the date that we are in with regard to diesel has more to do with just the successful lobby that has existed for many, many years and less to do with our ability to address

this problem. We have to move aggressively to do that.

I encourage the efforts you made on this proposal. Please don't weaken and it don't back up. Those of us in our respective areas will do our best to make sure that these laws are complied with and that we are all doing our share. Please stay aggressive on this one.

MS. OGE: Thank you. Mr. Richard Shyu. Good afternoon.

MR. SHYU: Good afternoon. My name is Richard Shyu. Executive Engineer for Government Technical Affairs at Freightliner Corporation. I am here today on behalf of Daimler-rysler, AG Powertrain Business Unit, manufacturer of Mercedes Benz heavy-duty diesel engine.

My testimony will concentrate on the aspects of proposed emission standards and new test procedures affecting heavy-duty diesel engines. We will also be submitting written comments for the record at a later date and I ask that they be considered in a final rulemaking.

First and foremost, Daimler-Chrysler applauds the Agency's recognition that fuels and technologies go hand in hand in reducing emissions. Fuel should not limit technologies. Fuel should enable technologies. The Agency's proposal is an enabling step toward improving quality across the Nation. It is with regard to EPA's latest proposal that Daimler Chrysler would like to make

this oral comments.

Specifically, Daimler Chrysler has worked diligently with the EPA and other regulatory agencies to develop and bring to the market the best, technologically feasible emission control technologies available for heavy-duty diesel engines. Daimler-Chrysler intends to continue this commitment to work with the EPA and other concerned party in a context of this most recent rulemaking effort. There are, however, certain aspects of the proposed rule on which Daimler-Chrysler would like to comment.

As the Agency stated in the NPRM manufactures need ultra-low sulfur diesel fuels and lube oils to enable NOx absorber and PM trap technologies to achieve the 0.2O NOx and 0.01 PM proposed emission standards for model year 2007 heavy-duty diesel engines. The Agency also acknowledged that the metallic ash content of the lube oils may cause plugging of particulate traps.

While the Agency proposed to regulate sulfur content for diesel fuels, it failed to do the same for lube oils. Instead, the Agency proposed a voluntary program. Daimler-Chrysler believes that once the Agency has recognized the critical impact of fuels and lube oils on the proper operation of the emission control equipment, it is not appropriate to leave such factor to voluntary

programs.

Voluntary programs have the potential to adversely affect not only the significant investments in technologies, but also the air quality benefits expected by the EPA, the states and the general public. Accordingly, we will request that specific sulfur content for the lube, oil be regulated as well.

The Agency did not propose to regulate the ash, that is the sulfated ash of the lube oils. Daimler-Chrysler data indicated that ash-plugging problems are severe. Trap removal and mechanical blowoff of ash may be required at an interval of every 100,000 to 150,000 kilometer of operation if this issue is not addressed.

When the ash blowoff schedule was not adhered to an increase in exhaust backpressure and consequently in fuel consumption will occur in combination with insufficient regeneration of the trap. Daimler-Chrysler is not advocating elimination of the ash-forming compounds, which provide necessary antiwear and detergent/dispersant properties of engine oil.

Therefore, it is necessary to seek a compromise between performance of the oil, including drain intervals, and the aftertreatment device interaction. We recommend that the Agency investigate this issue further and look to existing data concerning a proper balance of

the two factors.

For example, European Automobile Manufacturers Association test sequences for engine oils and Mercedes Benz specifications for engine oils already recommend certain balances of sulfated ash for new technology engines. We will provide more detailed comments with supporting data with these and previously mentioned effect of ash in written comment to the Agency by the close of the commentary.

With regards to Daimler-Chrysler's second concern, the Agency proposed not-to-exceed limit of 1.25 time federal transient test procedure standards under all ambient conditions, without clearly defined test procedures. For model year 2007, the proposed PM standard on FTP is 0.01 g/bhp-hr. based on averaged weighted composite cycle. This means, a PM measurement accuracy required to comply with NTE limits may not be achievable under current prevailing regulations.

Section 202b(2) of the Clean Air Act requires that EPA to develop test procedures and measurement techniques for the emission regulations promulgated. We urge EPA to develop NTE test procedures and PM measurement techniques adequate for the proposed standards without further delay. We stand ready to cooperate with the Agency in developing such procedures and techniques.

I appreciate the opportunity to testify on behalf of Daimler-Chrysler AG, manufacturer of Mercedes-Benz heavy-duty diesel engines. Thank you.

MS. OGE: Thank you, Mr. Shyu. I would like to thank all the panel members with coming forward with your testimony. I would suggest that we take not more than 10-minutes break. The court reporter would like to have a break of a few minutes and we will be back in 10 minutes. I would suggest by 10 of 1:00 for the next panel to be here. Thank you.

(Recess ensued)

MR. OGE: Mr. Legre, good afternoon. We will start with you.

MR. LEGRE: Thank you very much, Madam Chairman. Good afternoon to the panel. We take this opportunity to welcome you to the City of Los Angeles and to report that rather dramatic improvements have been made in air quality in this city over the past 20 years. We also take this opportunity to register the point that we realize much more needs to be done and we are committed to that both locally and we presume you are nationally.

I am here today to speak unequivocably in support of the EPA's proposal for more stringent national standards for heavy-duty vehicles. The City of Los Angeles recently completed its first round of public hearings on

the very issue of diesel impacts on air quality in the South Coast Basin.

As Chair of the City Council's Environmental Quality and Waste Management Committee, I heard through the course of several hearings from engine manufacturers, fuel providers, fleet operators of the environmental community, educators and activists alike as well as concerned citizens of whom you will obviously hear from today.

If one message was clear from that testimony, it was that everyone believes that clean air must be achieved and that to do so it will require leadership, innovation, and perhaps more importantly, commitment. From those hearings it was clear that a City policy needed to be adopted on this issue.

Earlier this month, the Los Angeles City Council did indeed adopt a clean fuel policy which included support for programs and regulations that promote clean and efficient vehicle technologies. Based on this newly adopted policy, the City Council desired and did demonstrate leadership by supporting not only the South Coast Air Quality Management District's first three clean fleet rules, but also committed to retrofitting all of the existing diesel trucks with particulate traps and low sulfur diesel fuel.

An important component of that decision, you

might say, is the recognition that in order to address nonstationary air quality issues in the Los Angeles basin where interstate diesel trucks are abundant, strong state and federal standards are needed. Therefore, the City of Los Angeles, again, strongly supports the EPA's proposed heavy-duty vehicle standards and the sulfur control requirements for diesel fuel.

We take this opportunity to urge you to adopt such standards, reducing NOx by 95 percent below the current standards and particulate matters is fundamentally an important proposal worth our celebrating for those who most need protection from air pollution, specifically children, the elderly, and those with asthma and other respiratory illnesses.

To further encourage municipalities, like that of Los Angeles, unique though Los Angeles may be. To encourage us to accelerate the purchase of new and use of new, clean vehicle technologies in advance of new standards taking effect, it would be my request that we consider having the EPA develop a financial incentive program, such as grants or a revolving loan program, or whatever else may be available to you in that considerable pool of resources at your disposal.

Early adopters of advanced clean vehicle technologies, such as the City of Los Angeles must overcome

significant uncertainty about vehicle performance, reliability and durability which frequently results in higher costs, which obviously is discouraging and would essentially impose a significant impediment to our accomplishing our stated goals and/or objectives.

Demonstration and testing of these new technologies are vital to ensuring that the technology is feasible. We have got to know that it works. The downside of it not working is not what any municipality, particularly the City of Los Angeles is willing to endure. While the City Council is not adverse to facing the challenges that may be a precedent in making and it would be essentially on a true commitment partnership on behalf of the EPA if, in fact, we can begin an earnest conversation about how this assistance could or should take place or how it might then be provided.

Once again, I would like to thank you for the opportunity to speak during the day and for holding one of your hearings, one of five, next to the last hearing here in the City of Los Angeles. We appreciate it very much.

MS. OGE: Thank you. Ms. Masters, good afternoon.

MS. MASTERS: Good afternoon. My name is Julie Masters. I am an attorney with the natural resources defense council, which is an national nonprofit

environmental advocacy organization. I will be sharing our time slot today with Gail Ruderman. On behalf of our more than 400,000 members nationwide I would like to thank you for this opportunity to comment. I would also like to note that we did submit written testimony at the New York hearing.

In our view, particulate matter and NOx emissions from diesel exhaust are probably the most serious air pollution threat facing many Americans today, particularly in Los Angeles and other urban areas. Although diesel vehicles make up only 2 percent of all vehicles on the road today, they make greater than 50 percent of a demiparticulate matter and nearly one-third of all the smog-forming NOx in urban areas throughout the country.

We, therefore, applaud EPA for this ambitious proposal to remove sulfur from diesel fuel and to clean up the Nation's trucks and buses. The reasons for concerns about diesel exhaust are clear. Diesel particulates along with 40 other chemicals found in diesel exhausts are listed with toxic air contaminants by the State of California.

Indeed, diesel exhaust is known to cause a vast array of illness, including cancer, heart attacks, asthma attacks, and other respiratory problems and it is responsible for over 15,000 premature deaths every year.

Los Angeles faces some of the worst health risks from diesel exhaust. The South Coast Air Quality Management District recently concluded in its comprehensive two study that over 70 percent of the cancer risk in the South Coast Air Basin comes from diesel particulates. L. A. has been found to rank first in estimated cancer cases caused by lifetime exposure to diesel exhaust.

These proposed regulations if fully implemented will have a profound effect throughout the country and particularly in urban areas, such as Los Angeles, in reducing smog, soot, and the negative health impacts caused by dirty diesel exhaust. Some industry representatives have argued that this rulemaking should be delayed because they need more time. But the proposed rules already have a seven-year delay built in and six-year delay built in for the sulfur trap 2006 and 2007 before the industry must comply with stricter standards.

Moreover, technologies that require low sulfur diesel fuels exist today and are being commercialized and used in Europe and elsewhere. Every year of delay on industry's part means only more avoidable asthma emergencies and more avoidable cancers. As for the substance of the proposed rules, first strongly supports a national sulfur cap of 15 ppm in mid 2006. We would strongly oppose any level above that cap.

Just as lighter gasoline was a barrier to cleaner cars the late 1970s, today's high sulfur diesel fuel prevents the use of advanced emission control technologies. Nevertheless, Some oil companies still argue for a higher 50 ppm sulfur cap citing as reasons the potential unavailability of ultra-low sulfur diesel and inability to handle the costs associated with producing low-sulfur fuel.

These companies claim that the same emissions reductions can be achieved with this higher cap. These oil companies represent a very small minority. First, not all oil companies feel that way. PB and company enforce the rule and announce that it will have sufficient quantities to sell its 15 ppm sulfur fuel in California next year at an incremental cost of only five cents per gallon. That is without the economies of scale benefits of the nation-wide sale of fuel.

Moreover, both the engine manufacturers and emission controls manufacturers are arguing for a lower sulfur cap of 5 ppm because they believe only a lower sulfur fuel will ensure the emission reductions that they need to comply with the rules. The California Trucker's Association supports the 15 ppm cap because California currently has more stringent sulfur requirements and a national cap will level the playing field.

As for the cost of compliance to the oil companies, America's largest oil companies reported nearly $12 billion in profits in the first quarter of 2000 alone. The cost of the rule are estimated to be $4 billion over the entire ten-year span of the rule. More importantly, we are talking about oil companies paying for the cost of remedying the harms that their products have caused. It is a cost they can bear and cost they should bear.

As for the cost to the consumers, some oil companies said you could not take the lead out of gasoline because consumers would never be able to handle the costs. They were wrong. The price of diesel is expected to increase only three to four cents per gallon. This increase will not substantiually effect our nation's strong economy. Following, this cap should not be implemented any later than by 2006. Implementation by 2006 is feasible and will ensure an adequate supply of fuel by the time the emission standards kick in in 2007.

MS. RUDERMAN: Good afternoon. I am Gail Ruderman. I am a senior attorney with the National Resources Defense Council. First I want to emphasize, as Julie did, that we commend EPA for all the work you have done in developing this rule and proposing the rule that is before us today.

What I would like to focus on in the remainder

of our time are the areas where we strongly recommend that you strengthen the rules to help further protect the communities and many of these have been pointed out by subject of the earlier panels.

First is we urge you to implement all of the portions of the rule no later than 2007. You have proposed a PM standard for 2007, but the NOx levels you have proposed are to be phased between 2007 and 2007, and we strongly urge you to implement that portion of the rule by 2007. This weakens, as you know, our ozone attainment level is 2010. We will have no benefits of your NOx portion of the rule by 2010 if the first time -- we won't have some sufficient impact of that if it is only phased-in from 2007 to 2007 to 2010. If it fully implemented in 2010 it will make a big difference in this area.

We believe that the engine manufacturers can bring you clean engines that achieve those NOx limits by 2007. The Air Resources Board has adopted a rule governing transit buses which implements the stringent .2 gram NOx cap by 2007. We believe that if California can do it, the nation can do it, and that only covers transit buses. Our hope is that all heavy-duty vehicles will have to comply with this limit.

The second has to do with formaldehyde. The Air Resources Board earlier raised with you that their

recommendations to reduce the formaldehyde standard to .01 grams per brake-horsepower-hour instead of .016. We too join in this recommendation because formaldehyde is a very troubling toxic air contaminant and we urge you to reduce these levels.

The third issue is in-use compliance, another areas that greatly concerns the environmental community. Our concern is that you will have these wonderful standards designed to protect the community, but under reality if those levels are not achieved there will not be the significant air protections you would otherwise would have.

And history tells us we have something here serious to worry about. There are significant concerns about the deterioration of heavy-duty vehicles in ashtma, are greater than the certified emissions. Also, a variety of duty cycles. We are very concerned that the current duties cycle does not accurately reflect that urban transit cycle or trash truck cycle or central business district cycle. We were strongly encourage you to implement a number of these use elements, including on-board diagnostics. It is a requirement for cars. It should be a requirement for heavy-duty vehicles.

In-use testing. There already are some tests that have been done in-use which would give you a more accurate reading of what the real world emissions are and

we would urge you strongly to make that compliant with your rule. The third part is to develop duty cycles which more accurately reflect heavy-duty bus and truck emissions and various specific duty cycles.

The fourth has to do with offroad vehicles. We strongly urge you, as have many others, to extend your low sulfur limits of 15 parts per million to operate vehicles. The oil refineries will have to retool their operations to create a low sulfur fuel. We have these benefits in the onroad sector. We should have them in the offroad sector as well.

Lastly, fifth, is we strongly urge you to put in provisions that push alternative fuel technologies as well. In this region we need more than just cleaner diesel. We also need alternative fuels and we need it now because we have very serious toxic problems and very serious particulate and ozone problems. And we encourage you to include provisions to have other incentives to push alternative fuels.

In conclusion, this is a critical moment in history. You have an opportunity, you have the environmentalist, the public health community, the public teachers, you have the truckers, you have the control manufacturers association, you have them all lined up on one side saying go ahead with this proposal and a few oil

companies on the other side saying slow down. Please don't slow down. Move ahead and adopt the rule. My time is up. We hope that you go ahead and strenghten the rule to protect our common Agency. Thank you.

MS. OGE: Thank you. Miss Garcia, good afternoon.

MS. GARCIA: Thank you for the opportunity to speak to you to today. My name is Nadine Garcia and I am a member of the American Lung Association. One year ago on July 7, 1999 I received a new left lung and with it a new lease on life.

Before I had my lung transplant, my condition was so bad I can't catch my breath enough even to brush my teeth. I would not have been able to breathe enough to come to talk to you today. Because I know first-hand what it is like to gasp for air, I am here to ask you to clean up dirty trucks and buses.

I have emphysema caused by a lifetime of smoking. After I was diagnosed with the disease, I spent nine years trying to catch my breath. For a person with lung disease, air pollution makes breathing even more difficult, if not impossible. I know that many of my friends in the Better Breathers Club suffer terribly when the air is bad outside. Some even have to be rushed to the emergency room.

If you have never been able to breath, you don't know what it's like. You can't imagine the terror a person feels when they open their mouth and still can't get any air. It is a feeling that I hope I would never experience again.

But even with my new lung I notice that on bad air days I feel the effects. I have to be careful and stay inside if it is real bad. When a big truck or bus goes by I try to avoid breathing in the black smoke because I know what it does to the lungs.

Now that I have my new lung I want to protect it. I want to live to see my 14 grandchildren grow up and have families of their own and not die prematurely because of air pollution. I want my friends who suffer from lung disease to have hope that one day they, too, will be able to breathe again.

We breathe some of the worst air in the country here in Los Angeles. We have almost 160,000 children with asthma. 350,000 adults with asthma. 480,000 who suffer from chronic bronchitis and 55,000 with emphysema. Even healthy people feel shortness of breath or a burning sensation in their chest when the air is polluted. We need to make diesel trucks and buses as clean as cars. Please do not back away from your commitment for a low sulfur fuel and new cleaner engines. If anything, I

urge you to consider moving up your schedule. Some of us don't have seven to ten years to wait for cleaner air. Thank you for your time and God bless you.

MS. OGE: Thank you for coming and taking time from your schedule today to share your views with us. I want to thank you for your patience. I understand you have a medical appointment that you are putting off to come here and testify. Thank you very much.

Mr. Bruce Bertelsen and John Mooney. Good afternoon.

MR. BERTELSEN: Good afternoon. My name is Bruce Bertelsen. I am the executive director of the Manufacturers of Emission Controls Association. MECA is pleased to present testimony in support of EPA's proposed heavy-duty engine and vehicle standards and highway diesel sulfur control requirements. We believe an important opportunity exists to significantly further reduce emissions from highway heavy-duty diesel engines by utilizing an engineered systems approach that incorporates and combines advanced engine designs, advanced emission control technology and very low sulfur diesel fuel.

EPA's regulatory initiative recognizes the importance of promoting the systems approach and the Agency's proposal constitutes a carefully crafted and balanced program. If the program is finalized, it will

result in substantial cost-effective emission reductions. Indeed EPA's initiative will bring about the age of the truly clean diesel engine.

MECA is a nonprofit association made up of the world's leading manufacturers of motor vehicle emission controls. Our member companies have over 30 years of experience and a proven track record in developing and commercializing exhaust control technologies for motor vehicles.

Today I will briefly summarize MECA's position on EPA's proposed initiative. We plan to submit more detailed written comments prior to the end of the comment period. I would like to focus my comments on two items. First, the technological feasibility of the heavy-duty diesel engine standards. And second, the critical need for very low sulfur diesel fuel to meet those standards.

First with regard to the technological feasibility. We believe the emission standards proposed for heavy diesel powered heavy-duty engines can be achieved in a cost-effective manner and within the lead time provided if low sulfur fuel is available. EPA in it's proposal identified two primary candidate technologies for meeting the proposed emission limits. Catalyst-based diesel particulate filters for PM control and NOx absorber technology for NOx control.

Catalyst-based diesel particulate filters are commercially available today. The only remaining engineering effort is to optimist the filter systems for the specific engine to which they will be applied. Worldwide over 20,000 PM filters have been equipped on diesel engines in a wide variety of applications. The control efficiency performance and durability of filter systems has been demonstrated.

Catalyst-based diesel particulate filters used on engines operated on very low sulfur diesel fuel can achieve PM and toxic hydrocarbon emissions well in excess of 90 percent. When very low sulfur diesel fuel is utilized, the level of particulate emissions is so low that it is almost unmeasurable. Where diesel fuel containing less than 10 ppm sulfur has been used, filter technologies has demonstrated impressive durability.

Indeed, in some applications filters have continued to provide excellent particulate removal after 600,000 kilometers of vehicle operation. Development and optimization of NOx absorber technology is progressing at a rapid rate and our members fully expect with the availability of very low sulfur technology, this technologys will be commercialized in 2007 for diesel engines.

Indeed, the prospect that EPA will require

very low sulfur diesel fuel in a 2006 time frame has already stimulated an increased commitment to bring about their technology and to apply it to diesel engine applications. Our members see no barriers to this technology, again, provided very low sulfur fuel is available. Rather the challenges are engineering in nature.

Our members are making the substantial financial investment in this technology because they believe it will be commercially available. With regard to the need for very low sulfur fuel, meeting a .2 NOx standard and .01 PM standard over the full useful life of an onroad heavy duty diesel engine as certified on a combined transcient steady state certification test procedures not to exceed emission standards will be challenging.

As previously stated, however, we believe these challenges will be met and the ultimate goal of the truly clean diesel engine is possible. But, again, very low sulfur diesel fuel will be needed. While we continue to recommend that EPA establish a sulfur cap of 5 ppm, our members believe that with a sulfur cap of 15 ppm, emission control strategies can be developed to meet the proposed emission limits.

Specifically with a 15 ppm cap, our members

are extremely confident that all catalyst-based filter technologies will be designed to help meet the .01 PM standard, and that NOx absorber technology will be optimized to help meet the .2 NOx standard. At levels above 15 ppm sulfur we doubt that the proposed standards can be met.

In closing I would like to commend the Agency again for its thoughtful and comprehensive proposal. I want to indicate our commitment that if the standards are finalized and if EPA adopts the sulfur requirements as proposed, our industry is prepared to do our part to ensure that the technology will be there to meet the desired emission reductions. Thank you.

MS. OGE: Thank you. Mr. Mooney.

MR. MOONEY: Good afternoon. My name is John J. Mooney. I am the Director of Technology Development and Business Systems for the Environmental Technologies Group of Engelhard Corporation. Engelhard Corporation appreciates the opportunity to testify at today's hearings and fully supports the testimony of the Manufacturers of Emission Controls Association.

For 40 years Engelhard corporation has been a leading developer and marketer of exhaust emission control technologies for on- and offroad, light-duty and heavy-duty vehicles, and other mobile and stationary source

applications. Engelhard Corporation is the inventor of the monolithic catalytic convertor and three-way catalyst, both of which are the key components of light-duty vehicle emission control systems.

More recently Engelhard invented catalytic system for hand-held two stroke engines used in environment equipment and as well the premier catalytic system that is applied to onroad vehicle radiator surfaces which destroyed ground level ozone.

For diesel engine emissions control, Engelhard Corporation makes and sells diesel oxidation catalysts, catalytic soot filters and ceramic coatings for diesel engine parts. Under intense development over the past several years is our DPX product line, that is the catalytic soot filter and catalytic-based NOx emission control technologies, which include lean NOx catalysts and NOx adsorber catalysts.

Engelhard Corporation believes that the technological challenges posed by the US EPA heavy-duty diesel engine 2007 rule proposal can be met. All that is required is to provide a low sulfur diesel fuel with a maximum 15 part per million sulfur cap. I thank you.

MR. OGE: Thank you. Mr. Herwick, good afternoon.

MR. HERWICK: Good afternoon. My name is Gary

Herwick. I am with General Motors Corporation. I appreciate the opportunity to speak to you this afternoon on behalf of the Alliance of Automobile Manufacturers. The Alliance is a coalition of car and truck manufacturers who sell more than 90 percent of the vehicles in this country. Alliance members are in the transportation business and our interest in this rulemaking is to preserve diesel engines as a power source option for the light-duty market.

As EPA recognizes, diesel engines have inherent advantages with higher fuel economy, lower greenhouse gas emissions, and a lower evaporative and CO emissions. Diesel is one of the key technologies of the future.

Considering concerns about fuel supplies that have surfaced in this rulemaking, EPA should also consider the potential overall fuel savings that would accrue if the automakers are successful in introducing more fuel-efficient vehicles. The PNGV program, Partnership for a New Generation of Vehicles Program, estimates that its advanced diesel technologies can achieve at least a 40-percent gain in fuel economy over today's gasoline vehicles.

Our members are working hard to advance the state of the art in fuel-efficient diesel technology so it will meet the tier two standards adopted last year

knowledge. But the most critical factor in this endeavor is the quality of the fuel and especially sulfur. That is why we applaud EPA for taking this crucial first step toward enabling the next generation of diesel technology.

First, EPA treated the vehicle and fuel as a system for both the existing and future use of fleets. This perspective is essential for today's sophisticated vehicles.

Second, EPA proposed to dramatically reduce sulfur to enable the new exhaust aftertreatment technology. Numerous research programs are showing how clean diesel can be. Recent bus demonstration programs have diesel buses with aftertreatment controls and clean diesel fuel are proving as clean or cleaner on buses running on compressed natural gas. This is truly a remarkable achievement.

Third, EPA proposed to introduce a new fuel on a nationwide basis with a common deadline and very limited exceptions. This approach is necessary to prevent any high sulfur fuel from contamining the sensitive new aftertreatment devices that will be used and it will help ensure the diesel-powered trucks will continue to be able to deliver their goods across the country.

Fourth, EPA proposed introducing the cleaner fuel before the new aftertreatment technology must be used on heavy-duty vehicles. To the extent the new cap leads to

early introduction of near zero sulfur fuel, it will encourage automakers and suppliers to continue developing and investing in this light-duty vehicle option.

As much of a stretch as the tier two standards will be for gasoline-powered vehicles, they will be even more so for diesel engines. The fundamental problem as EPA recognizes is getting the vehicle's system to meet both the NOx and the PM emission standards at the same time. Fuels must be essentially sulfur free to allow diesel vehicles to operate their cleanest throughout their useful life.

That is why automakers and engine manufacturers from around the world have endorsed this level in their recently updated worldwide fuel charter which we have submitted for the record and which is also available on our website. The charter defines sulfur-free as between five and ten parts per million sulfur. Our development data to date sports these levels.

Data from the Department of Energy and the API and Engine Manufacturers Associations continuing DECSE Control Program, Diesel Emission Control Sulfur Effects program, also supports this definition of sulfur-free fuels. The Manufacturers of Emission Controls Association, which we just heard from, also continues to recommend 5 ppm. Notwithstanding its support for the proposed 15 ppm sulfur cap.

Many people are assuming that the 15 ppm cap may lead to an average sulfur level of as low as seven parts per million with most of the fuel having less than 10 ppm due to the respected compliance margin. We are less certain of this outcome. Rather we expect refiners may learn how to shrink their compliance margins as our manufacturers have done in new submissions compliance.

This could lead to more fuel above the 10 ppm level which could seriously poison the new aftertreatment devices. In addition to sulfur, EPA should also adjust other fuel properties as recommended in the worldwide fuel charter. We will discuss these issues further in our written comments.

We think five to ten parts per million is doable. After all, refiners are making this fuel today in Sweden and elsewhere, as others have certified throughout the hearing process. Other countries are moving quickly to ultra-low sulfur fuels. Just last year, Germany adopted a tax incentive program to encourage fuels with less than 10 ppm sulfur by 2003.

In May the European union announced it intent to study a revision of its 2005 sulfur regulation to 10 parts per million for all of Europe. The key point is that refiners know how to make clean diesel fuel.

At this point I would like to recognize Tosco

for its support of EPA's proposed sulfur limit, and I'd also like to recognize ARCO and Equilong for manufacturing smaller quantities of this fuel for demonstration programs. Proper incentives and market demand will bring this fuel to market even faster than public estimates predict.

We are at GBA to focus on its incentive package to encourage to marketplace the make the new cleaner fuel widely available as soon as possible. We have heard concerns expressed about the business risks and the potential supply shortages. We believe we understand the business risks associated with increasingly stringent mobile source emission regulations.

Indeed, we believe the new technology forcing tier two standards constitute an even greater business risk for a industry. We believe that fuel supplies will be driven more by profitability and other factors and not simply by the cost of this regulation.

We have come a long way in the debate over sulfur. Just two years ago automakers petitioned EPA to reduce the sulfur content of gasoline to the levels in California or even lower. Today just about everyone accepts the critical role that fuels and sulfur play in our national environmental policy. The issue is no longer whether to reduce sulfur. It is not even that near zero sulfur fuels will eventually be needed. Rather, it is when

they will be available to enable a new technology.

For our part Alliance members want to bring advanced technologies, such as the turbo-charged direct-injection engine and hybrid-electric diesel vehicles that are described in our new brochure, Advanced Technologies, that you can all take a look at in our media room just around the corner to the point where they can operate cleanly and meet consumer demands.

The proposed 15 ppm cap on diesel sulfur is an essential step forward and will provide incentive to continue developing and investing in clean diesel technology to make it one of our key options for the future. Thank you.

MR. OGE: Thank you. Mr. Keller. Thanks for you patience.

MR. KELLER: Good afternoon. My name is Glenn Keller and I am the Executive Director of Engine Manufacturers Association. Among EMA's members are the principal manufacturers of the truck and bus engines covered by today's proposal. Up front I want to make it completely clear that EMA supports EPA's proposal as it prescribes a path for achieving clean diesel technology.

As we sit here today, we are on the verge, the critical turning point, of something spectacular. We have within our grasp the potential to dramatically reduce the

emissions of the most fuel-efficient, reliable and durable source of motor power available today that serves as the backbone of our nation's transportation and delivery system. The diesel engine can be as clean as, if not cleaner than any other power source. It is capable of meeting, emission standards significantly below today's levels. And let me remind everybody that the emissions from today's diesel engines already have been reduced by over 90 percent. Yet we recognize that more, much more, in fact, can and should be done to clean up diesel engines.

The key to accomplishing this feat is to greatly reduce the sulfur content of the diesel fuel. Further reductions in diesel engine emissions are going to require much more than new engine designs and technologies. As EPA appropriately recognizes, future remission reductions require a systems approach involving the engine, aftertreatment and the fuel to support them. In a sense the future of clean low-emitting trucks and buses rests on a three-legged stool. The stool will fall without all three legs in place. One of those legs, fuel qualify, enables the technology necessary to make the other two legs stand.

Without removing essentially all sulfur from diesel fuel, advanced NOx aftertreatment devices will not be feasible. Advanced PM aftertreatment will be

prematurely poisoned, and engines will be exposed to excessive wear, increased maintenance costs, and impaired durability. I cannot emphasize enough the critical importance of ultra-low sulfur fuel as the enabler for achieving substantial NOx and PM reductions. Improved diesel fuel also has a role in responding to potential health effects concerns.

Ultra-low sulfur fuel lowers the total mass of particulate from not just from the new engines but from the entire fleet, and it enables the retrofit of known aftertreatment technologies, such as oxidation catalysts and catalyzed particulate filters, which can reduce the organic and carbonaceous components of PM emissions. Moreover, limiting the sulfur compounds emitted into the air provides direct benefits in reducing the inventory of harmful fine particles of sulfate in the air we breathe. Sulfur and fuel is a poison. It ends up compromising our air and also acts to compromise the performance of these advanced aftertreatment devices we see.

We applaud EPA for recognizing the critical role of fuel sulfur. We strongly support the need for a uniformed nationwide low sulfur fuel standard with a hard cap on sulfur content. Regional differences in sulfur content will not allow the systems approach necessary to meet EPA's very stringent NOx and PM emission levels.

Further, a hard cap on sulfur is critical. Averages simply will not work. They are difficult and impractical to enforce. Moreover, the engine and aftertreatment legs of the stool must be assured of never being exposed to high sulfur fuel.

In our view, EPA's proposal for a 15 ppm limit does not go far enough. And fuel improvements should not only be limited to trucks and buses. Nonroad fuels must also be improved. We are aware of the various arguments raised by the oil industry against improving fuel quality. They don't want to reduce sulfur to even 15 ppm, let alone to lower levels. Nation-wide ultra-low sulfur fuel can -- no, must -- be achieved and it can be done cost effectively without economic harm to either the oil industry or to the trucking industry, the users of both our engines and the oil industries fuel. We will provide detailed comments on the need for ultra-low sulfur fuel in our written submission.

So today we are enthusiastic, excited and very hopeful about the future of the diesel engine and our industries' ability to produce reliable, durable, fuel efficient, high-performing diesel engines that also are as clean or cleaner than any other power source. There are issues which will require a great deal of work by manufacturers and the Agency. But it is no longer a

question of if. Give us fuel improvements, sufficient time, compliance flexible and testing certainty, and tremendous emission reduction can be achieved.

If you have any questions, I would be pleased to answer them.

MS. OGE: I have two questions for Mr. Gary Herwick. In an effort to move forward, because we are running late, I would appreciate it if you could submit any written comments that you have for the record. You made two statements that I wanted to follow-up. One had to do with addressing other parameters with the fuel with sulfur. We would encourage the Alliance to provide any data that you have that will suggest the environmental benefits and the effects of aftertreatment technology.

The second issue that you mention in your testimony is for the Agency to consider incentives in order to see that cleaner fuels are introduced in the marketplace earlier than 2006 time frame. We would appreciate any specific recommendations that you have on this issue. Thank you.

MR. HERWICK: You are not asking me to respond now. You would like written comments on those?

MS. OGE: Please. Any questions for the panel? I would like to thank you all for coming forward and also for being extraordinarily patient. We have more

people coming forward to testify than we had planned. We are willing to go through our lunch and our dinner as long as it takes to listen to everybody who has a statement to make for the record. Thank you very much.

I will call the next panel. We are about an hour behind schedule. I hope that we can pick up some speed here. I would like to call Reverand Terry Van Cook. Mr. Ron Milan, and I believe he is accompanied by Ms. Nina Solomon. Ray Edrasian. Bahram Fazeli. Mr. Greg Vlasek. Dr. Kirk Murphy. Miss Vanessa Lynn. Miss Cynthia Rojas. And also I would like to call the following individuals if they are still here, please come forward. Mr. Bob Massman, Mr. Mike Williams and Mr. Bill Burgemaster. Please print the names on the cards placed in front of you.

Reverand Van Cook, welcome and good afternoon.

MR. VAN HOOK: I am Dr. Terry Van Hook, Pastor of the Culver-Palms United Methodist Church in Culver City, California. I am here both as a private individual but also as someone who represents a large group of individuals concerned about this issue. I do want to thank you all, especially the EPA, for the 30 years of hard work work to clean up the air the other areas of pollution and for coming and meeting us here in Los Angeles.

I remember the years here in L.A. when the

smog season was in force and it seemed like the San Gabriel Mountains had been mysteriously moved away for the summer. Those days are fewer. We heard testimony on that earlier. I thank God for that. And also I thank God for your working for the State of California and for all the people, the enumerable people, who have worked for over 30 years to wrestle with these environmental issues.

I also remember that it took a child choking in an airplane for me to wake up and see what was going on. In the days before the airliner's smoking ban, a man smoking a cigar in coach put a nearby child into an asthmatic fit. But the tearful mother did not get through to him to have him somehow stop or even move. He was completely unconcerned over the consequences and refused to extinguish his cigar. The mother's tearful plea had no effect. He saw nothing wrong. He didn't feel that he wanted to waste the money he had spent.

Finally, a very courageous flight attendant came and confronted a man with a sick child sitting behind him, and that finally resulted in the cigar being shamefully put out. Your Agency has taken on the role of being such a courageous public servant, and I thank you again for that.

Today the issue is sulfur and the other pollution in diesel fuels that are before us. I ask you to

look simply beyond being that public watch dog and to see instead the larger picture of what we are engaged in. A hundred years ago when the internal combustion engine was new and exhaust gases were just invisibly mixed with the dust that followed with the wait behind the car or truck, there was no knowledge of the immense damage to lungs and health that such pollution would cause.

Yet even then anyone living would have been morally appauled as someone came and proposed that had we start an industry that would end up dumping 3 million tons per year of dangerous particulate matter through our air as a result of their business. This, as we have learned, is what the current diesel engines, as improved as they have been -- and I do recognize that as well -- contribute to our atmosphere today.

Such a proposal like that would be shamefully laughed out of town, especially when we learned that a high percentage of those particulates end up in our children's lungs. It would be as if we lit up 20 cigars in a closed cabin of coach in an airline. We have made great strides in undoing the damage that we ourselves have done over the last hundred years. But the final goal will still elude us if we continue to think only of the economic cost to the producers of the oil and the economic cost of the refining and other processes that go into reducing sulfur.

If we ignore the economic and human and even spiritual cost to the consumers of this pollution, and, yes, there are consumers of pollution. We can easily call everyone, the men, women and children, who have to follow along behind the particulate-generating engine, an unwitting consumer of pollution. We can easily call those who live alongside the roads that particulate-generating engines travel unwitting consumers of pollution.

We can easily call those who play and work downwind, sometimes miles downwind from the highways and byways of the particulate-generating race on unwitting consumers of pollution. All these sources of pollution often seem uneffected by the waste stream that they leave in their wake and would rather save a few pennies per mile than be morally responsible for their actions.

The unwitting consumers of pollution are all the unseeing human beings of greath worth that pay the cost of those few pennies with their health. The reality of the big picture is that every engine, every industry that has an exhaust pipe or has a smoke stack or some other way of venting pollution to the air, is using the air we breathe as their free garbage dump. They continue to take advantage of the fact that no one owns the air. They are exploiting a God-given resource as a cheap and inexpensive way to expose of their unwanted chemicals. It is only fair

that we ask this to stop.

I know you know this. We all know this. It is just that we lose sight of it at times. I hope that what we do here today and in the continuing efforts of the EPA to return to a common agreement, a common sense conclusion that we are in this all together, we are a community together. Not a group of individuals that need to be policed or coerced into doing the right thing.

That we are a nation seeking to live in peace and justice in respect and dignity for each other. That whether we are young or old, rich or poor, none of us should be required to breathe the byproducts of someone else's industrial process and, therefore, pay a personal cost of disposing of the waste that they create. That's the bigger picture before us today.

As members of the EPA, you have the power to set the policies to hold us to the goals and dreams of clean air, not just partially clean air. To have the picture of the use of each other completely in our past and to have the picture of the use of nature as places to dump our byproducts eradicated.

I know that God weeps when God sees us using each other in such disrespectful and destructive ways. I ask you and all who are here today to remember our sacred words from God and our honorable covenant as Americans, to

take each other into account, to care for each other as our nation has tried to do in its whole history. I ask to you work hard to restore not just our land and air water, but to restore our morals, spiritual and physical health as well.

That is the higher calling of the EPA. It may not be written in your mission statement but it must be written on your hearts. We can be moral leaders as well as political leaders. The two are not exclusive. I know you know this. Don't lose your focus. Don't let us down. Thank you very much.

MS. OGE: Reverand Van Cook, thank you very much. I would like to call Mr. Bahram Fazeli.

MR. FAZELI: Good afternoon. My name is Bahram Fazeli. I am representing Communities for a Better Environment. Communities for a Better Environment is a state-wide environmental health and justice organization that relies on organizing legal advocacy and technical research to assist communities in voicing their demands and influencing policies that influences their health.

We belong to a rapidly growing local, national, and international movement that demands corporate responsibility. The majority of our members who living in lower-income communities of color have become increasingly aware that they are carrying more than their fair share of

pollution in their communities. People of color and lower-income communities have become increasingly aware that they are targeted by stationary and mobile sources of pollution, with diesel being among the worst of these toxic air components.

Particularly children, pregnant women, elderly and people with poor health who live along the Alameda Corridor in the South Coast Basin have and will continue to suffer the increasing effects of pollution, especially diesel traffic, infecting them with acute and chronic circulatory and respiratory illnesses. There's a section in the City of Highland Park where our offices are located that the district the people refer to as Asthma Town because there are proportionately high rates of asthma among the children.

People of color in lower-income communities and especially children continue to suffer because we as a society rely on an economic model of growth that is polluter-friendly. The regulatory vision of those who set public policy has long been distorted by an obsolete model of growth that neglects the respects of the responsible growth on the health of humans and the environment.

We are yet to see the implementation of the model that internalizes the real cost of pollution. A model that emphasizes prevention over last-minute district

measures secure, and a model that emphasizes welfare of human health over rights of polluters to expand. Too long we have lived by the motto of expand now and breathe later. And too long communities of color and especially children of these communities have become the yellow canaries of bad economic habits of polluters that seem to only profit a few.

We are glad to see that EPA is taking a series of steps in improving the health of our communities. We commend the EPA for what we consider the first of steps in a series of steps that needs to be taken to improve the quality of air in our communities. We support the amendments that were proposed by National Resources Defense Council and other environmental groups to strengthen the rule and we urge EPA to implement the rule without delay. Thank you.

MR. OGE: Thank you. Mr. Ron Milan, welcome.

MR. MILAN: My name is Ron Milan. I am the Executive Director of the Los Angeles County Bicycle Coalition. We are a coalition of cyclists throughout L. A. County working to make the streets safer and more enjoyable for people to ride a bike, both as an alternatives means of transportation and as a means of recreation. Oftentimes they are both recreation and transportation.

We are working really hard to make the streets

safe for cycling and we are really thrilled about this proposal. We support it. And we are supporting it because cyclist bear a brunt of this problem of fuels as well. I can speak on behalf of cyclists. I work downtown and there's nothing worse than biking on the streets and being behind one of the diesel-spewing buses of the MTA. I play a little game. I ride behind it and I try really, really fast to get ahead of the bus and I then I have some fresh a for I little bit, and sometimes the bus gets ahead of me and I have to be behind the bus again. It is dreadful.

We are working to make the streets not only safe for cycling, but the fewer buses we have that are polluting, the more people we think will get out there and bicycle and not use any fuel at all. Once cyclists have to sit behind the buses and also in general the air quality make it tough for cycling. Biking on a day that has too much smog, too much air quality problems is not fun either, and it keeps a lot of people indoors.

We believe that L.A. County has a lot of potential being a great place to bike. We have flat terrain and great weather year round. Too often the air quality is no good and being behind buses is no good. We applaud your proposal. We think it can be strengthened and we agree with NRDC who has put forth some other suggestions and amendments. So not only should we pass this proposal

with the amendments, but let's implement it and we would like to help you implement it.

Thank you so much for doing all this. If I have any time left, I think there's a Nina Solomon. I would like to donate my time to her.

MS. DRAY: Hello. Good afternoon. My name is Dr. Rae Dray (phonetic) and I am a toxicologist and biologist. I am actually speaking on behalf of a Neighborhood Association. We call ourselves Neighbors for a Safe Environment, NASE. We would like to take this opportunity to bring to the attention of the EPA about a situation in our residential community.

This is in the west side of Los Angeles. There is an oil and gas drilling site in the midst of this residential area. In fact, the facility is within hundreds of feet of four schools, so it is a neighborhood where there's a great concentration of children, there's a great population of the elderly, and it is a walking community. There are a lot of people that traverse the streets.

This oil company, Briper Energy Company, has filed an EIR and is proposed to expand their facilities. And their guise of expansion is basically in terms of what they are calling a modernization. In fact, they are using a diesel-powered rig which is on a mobile platform to do their oil drilling and maintenance work. They want to get

rid of this diesel rig and transform it into an electric rig.

However, in the process they are going to be going to a 365-day a year schedule so that there will be lots of diesel trucks that are coming into the facility and adding this diesel pollution to the area. We definitely applaud what the EPA wants to do in terms of cleaning up the diesel. If this diesel rig that they currently have could be cleaned up, they would probably not have to do this expanded operation.

The other point that we need to bring to your attention is that even though the EPA has categorically stated up front that this is a major polluting facility and has urged the local agencies to enforce and issue permits, the local agencies do not because it falls through the cracks. Since this is a mobile unit, it is not permanent, The AQMD does not have a rule. The EPA is not being forceful enough, we feel, in demanding that the local agencies make rules to, in fact, enforce these types of facilities.

I would like to ask Nina Solomon to give you a few more remarks.

MS. SOLOMON: The only thing that I wanted to add is that there is often a conflict between local government and business. In our case, there's a perceived

notion that you need to appear to be pro-business in Los Angeles, and as a result we have suffered greatly because of that. We are hoping along with your proposal will come enforcement.

One of the major issues always is enforcement, and in this case this particular facility is considered both stationary and nonstationary. I think it is unique, perhaps, the concept is unique. As a result it falls through all the cracks for enforcement. We are hoping that you will look at that aspect as well.

MR. OGE: I would like to thank you both of you. If you could give your names and phone number to the receptionist, I will have our regional staff that are responsible for the State of California to call up both of you. Thank you.

Mr. Greg Vlasek, good afternoon.

MR. VLASEK: Thank you. Good afternoon. I am Greg Vlasek. I represent the California Natural Gas Vehicle Coalition in Sacramento. We are an advocacy coalition of 35 fuel providers, light-duty vehicle manufacturers, fleet users of natural gas vehicles, and heavy-duty engine manufacturers and technology companies.

We are here today in the house on the debate over diesel to support the proposed EPA diesel sulfur reduction and heavy-duty engine standards as proposed and

the like many of the prior speakers we see opportunities to actually strengthen and improve upon these proposed regulations.

The Natural Gas Vehicle Industry is here because these new future engine standards level the playing field for other maturing technologies that can compete with diesel. That includes natural gas engines and trucks and future technologies, such as fuel cells, hybrid technologies, and so on.

We are talking about leveling the playing field in two ways that have already been touched on. One is geographically. California is already committed to starting down this path to clean diesel fuel and cleaner trucks. From a competetive standpoint from our trucking industry, it is very important that this become a national program because we do have so many trucks coming in from other parts of the country, and if the standards are not equalized at some point, there is no hope whatsoever that California nonattainment areas will be able to achieve attainment in the time frame required.

The other leveling effect is in the area of technology. There has been a big debate here and that debate will continue over what is the appropriate sulfur content of diesel fuel in order to be able to apply these new technologies. Should it be 50, should it 20, 15, 10,

5, where should it be. I even heard 5 to 10 ppm sulfur characterized as sulfur-free diesel fuel for the first time. I am not sure exactly where that leaves natural gas.

Natural gas in commercial pipeline grade that ranges from about two to four ppm sulfur. That is with no incremental processing cost to either the fuel provider or ultimately to the consumer. What that does is it enables natural gas technologies to take advantage of all these diesel aftertreatment technologies that are being discussed and to do so in a way that is very cost effective.

That is appropriate because currently natural gas engines and trucks have such a very minute fraction of the market. There in no way that we can develop those technologies separately without the diesel engine manufacturers stepping up to do the development. But anything that they do to improve on diesel engines is going to be transferrable to natural gas engines and make them cleaner as well.

Along with ARB and the California Trucking Association and South Coast AQMD, we would agree that we ought to be really talking about inclusion of all diesel fuel, not just onroad truck fuel. As the ARB pointed out at the beginning of the day today, up to 55 percent of the NOx inventory is from offroad sources. So why when we have the opportunity in a seven-year lead time to effect new

fuel standards and new technology standards, why would we not be looking at agricultural engines, construction engines, locomotive engines, marine engines, and so on that all contribute very dramatically to the inventory in California and other nonattainment areas, particularly in the Central Valley where I come from.

We would also support the concept of a more aggressive phase-in schedule. These new engines and new fuel are needed sooner rather than later for health reasons. We believe in too much stock is currently being placed, particularly here in California, in the possibility of low sulfur diesel retrofit technologies. While some of those things do appear to show promise, we have very strong concerns about how well those things will perform in use when there is no engine manufacturer to back up the combined engine and aftermarket retrofit technology being properly integrated. We don't see anybody stepping up to fill that void to make sure that the retrofit technologies really do work in use.

The Engine Manufacturer's Association testified here today and testified elsewhere that diesel engines can be as clean or cleaner than any other power source. I presume that to include natural gas technologies, fuel cells and the like. I think those familiar with engine certification data and in-use

emissions data as opposed to lab data know that diesel engines have a long way to go and natural gas is the clear leader in heavy-duty engines emissions technology.

If the EPA says that diesel manufacturers can be cleaner than natural gas and fuel cells, let's hold them to it with these regulations and give them the fuel they need to achieve that. The petroleum industry's argument seems to be reducing public cancer risk is not worth the cost of retooling their infrastructure to supply that clean fuel. And the vehicle control technologies might not work anyway. They seem to have very little confidence in the advanced diesel technologies.

If that's true, it is all the more reason for EPA to adopt these new standards and to encourage heavy-duty engine manufacturers to accellerate their commercialization of natural gas engines and other technologies that can delivery the results and can deliver the clean fuel. Remember I said natural gas is already below any proposed standard for sulfur and diesel. Three ppm with no added cost to the provider or the consumer.

Finally, I would like to interject some caution on the selective catalytic reduction technology that has been discussed as a heavy-duty truck emission strategy. CTA, California Trucking Association, hinted earlier at some of the practical problems associated with

this. Selective catalytic reduction technology, that is using ammonia or urea as a reagent in the catalyst process to reduce NOx has been used in stationary engine applications by California gas utilities for nearly 20 years. About as long as I have knowledge in the natural gas industry.

You need for watch this very closely and to talk with your stationary technology people about this because this is a very, very sensitive technology that requires extremely careful control that is hard to achieve in the real world and very hard to achieve with a transient mode engine. The predictive modeling for proper injection is very hard to maintain. We found that even on stationary engines that do have predictable load shifts, unlike a diesel truck or a bus, as was testified earlier, this technology can actually quite easily, if not properly managed or monitored, can result in increases in the emissions of toxins and NOx, aside from the practical problems of using that kind of material.

Again, in-use compliance associated with that technology is an issue of very large concern because of the reasons mentioned. That's all I have. I appreciate your time. I would be happy to answer any questions you might have about natural gas technology.

MS. OGE: Thank you for coming. I would like

to welcome Silene, Julia and Erasmo. Good afternoon. One of you will speak or all of you? If you can state your name for the record and you can proceed.

MS. PARAMEDEZ: Good afternoon. My name is Silene Paramedez. I represent Beaumont High School Environmental Club. By being in an environmental club we are trying to make a difference in our community by getting involved in as many activities as we can. Today we found a problem which is air pollution. Air pollution is caused by power plants and multiple usage of cars.

The one way we can prevent air pollution is there are a lot of people that use cars so we can use carpool cause there's a lot of people that live near each other and it will make a difference if we carpool. We key share in carpool together. Why have more pollution if we can travel to one place together. We are trying to tell people that air pollution is not healthy and we should make a difference and try to prevent it.

MR. OGE: Thank you, Silene.

MR. FUENTES: Good afternoon. My name is Erasmo Fuentes and I am also a Belmont Student and also a member of the Environmental Club. As you all know, I would like to thank you, the EPA for giving me the chance to speak here today. Pollution is a big problem in your community. Everyday children with asthma are being sent to

the emergency room because of severe asthma attacks.

I know because I had experienced a couple of asthma attacks in the past. One of the reasons the doctors gave my parents was because of the high smog and the pollution in the air. I would like all of you to make stricter regulations in the pollution because it is needed. It is no fun having asthma. I would also like to thank the EPA for trying to make the difference in the lives of asthmatics.

MR. OGE: Thank you, Julia. Good morning.

MS. MUNOZ: Good afternoon. My name is Julia Munoz from Belmont High School. I represent not only myself but also I represent the future. In other words, if pollution continues, there's practically no future. Many of you have experiences that extremely heat has been increasing, that is given to the air pollution and all that. It changes our climate. It not only changes our climate now but will eventually change the future. I would love to be in the future and I am planning for it.

However, the air pollution has prevented me for doing so. I would also like to talk about have you ever experienced being in the back of a school bus. When the school bus takes out it bursts out a lot of gas and contamination out of its pipes. Once when I was a little girl I was in the back of a bus and it was a bad

experience.

In the future that's how we are all going to be breathing. Imagine yourself being in the back of a school bus breathing that air. Basically in the future the way I see it as is wearing gas masks all the time when we go out. Even to go out like we say now to breathe some little air, we have to grab our gas mask and go outside.

In programs such as the environmental program at our school and also AOP is trying to make a difference. However, we still need stricter laws. We all enjoy the car. I do enjoy my car and I don't really enjoy walking. However, if we don't start doing something about it, we have to realize we are destroying it. We are destroying our environment. But we might think we are that doing bad to ourselves, but we actually are. We are not making a future.

Thanks a lot for us all of us who are trying to make a difference. I know I will be trying to make a difference as well in the future. Thanks a lot for hearing me.

MS. OGE: Thank you Julia and thank all the panel members. You are the reason we came to Los Angeles and we are not holding this public hearing in Washington. We are traveling across the country to get the views of all affected. Especially concerned citizen like yourselves.

Thank you for coming forward. We will start with our next panel.

Mr. Craig Moyer, Mr. Alan Cabodi, Mr. Chad Tuttle, Mr. Steve Farkas, Dr. Gary Herbertson, Duane Bordvick, Dan Jacobson, Clara Rosenthal and George White.

If you can state your name and affiliation, we can start with you.

MR. MOYER: Craig Moyer with the law firm of Demetriou, Del Guercio, Springer and Moyer in Los Angeles. I am speaking today as the general counsel and executive director of the Western Independent Refineries Association. We have on this panel four WIRA members and I want to support their comments and try to coordinate so we didn't have repeats on here. But there's no federal rulemaking that is more significant to small refiners today.

WIRA a trade association representing the interests of the 11 small refiners still operating on the West Coast. WIRA is a trade association of those small and independent refiners who have been long-recognized as an important competitive force in the refining sector. The small and independent sector of the refining industry is integral to maintaining competition.

In addition, small and independent refiners also supply other petroleum products not otherwise available in certain areas. For example, small refiners

manufacture 100 percent of California's grade aviation fuel, allophatic solvents and JP4 jet fuel. Small refiners also manufacture 100 percent of the asphalt produced in Southern California and most of the offroad diesel.

Congress and many agencies, including United States EPA and the California Resources Board have long recognized the importance of the independent refining sector to maintaining a competitive market for petroleum products. There are five West Coast small refiners that are currently today making onroad diesel fuel. Diesel fuel is a very important product to small refiners.

There is substantial precedent I would like to remind you of for small refiners separate treatment, including the diesel fuel acid rain credits and the Clean Air Act Amendment of 990. I would like to recall the gasoline rulemaking here in California in 1991 to analyze the implications of a major fuels reformulations on the ability of small refiners to survive.

The point is to consider not only the impact on small refiners, but also on the competitiveness in the marketplace. The California Attorney General recently found that the elimination of several small refiners from the gasoline market during the 1990s in California contributed to the lack of competition and increased the price spikes that we have seen in gasoline here in

California.

I would like to begin the substantive comments by expressing WIRA's complete and utter support for your proposal on engine emission standards. Additionally because it appears that ultra-low sulfur diesel fuel is necessary for engine manufacturers to be able to meet those standards, WIRA supports the need to dramatically reduce the sulfur content of diesel fuel.

Today we are proposing a 30 ppm average sulfur content for diesel fuel. That is a reduction of 94 percent from today's standards. As compared to 15 ppm, we believe that a 30 ppm average sulfur content is more appropriate balance between diesel fuel production capabilities and sulfur impacts on engine emission control technologies. We believe there's a need to push engine manufacturers.

Lowering the sulfur to an average of not less than 30 ppm is critical to refiners, especially small refiners, to avoid substantial reduction in diesel fuel production. Below the break point of 25 to 35 parts per million sulfur, costs increase dramatically and production declines dramatically.

As compared to 15 ppm a sulfur of 30 ppm appears to result in almost no measurable difference in fuel economy or the ability of the technology to meet emission standards. An observation would be if Navistar

can meet the standards today with 15 parts per million why stifle technology and suggest that no further development is necessary.

The sulfur content of 15 ppm will reduce the volumes substantially simply by lowering end point. The base case, that is, will reduce the routine volume of production. Perhaps more importantly, a sulfur content of 15 parts per million creates an untenably fragile system for production. There is simply no margin for error. There are minor process variations would create offspec batches that are going to have to be reprocessed.

Other members of this panel will be speaking to that issue substantially more. The bottom line is that EPA's proposal will not only reduce the overall diesel production capacities but also create a system so susceptible to upset and batch loss that spot shortages and their resulting price spikes will become common place.

There's no question that 15 ppm sulfur diesel fuel can be made. The question is how much of it, how consistently can it be made and at what cost. The requirement for 15 ppm sulfur diesel fuel also establishes an untenably fragile system for engine manufacturers. It seems to me dangerous for engine manufacturers to design a system so sensitive to sulfur that exposures to anything more than 15 parts per million will create problems. This

is an extraordinarily low level.

Let me then turn to the small-refiner perspective, specifically having to do with some of the issues requested that you asked for specific comments. WIRA did participate in your Sabrifa process. Unfortunately, this Sabrifa process did not meet the legal requirements of section 609 because no one during the Sabrifa process, including EPA, focused upon a goal of 15 parts per million sulfur. That rulemaking is fatally flawed and subject to challenge.

However, during that process there was a breakpoint for J-curve on sulfur reduction that was demonstrated to be at 25 to 35 parts per million. We demonstrated that as to small refiners the low 30 ppm costs increased dramatically and production declines. We do appreciate EPA's recognition at the convening of the Sabrifa panel and your understanding of the peculiar and extraordinary challenges that are facing small and independent refiners.

EPA recognizes that it will cost small refiners 50 percent more to achieve the same sulfur reductions. We think actually this estimate is low. The key point is that small refiners need an menu of options to choose from to reduce the negative implications. There is no one solution that the help every small refiners.

You did request some specific comment on some specific options. Of those three options for which EPA seeks specific comment, WIRA supports the ability to sell 500 ppm segregated onroad diesel fuel. This option is not particularly helpful, but it may be of some limited value to some small retainers and better for West Coast refiners than the other options.

We also support a 30 ppm average even if EPA, incorrectly we believe, chooses to pursue a 15 ppm for all other refiners diesel fuel. EPA could also establish a mandatory exchange program for ultra-low diesel fuel. A hardship extension is not helpful because all West Coast refiners either make no gasoline or already make ultra-low sulfur gasoline. The tier-two gasoline standards have no effect on small refiners on the West Coast.

A couple of additional final points. EPA needs to prohibit dumping into the offroad market, ala the antidumping provisions of gasoline in the gasoline standards of the early '90s. Finally, we need your help to advocate financial support for small refineries. Small refineries will and already are laying the groundwork for legislation for investment tax credits to cover the capital and increased operating costs associated with these rules and the disproportionate implications of those rules on small refiners. We would ask for your support for those

financial changes. Thank you.

MS. OGE: Thank you. Mr. Tuttle, good afternoon.

MR. TUTTLE: Thank you. Good Afternoon. My name is Chad Tuttle of Kern Oil and Refining Company. As a small business refiner, my comments today will focus on the diesel fuel sulfur standards. Please note that these comments are presented from the perspective of a small business excessive, which has made extensive financial and commercial investments to enable it to comply with Federal and California fuel regulations.

Kern echos the prior comments of Western Independent Refiners Association and other small business refiners speaking to this matter Kern supports EPA's proposal on heavy-duty diesel engine emission standards. Kern further supports and acknowledges the need for diesel sulfur reduction to accomplish the required engine emission reductions. Kern does not agree with EPA's proposed level of sulfur at 15 parts per million.

The diesel sulfur reduction to a near zero level is not practical. As a point of reference I will briefly ilustrate Kern, for example, must consistently process its untreated diesel fraction distilled from crude oil with a beginning sulfur level of 5000 ppm. Please note that the current diesel sulfur limit of 500 ppm alone

represents greater than a 90-percent reduction.

The proposed limit of 15 ppm sulfur represents a reduction of 99.7. Kern believes that accomplishing such a severe diesel sulfur reduction on a consistent industry-wide basis is unworkable. Kern cannot meet a 15 ppm standard with our existing desulfurization equiment installed in 1993 to meet the 500 standard.

The 15 ppm standard would require Kern to basically start over. This includes a second larger high-pressure diesel hyddrotreater hydrogen plant expanded sulfur recovery and supporting equipment. This carries a price tag of approximately 35 million and is far out of Kern's financial reach.

We also reviewed modifications to our existing hydrotreater and based on our findings, diesel production capacity would be reduced by over half. Such a severe reduction is also unworkable. This production imbalance will force Kern out of business due to an already limited and shrinking offroad diesel market. If Kern suffers a production shortfall, including possible shutdown, California will endure further increased diesel costs in the San Joaquin Valley. California would also lose critical Kern gasoline production in the tightly balanced market as well.

Kern proposes a diesel sulfur limit average

of 30 ppm representing a very difficult but technically feasible reduction of 99.4 percent. As compared to 15, 30 ppm diesel sulfur content is a more appropriate balance between diesel fuel production capabilities and sulfur impacts on engine emission control technologies. Refiners have been pushed to the limits as well as engine 0manufacturers. We recognize we must continue to push harder.

Average diesel sulfur limit of 30 ppm is critical to avoid substantial losses in production. As compared to 15, 30 ppm diesel sulfur content represents an almost no measureable difference in fuel economy or the ability of the technology to meet emission standards. The difference between 30 ppm and 15 is little different from the amount of sulfur that may enter a diesel engine as a result of lube oil.

Kern is a small independent refinery in Bakersfield, California. Kern is the only small independent refiner in Central California currently producing significant volumes of onroad diesel, which meets both California and Federal specifications. Kern has spent millions of dollars to upgrade its refinery as a result of the 1993 EPA diesel sulfur regulations. Kern is also the only small refiner producing both federal reformulated gasoline and California cleaner burning gasoline. Kern

employs 107 people and has supplied petroleum product for 65 years.

Diesel is Kern's livelihood. It is important to note that Kern markets diesel to both the independent and branded marketing secctors in the San Joaquin Valley, High Desert and Central Coast, and as a small independent refiner in Central California, Kern plays a significant role in leveling the market's economic and supply playing fields, particularly in the Southern San Joaquin Valley.

The other only other significant producer in the San Joaquim Valley is the major oil company refinery. At peak season produces over 8,000 barrels per day or 39 percent of the San Joaquin Valley market. Kern is clearly a powerful pro-competitive force. For Kern diesel production is the largest part of our business and a fundamental and necessary component of producing onroad diesel has included the largest single refinery investment and modification in our companies 65-year history. This, of course, was EPA's diesel sulfur reduction effective in late 1993 and concurrently california low aromatic diesel regulations.

Kern has spent the last four months focusing on how to feasibly achieve comliance with the newly proposed EPA diesel sulfur regulations. This work has included researching the available technology and reviewing

potential cruid oil input changes. A diesel sulfur limit of 15 ppm will substantially and negatively impact Kern up to and including possible shutdown.

We have reviewed diesel sulfur reduction scenarios from 50 to 15 ppm. Our work shows that an average limit of 30 ppm is workable, with modest production losses. 15 is not.

Kern strongly agrees with the EPA's findings and the advanced notice of produced rulemaking published in the May 13, 1999 federal register which states: "Desulfurization of diesel fuel to very low levels is expected to involve substantial investments and added operating expenses by petroleum refiners."

Small business refineries like Kern will face more severe solution scenarios compared to major oil companies. Small refiners operate under different less flexible processes than do larger refiners. It is important to note that small refiners also face additional restraints to secure financing from major projects. This is cumulative when compared to the other issues of planning, engineering, permitting, purchases of equipment, construction and start-up.

Kern requests that EPA formally support economic incentive for small business refiners including but not necessarily limited to investment tax credits,

excise tax relief, accelerated depreciation or expensive qualified environmental expenditures and acid-rain credits to help cover capital and increased operating expenses.

In closing, Kern concurs with EPS'a proposed heavy-duty diesel engine emission standards. Kern supports the need to reduce sulfur in diesel. Kern strongly opposes 15 ppm diesel sulfur limit. Kern supports a 30 ppm average diesel sulfur limit. Keep in mind for us there are enormous differences between a 99.7 percent reduction.

Kern requests that EPA formally and publically advocate and endorse small business economic assistance. Possibly through excise tax credits, investment tax initiatives and/or other options so that small business refiners can absorb greater than 50 percent cost of compliance that we have estimated we will incur.

California's economy is dependent on the element of competition that Kern and other small refineries provide. Thank you.

MS. OGE: Thank you. Mr. Duane Bordvick. Good afternoon.

MR. BORDVICK: I am Duane Bordvick. I am Senior Vice President for Safety Health and Environment for Tosco Corporation. Thank you for this opportunity here today. Tosco is not a small refiner. Maybe once we were, but now we are not. We are a large refiner. We are not a

major oil company. Not an integrated oil company. We have no production, but as a refiner I believe we now are third in the nation for refining capacity and one of the major suppliers of diesel fuel in the United States.

Tosco supports EPA's basic proposal of one standard 15 parts per million. One time 2006 for all refiners for all the country. As a major supplier of gasoline and diesel fuel to the public Tosco believes that we must continually improve these product to make them environmentally acceptable. For this reason, Tosco has supported a number of similar measures, such as rapid phase oou of EMTV, lowering the gasoline sulfur 30 parts per million, and now this ultra-low sulfur diesel proposal.

Making clean fuels we believe is our mission. We believe at the important. We are in this business. We want to stay in this business. We want to be able to have a fuel that competes with any other clean fuel. For that reason and many others we believe it is the right thing to do.

The standard will indeed, as you heard today, pose some significant costs on the refining industry, and I can assure you that includes Tosco. I have heard some speculate that Tosco is taking this position because we are in some special circumstance or we have an ability to meet the standard today without spending large sums of money.

This isn't true. It is not so.

We have looked at the cost of pleading the new standard. It is in the range of what EPA has predicted. We don't believe we have any special circumstances. We do have some California refineries. About 25 percent of our capacity is in California. In California as well we have to make significant investments.

For the purpose of our business, making clean products, for the same purposes that you have proposed for the health of our country, we are pleased to strongly support your proposal. I would like to add some comments on some of the other measures that you have asked for comments on.

The alternative program options is one of them. We do have some serious concerns about that. I believe you have raised many of those concerns in the staff report and we think you correctly identified many, if not all of those concerns, that we believe it is not appropriate or will not do anyone any good, necessarily, to have a phase-in approach.

In our own company we have asked our marketing people, asked distribution people, commercial people, refiner people is this good, will this help, do you want this. No. Across the board the answer was no. In some you can see some benefit. To others we for a short time.

In the long term we don't believe it will provide any benefit, and it carries a lot of risks which you identifid. Misfueling, et cetera.

One of the big risks may be the impact that it has possibly on supply. I think our industry works best when you have some certainty. When you have to make it you know what to do. Our industry should be pretty proud. We have done a lot. We have met the challenges and I think we can meet this challenge. When you put in some alternatives and put in some phase-ins, there is now uncertainty of who is going to be making the fuel win, I think that will increase the risk of supply.

And as API mentioned this morning, supply is a serious concern. We are concerned about that as well. I think it has to be seriously considered, and we believe, I think we are optimistic, certainly our company and our industry, that we will, given the six and a half years that we have to meet this, we will do it.

I will also comment on another provision, the small refiner. You have heard some already. Generally we don't support any special provisions for our industry. There may be special cases. I think my only comment there would be to be very careful to have any provision be as narrow and specific as possible so you don't fall into some of the problems that might be associated with the phase-in

and certainly with supply inequities.

I will say that we can go along with certain very carefully, very narrow provisions to help certain segments of our industry, but be very careful. In conclusion, again, I want to reiterate our strong support for your proposal, 15 parts per million. One time, 2006. The dual fuel, the phase-in we think is very dangerous and unworkable. Go with your straight-forward proposal. We are ready to do it with you. It will mean that, we hope, diesel fuel will be around for a very, very long time and protect the length of our folks, and frankly we think it is the right thing to do. Thank you.

MS. OGE: Thank you for the support. Mr. Al Cabodi, good afternoon.

MR. CABODI: My name is Al Cabodi. I am vice president of manufacturing for U.S. Oil and Refining Company. We are a small independent 45,000 barrel a day refinery in Tacoma, Washington, which is about 30 miles south of Seattle. We are not a Tosco. We don't have a million barrels of capacity.

However, small refiners like U. S. Oil are important to the national economy and security. U.S. Oil supplies 45 percent of the asphalt products in Western Washington. We supply approximately 100 percent of the military JPA to McCord Air Force Base, which is one of the

premier Air Force Bases in the United States. We supply relatively small amount of diesel, but that's still a couple 100,000 gallons a day of diesel on the onboard market primarily.

We are a family owned business. We care for the community and we care for the people around us and we want to be a good environmental neighbor. However, we want to stay in business. USO participated in the Sabrifa panel, one of 22 small refiners producing diesel in the United States. We do support the proposal on engine emissions standards. We do support EPA's dramatic reduction in sulfur, however not to the 15 ppm level.

As we see it, an onroad diesel sulfur content of 15 ppm maximum creates a very fragile system for productions, and it is going to result in some problems. I am going to go into a little more detail on these problems as I see it. You will have unnecessary product cost increases. To go from a 30 average to a 15 will be a significant operating and capital investment cost. We think it will be at least five cents a gallon higher than the 30 ppm average.

You will have lower fuel economy, reduced diesel volumes and reduced jet fuel volumes. Let me elaborate on these points because some of those points have not been made before or they have been in very cursory

remarks.

First off you have very little margin in error when you are producing ultra-low sulfur diesel. Minor process variations, changes in raw materials will create offspec batches and most people won't have the capabilities to reprocess those. If you have a problem in your operation and you have a tank that is off specification, you will have a tough time just continuing your operation to continue on making an ultra-low sulfur product.

So many of these will probably be dumbed into an offroad diesel market or used as cutters. That will pull volume out of the offroad diesel fuel. Refinery diesel production are more limited in gasoline. It results in a lower flexibility to control and blend sulfur to such low levels. Light cycles, sulfur distillates will be eliminated by many people from the onroad sulfur fuel. This is a significant effect.

These sulfur components are extremely difficult to get out and that will require even a higher investment than the normal hydrotreating investment. The choice is going to be do I put this investment in on the front end thinking I am going to get some economic benefit for doing it. I am not sure people are going to do that because what is going to happen they will say there is go to have to be a price increase to support this. I will see

a little later. You are talking about a significant percentage of the diesel fuel.

The crudes that presently run sometimes especially for products like asphalt, specialty products are extremely high sulfur, very difficult crudes to handle. We presently take the distillates from these and turn them down to less than 500 ppm and put them onto the onroad diesel fuel. That is not going to happen if this action goes to 15 ppm.

The reason is you are dealing with unusual crudes. You are dealing with crudes that are Canadian crudes that are pumped out of the ground using huff and puff methods. They get down there and burn the crudes, make them come out of the ground and cut them back and put them into a marketplace, and you have variations as of sulfur compounds that you can't count on getting out. We couldn't dare take the chance to run these crudes anymore. The heavier portion of the diesel fuel, which has sulfur compounds that are more difficult to get out.

One of the ways you can go ahead and go down to the 15 parts per million is cut out of heavy portion of diesel so it is no longer in the fuel. It is no longer an onroad market. You cut a chunk of that out. You can do an easier job to the 15 ppm. That's volume. The other thing is the fuel efficiency is primarily from the heavier

components in diesel. Those are based on pounds per gallon. Which have more pounds and more PBDU.

If you start cutting those out to eliminate the sulfur compound your miles per gallon go down, and that is totally contrary to what the truckers are thinking. They keep thinking this is great to get the sulfur down, the emission controls work a little easier and the efficiencies are better and you will get more efficiency out of the engine. If you cut out the heavy components you will have less pounds per gallon and you will get lower miles per gallon.

One more point, if you start cutting -- let's go conversely to cutting out the back end. You start taking the back end of jet fuel, which is a lighter product, which has easier sulfur compound to remove, put it into the diesel fuel, you now have a little bit more onraod diesel that you have made up some volume, but you have pulled it out of the jet market. The jet market is a tight market many times. That can cause some problems there.

I believe that for the aforementioned reasons that if you go to a 15 ppm max ultra-low diesel supplies will be extremely tight and any incidents in productions at refineries will result in supreme reductions and price spikes. Supply and demand economics will be felt.

As I mentioned for the above reasons, we

support a 30 ppm average. That's a 94 percent reduction from today's standards. I think we need to put a little bit of pressure on the engine control manufacturers. Why should the public pay for an easy-out. If they can do 15 now, why don't we let them put a little investment in and save the public money instead of the public having to spend a much lower sulfur than they have to to get the same emission standards. I think they can develop in the next few years better controls.

We appreciate the EPA's recognition of the challenges facing the small refiners. To remain a viable operation we have to have a menu of options. We support the authority to sell 500 ppms segregated onroad diesel. That's not saying you need a nationwide two-tiered system. That won't happen. For the few small refiners that may be able to use this, something where they may be able to get some local distributors to keep the older vehicles running 500 ppm and take a portion of the fuel and relieve some of their strain. That may be workable. Leave the option in there. It probably means nothing to U. S. Oil but it might help some other people.

The hardship extension doesn't do anything for U. S. Oil. I will list a few other options I would like you to consider. We propose a mandatory diesel exchange program if you continue to go with a 15 ppm max. It would

work something like that this. Small refiners would have the option to produce and sell 500 ppm sulfur diesel into offroad or marine markets either directly or in exchange with majors.

EPA would then make available ultra-low sulfur onroad diesel barrel for barrel. We pay a premium for that diesel equal to the differential between the operating costs of the low sulfur and the ultra-low sulfur diesel. This is a win-win situation because you are going to have a contribution of a 500 ppm or less low sulfur diesel into the offroad market early and some small refiners may have a capability and put 100 percent into that offroad fuel which will lower emissions, but we need to the right to get ultra-low sulfur diesel to be able to supply our customers, otherwise we will be out of business.

You must prevent dumping of high sulfur diesel components into the offroad diesel market because that will deteriorate the environment and at the same time create an offroad price collapse. Finally, the EPA needs to help small refiners in endorsing and obtaining financial support. This was mentioned, but we really need help on this. We can look at income or excise tax credits, accelerated depreciation, loan guarantees, and that may help us to supplying the ultra-low diesel problem. Thank you for the opportunity to present my comments.

MS. OGE: Thank you, Mr. Cabodi. I would like to call for Mr. Gary Helbertson. Good afternoon.

MR. HERBERTSON: Good afternoon. I represent the Institute for Global Solutions, the North American Coalition for Religion and Ecology and the Earth Day, Earth Week Global Green Ribbon Pledge Campaign. I am honored to have the opportunity to speak at this crucial life or death hearing on diesel fuel emission standards.

I speak in the context of being one of the founding staff members of the United Nations Environment Program assisting in the planning and coordination of citizen participation in the first UN World Conference on the environment health in Stockholm in '72, and organizing the owning nongovernmental section of the UN Earth Submit in Rio in '92.

"Where there is no vision the people perish." And "You shall know the truth and the truth shall make you free." Are two prophetic statements which have likely significant relevance for this life or death hearing on diesel fuel emission standards. It is absolutely wrong, immoral and intolerable that in the U.S.A. alone every year smog and particulate matter account for 15,000 premature deaths, one million respiratory problems, 400,000 asthma attacks, and thousands and thousands of cases of aggravated asthma. Air company pollution near ground level and acid

precipitation are already causing widespread injury to humans, forests and crops. We must bring environmentally damaging activities under control to restore and protect the integrity of the earth systems we depend on.

A great change in our stewardship of our earth and the life on it is required if vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated. Clearly have warned thousands of the most distinguished scientists on your planet, including 104 Nobel Prize Laureates. The evidence is in. Diesel fuels are a life or death issue which we must deal with an on a emergency basis within our nation and for the future of all life residing on your common planet earth.

To end totally unnecessary deaths we must take action to make drastic reductions from diesel fuel killing pollution from heavy-duty buses and trucks. Diesel fuels are an eco-justice issue. Poor communities are polluted.

I strongly urge you to take leadership for life and against death by reducing diesel sulfur levels to no more than 15 ppm nationwide for both on- and offroad diesels nationwide by 2006. Require all big trucks and buses to be cleaned up by at least 90 percent by 2007. Ensure that all heavy-duty diesel fuel vehicles meet strict emission standards when they are moving over our environmentally damaged planet earth. Not just when they

have their engine tests.

Leadership for life and against death also requires the immediate creation and use of diesel fuel alternatives, such as electric and fuel cell vehicles. Diesel fuel is a life or death mortal crises. It was Dante who said "The hottest fires in hell burn most brightly for those who remain neutral in a moral crisis." Only those who commit themselves to solutions, the diesel fuel destruction of life on earth, will end this unnecessary hell on earth process.

Please fulfill your life or death responsibility to end our diesel fuel crisis in accord with the earth charter pledge. We, the people of the earth, join together in a global partnership pledge to respect earth and all life, care for the community of life and all its diversity. Strive to build free, just, participatory, sustainable and peaceful societies. Secure Earth's abundance and beauty for present and all future generations. Good luck for the future of life on earth.

MS. OGE: Thank you. Mr. Steve Farkas.

MR. FARKAS: Good afternoon. I am Steve Farkas. I am the general counsel at Paramount Petroleum Corporation. I wanted to echo the comments made by the other small refiners sitting at the table, but also wanted to add a little bit of insight into the importance of

independent small refiners. The word independent means something, especially in this day in age of consolidate oil allogapolies.

We in the last ten years have had many battles with our large brethren exhibited by them that was strange to understand unless there was some ulterior motive based on potentially eliminating competition and profiting thereby. I am not alleging that. I am kind of guessing what was maybe at the root of it.

We have spent ten years meeting with California Resources Board who accepts the importance of an independent refiner. We have met with California Energy Commission. Bill Alkper told me I wish I could figure out a way to get more competitors in this state to keep oil, gas prices under control. Even the AQD, in the very last, in their recent 431.2 proposal had a small refiner exemption, following your lead, but that was the first time we had ever seen anything like that before.

It is pretty important to understand the place and role that small independent refiners play. We have the largest asphalt producer in the Western United States. When a car of formulated gasoline was proposed and enacted we stopped making gasoline, eliminating 20,000, 30,000 brrels a day out of the market. I don't think prices go down when that happens. I only took the first level course

of economics.

When we were competing with the Federal Trade Commission -- this is kind of an interesting off the subject but kind of important to note -- trying to express to them the importance of small refiners, discussing the ARCO/BP merger, we made the point that a small refiner like Paramount actually set the crude oil price for Alaskan crude.

They did their investigation and found out that there was some truth to that because the market dried up in that major supply themselves and they supply others on the long-term contracts. And when you look at what is the open market it is rather sparse. When a small refiner like Paramount comes in and bids on the price of ANS crude it ends up setting the market price which impacts the price of gasoline in the U.S. ARCO helped themselves and the merger was approved.

I want to point out that the AQD itself I think understands the slim balance they are trying to propose their 431.2 and in a meeting with them last week they suggested to me that they think there's adequate supply, at least the L. A. area, of diesel because they believe production is hundred -- they believe that demand at the time 2003, 2004, will be 120,000 barrels a day and that supplies 116,000 barrels a day.

Paramount produces 8,000 barrels a day, and at 15 ppm we won't be able to do that. That leads to the presumption that there will be a shortage, at least if the AKE rule is enacted prior to the EPA rule in Los Angeles. Again, just like what was said by representative from Kern, it is in excess of $30 million to do that.

The other thing I think I part a little from the other people, although cognisance of the need for small refiner exemption, even in the guise of 500 ppm segregated system, is good, the end result is it won't have much impact because in Los Angeles and in California those other systems of distribution are controlled by the majors. I don't know if they will be doing us much much of a favor. I guess that's the point on that.

What we really do need is a 30 ppm average. It allows us based on the engineering to make diesel, a small refiner diesel, low sulfur diesel, at a cost that is one that we can withstand. Probably need a little extra time to do it. But I just wanted to make the point of the need and the importance of the independent refiner in the State of California. That's all.

MS. OGE: Thank you. Ms. Clara Rosenthal. Welcome.

MS. ROSENTHAL: Thank you so much. My name is Clara Rosenthal and I am the Vice President, Director of

Health Education for the Los Angeles Tenth District PTA. The Los Angeles Tenth District runs through East L.A., North L. A., South L.A. from San Pedro at the way north to the Pacific Palisades. We are also part of the California State PTA and the National PTA.

I want to thank you for giving me this opportunity to speak on behalf of the Los Angeles Tenth District PTA and particularly to thank the EPA for their years of work in prevention. I was very happy to see the students from Belmont here. The first thing they did say, and I was going to say that is "Our children are our future."

What are we mouthing here. Are we mouthing words that are meaningless just to give lip service. You heard from the children themselves that we have many more cases of respiratory illness, children are not being able to attend school, and once they miss out or lose out, it is very hard for them to continue their education, so, therefore, we have a lot of dropouts.

I want for tell you that Los Angeles Tenth District as well as the entire PTA, the National PTA with over 7 million members does a lot more than most people think PTA is all about. Cookies, serving cake, no. We have a very strong legislative platform that we have had since the beginning for 100 years plus two. Two years ago

we celebrated the one hundredth anniversary of the national and local and state PTAs.

We have people that work in Sacramento -- when I say people, these are members of our PTAs that work in Sacramento that work with all legislative issues affecting children. I want to give you some little insight as to what we call a resolution in the state convention that occurs once a year we have resolutions from the local schools. They have everything to do with the health of the children, the well-being of children and youth, and encouraging education on subjects of major importance to society.

We recommend maximum acceptable safe levels of 01 parts per million oxidant in the air and exceeded in all urban areas of California wherein children's school activities expose them to the adverse affects of polluted air and vigorous coordinated and sustained efforts should be made to remove the possibility of long-term adverse effects on the health of children and the community.

Therefore, be it that the state PTA convention reaffirm the statement on environmental pollution adopted by the State PTA Board of Managers in September, and be it further that all communities whose air quality does not meet prescribed standards, especially oxidant level, be urged to enact uniform alert levels at which school

districts undertake measures to protect students from adverse effects, and be it further that each school district is urged to establish a policy of curtailing physical education and related activity when the alert level is attained. Which means that the kids have to go in, it interrupts their schooling. You heard all the figures of the escalating respiratory ailments and illnesses that we have.

I remember four years ago on our Board of Directors for the Tenth District PTA where there were six women that were battling cancer. These are women in the prime of life, mothers. Three of them have passed away. We cannot continue this kind of to me hypocracy. Either we value children's lives or we don't.

I know time is short here. I just want to read you one more issue from our environmental projects. Clean air, 1997. It was a resolution. This was our last resolution. We up it every year. We recognize that air pollutants, such as carbon dioxide, carbon monoxide, lead, nitrogen oxides, ozone particulates, sulfur flouride, sulfur dioxide have detrimental effects on children's health.

We call for constituent organizations to support environmental awareness programs and right to know legislation and regulations addressing air qualities. And

from what I heard today, we have so many groups that are like us, that once to help children live and be concerned citizen that I really am happy in one way, but I hope that we will be stronger forces together, banding together, to really know that our children are our future. Thank you.

MS. OGE: Thank you, Mr. Dan Jacobson. Good afternoon.

MR. JACOBSON: Good afternoon and thank you very much for allowing me to testify here today. My name is Dan Jacobson. I am senior staff person for California Research Group Calper. They are in strong support of the standards that you are proposing for a number of reasons. I think you guys have done a great job today just being able to listen to all the testimony you have heard. Today you have heard from a lot of the religious leaders and community leaders, teachers, students, health experts. Their will be a number of additional speakers that you will hear from.

It is not unusual that when people come to California that one of the main concerns they hear about is clean air. It almost seems apropos that today is a smog alert day that we are talking about this where we are actually saying that the air isn't good to breathe today and we need to be doing something about it and we applaud your efforts to be trying to do everything you can on this

issue.

In California the air is still unhealthy to breath on a number of days. That's why we need the EPA to stands strong on this rule. The big trucks and buses are among the biggest polluters. In the past they cheated on tests that have allowed them to continue to emit smog-forming pollution into our atmosphere. In order to protect the public health, we have to require drastic reductions in pollution from these large trucks and buses. However, because high sulfur fuel will hurt these new diesel cleanup technologies, we must be sure that all diesel fuel is cleaned up by the time that these new technologies are ready.

Therefore, in order to insure that all the cleaner trucks will have access to these clean fuels at Calper we are urging the EPA to require that the diesel sulfur levels for onroad and offroad vehicles with a cap of more than 15 ppms. Cleaning up these things are going to be incredibly important. You have heard from health experts and scientists and business leaders from across the state who are saying we are in a predicament here. We need your help.

They are not only asking that diesel be cleaned up, but across the state they are asking if a number of different steps be taken. At the federal level

this is a strong system step we are asking for. The state level we are asking to continue the zero emission program to start in by 2003. There's a lot that people here in California need to do to clean up their area. This is an important first step to do it. We are urging you to please take it step. Thank you very much for that time.

MS. OGE: Thank you very much. I would like to thank all of you. The interested representatives, the concerned citizens, the environmental and public health groups. Thank you for taking the time to share with us your testimony. We will take your comments into consideration as we are moving forward in finalizing this. We are making great time. We are a half hour late. I will call the 2:45 panel.

Mr. Steve Campbell, David Bartlett, Angie Farleigh, Professor Williams Hines and Mr. John Dewitt. Please print your name on the card in front of you.

MS. OGE: Mr. Campbell, good afternoon and welcome.

* MR. CAMPBELL: My name is Todd Campbell, policy director for the coalition for clean air. I apologize that you have to eat lunch while I speak so late, but that seems like an everyday lifestyle for an environmentalist like myself. The Coalition for Clean Air on behalf of your members throughout the State and for

breathers who breathe up hill though air daily applaud the United States for our EPA in bringing forth what should be considered and what this organizations believes one of the most important national roots to be heard this day.

The federal government has the power to relieve our nation's ailments that place the air we breathe and diesel exhaust should be viewed very high on the EPA's pollution list because diesel significantly impacting our communities, our neighborhoods or our children and grandparents and friends and even ourselves. It's health invocations are numerous, significant and serious.

The state of health of California is in serious crisis with regards to diesel exhaust pollution. Two percent of California's onroad vehicles are diesels, yet they constitute over 30 percent of the smog-forming emissions of NOx and 70 percent of the particulates from California mobile source inventories.

Over 97 percent of the particles that come out of diesel exhaust are ultrafine particles which have been linked to many respiratory diseases like asthma. In California, an estimated 500,000 children are suffering from asthma alone and this state leads the nation with over 2 million people diagnosed with asthma and an increased prevelance rate of 75 percent in the last 15 years.

Asthma, unfortunately, is not the only problem

associated with exhaust. Join the ranks of the National Institute of Occupational Safety and Health among other notorious health agencies. The California Environmental Protection Agency's diesel exhausts is a toxic component. That is diesel particulates in 1998, August of 1998, and prior the listing of 40 other compounds, listing on and on known to the state to either cause cancer or reproductive harm.

In the South Coast Basin alone over 70 percent of the air pollution is directly attributable to diesel soot, according to the local air quality management district. And as you heard earlier, STAPPA/ALAPCO estimates that over 125,000 cancer cases will be directly linked to the current diesel exahust levels nationwide, but in the Los Angeles metropolitan area alone, 16,250 access cases are predicted. That's 13 percent of this estimate nationwide.

Why is that? For one, we have a lot of the nation's trade by having two of the largest and busiest ports, Long Beach and Los Angeles. They require both diesel trains and trucks to haul thousands of freight tons to destinations as far as the State of Maine. We are also a burgeoning population. The Southern California Association of Governments estimates that this region will reach a populus of 20 million by 2020. That's like adding

two cities of the size of Chicago on top of what already exists.

It is no surprise that our communities of the Alameda Corridor and other well diesel-traveled routes are at higher risks than most communities. Unfortunately, there are more communities that are at greater risk from diesel throught this great state and beyond. The cities of RIchmond, Oakland, Stockton, San Leandro, Sacramento, and even San Diego to name just a few, including the Central Valley suffer from crank diesel exhaust levels.

The only way we are going to address the small owner/operator question is getting to those operators that actually buy their vehicles and are not large fleets in ports, harbors and airports, is through tighter stands for the fuels we use and engines we design. But more importantly, we owe it to these communities that bear the brunt of our Nation's trade and provide the level of prosperity that we all enjoy, to return the air quality that breathe to a safe and healthy level.

Everyone is entitled to a bill of rights for clean air and these people are being cheated everyday. What we need is a fuel that will move us forward and that is ultra-low sulfur diesel. Low sulfur at 15 parts per million is a tremendous first step from 500 ppm, but California is already infusing this fuel into the

california refinery system today.

15 parts per million sulfur diesel is being made available through countless commitments and testimonies made by BP, Amoco, Texaco and Chevron representatives throughout the state. In fact, the technology is here in 2000 to achieve levels even lower than 15 parts per million as BP, Amoco, and then ARCO announced its first sulfur fuel that sat around ten parts per million over a year ago.

Furthermore, the Europeans are way ahead of us on ultra-low sulfur diesel by producing low sulfur diesel at the level of five to 10 parts per million. We need to get back on track fast and furious. My question for this regulatory agency is if we have the technology to meet 15 parts per million, why wait six years to implement this action.

Furthermore, why not give engine manufacturers the fuel that will optimize engine performance by setting the target at 5 parts per million. Under the current rule this gives industry six years to figure out the way to get sulfur levels down an additional 10 parts per million. If the problem is residual sulfur in the pipelines, provide a phase-in in the sulfur level starting at 15 parts per million in 2006, 10 ppm in 2007 and 5 ppm in 2008. However you choose to do it, get these sulfur levels down. Like

lead in gasoline, sulfur is a deterrent for diesel to reach cleaner levels.

Bottom line, either we are serious about public health or we are not. The oil companies first quarter, furthermore, their profits of $11 billion plus could pay for this whole rule alone. Fewer refiners, as it was mentioned earlier, means bigger and wealthier refiners. If this industry wants to rid itself from boutique fuels, it should clean up its act.

The other thing that we need is cleaner engines sooner, not later. We need cleaner engines yesterday. What you are talking about is seven years before we begin to even realize the change in current conditions, and this is not even 100 percent allocation.

The rule proposes incremental market phase-in of 25 percent that in reality drags out until the end of this decade. That's too long, too late. Our lungs can't wait ten years. We need clean engines today. Our communities cannot continue to carry the pollution subsidy allowed to this industry any longer. At a very minumum, you should require or need to require 100 percent implemention of the clean engines proposed by 2007 or you need to start looking at cleaner alternative routes like the South Coast has opted to do to address its diesel problems.

This industry should be put on notice, the diesel industry that is, to either clean up its act or make way for cleaner technologies like fuel cells. We just can't wait any longer for what is proposed on the books before us. We also would like to agree with the air resources board in strengthening the formaldehyde standard to 2.01 from the .06 proposal. We feel that toxics at least in the Southern California are significant area of threat to our human health, and we encourage that you tighten this standard.

In addition to better in-use vehicle emission tests and toxicity protocols are extremely necessary. I cannot emphasize enough the need for better testing for in-use vehicle emissions or accurate evaluations of toxicity from engine exhausts. We need to better understand when our vents from mobile sources on and off the road really are. We also need to understand what is toxic and by how much.

Although I do feel some relief by this Agency in setting formaldehyde standards and soot reductions that some level of toxicity will be reduced in diesel exhaust, no one to date can authoritatively state the reduction of diesel exhaust soot is equal to .01 gram particulate matter standard will reduce the standard of toxicity.

We need EPA and other health base agencies to

tackle this important problem and give us a way to tackle the toxicity associated with diesel natural gas in whatever field we might choose to transfer people or goods in the future. Interim steps I am going to talk about briefly.

I think we should extend low sulfur fuel by 15 parts per million available today to the entire country no later than 2004 in allowing local districts throughout the nation, especially those in Houston, to apply particulate traps if they are proven to you be workable. We also strongly support the Blue Skys program. We need to recognize that cleaner technologies drive diesel and other dirty air fuels to zero.

Electric bus and also we should look and zero emission technologies that are here today like electricity and fuel cell. I have many, many things to share with you, but I would beg you to consider an optional zero emissions standard. When you are talking about the Blue Sky standards, think of an optional zero emission standards. Finally, apply the sulfur level fuels to offroad vehicles. They need it. It is an inventory that we are overlooking significantly. Thank you.

MR. OGE: Thank you, Mr. Campbell. Ms. Farleigh, good afternoon. Mr. Campbell and all of you, if you have written testimony, we would be glad to put that into the record.

MS. FARLEIGH: Thank you for giving me the opportunity to comment today on a rule that has important and far-reaching implications, our Nations' air quality. My name is Angie Farleigh. I work with U.S. PIRG, which is the national lobby office for Cal PIRG. California Public Interest Research Group.

There is a daily reality for Americans living in urban areas to experience thick black clouds of toxic diesel pollution and suffer the short-term discomfort and often the long-term health effects that are a direct result from breathing this exhaust. Our canvassers consistly hear this story from the millions of Americans they talk to at their doors each year. And as a former director of Cal PIRG's office, I know that this pollution effects not only children and elderly, but healthy young adults who spend time outdoors.

We actually had several canvassers here earlier this morning but had to leave before they could testify. So I would like to deliver written comments. They wrote these before they left.

From Vanessa Lynn, Ryan Bjornstad, Yuri Patamura and Sabrina Para Garcia, which I will give to you after my testimony. It is obviously common sense that cutting the pollution from heavy-duty vehicle will result in enormous public health benefits and will vastly improve

the quality of life in our cities and suburbs. Common sense in the case of diesel pollution is confirmed time and time again by the health studies showing that exposure to diesel pollution can lead to a range of symptoms from asthma attacks to premature death and lung cancer.

Based on over 30 epidemiological studies we know that exposure to diesel exhaust can increase the risk of lung cancer by as much 89 percent. It is to prevent these and other health impacts that U.S. PIRG strongly supports the proposed standards to reduce heavy-duty bus and truck pollution. Three key pieces form the cornerstone of the proposed standards.

First of all 15 parts per million cap on diesel fuel by 2006. The second is the .01 grams per brake-horse power-hour particulate standard effective in 2007. And finally the standards for NOx and hydrocarbons. I would like to comment on a few specific details related to these provisions.

First of all, clean diesel fuel is essential. U.S. PIRG supports the EPS proposal to cap diesel fuel sulfur levels at 15 parts per million effective in 2006. It would be an expensive exercise in futility to spend the next 10 years phasing in advanced afterburner pollution controls for heavy-duty vehicles only to allow these controls to be poisoned and rendered ineffective by the

presence of sulfur in the fuel.

Given the abilities of refiners to remove sulfur from the diesel fuel, we need to clean them up as soon as possible. Other observers have suggested alternative caps and averaging systems. For example, the American Petroleum Institute suggests that a cap of 15 parts per million would be sufficient.

However, the consequences of setting a cap higher than 15 ppm include increased incidence of particulate filter failure, deterioration of engine performance, and poisoning of the NOx catalyst. For the public, this means more pollution, more asthma attacks, more hospitalizations, more premature deaths and more cancer. We urge EPA to reject this alternative.

We do not support alternative proposals that would allow refiners to continue producing fuel at a level of 500 parts per million sulfur for a fraction of their total highway diesel fuel volume. This approach or any other scenario that would allow two or more other grades of diesel fuel to remain in the market is sorely impractical due to the reliability in misfueling implications.

To the extent that these alternative proposals are designed to be provide flexibility to small refiners, we believe this additional flexibility is unwarranted given the extremely long time of six years. Furthermore, these

flexibility measures severely compromise the environmental benefits of the proposed standards placing too high a burden on the breathing public.

Secondly, the proposed nitrogen oxide standard should apply to all new engines in 2007 not 2010. We believe that this unnecessarily delays the smog reduction benefits of the rules, prolonging the chronic smog problems faced by more than 132 million Americans who live in the likely ozone nonattainment areas across the nation.

The urgency of our need to reduce smog-forming emissions can not be overstated. Over half of the nation's ozone monitors have a three-year average above the eight-hour ozone standard. Moreover, according to a 1999 study by ABT Associates, smog was the cause of more than 6 million asthma attacks, 150,000 emergency room visits and 50,000 hospital admissions in a single summer of 1997.

We believe that all new engines should be able to meet the .2 grams per brake-horse power-hour by 2007. As Mr. Bertelson stated earlier, the manufacturers of emissions controls association is an association of companies who are most directly involved in producing the technology to achieve the standards, agree that the technologies to meet the NOx standard will be available in 2007.

Again, this hinges on the availability of

clean sulfur fuel. Thus we urge EPA to eliminate unnecessary delay and apply the .2 standard to all engines in 2007. Short of this, we urge to you at least shorten the phase-in period to a length of no more than two years.

Third, a technology review is unnecessary and counterproductive. U.S. PIRG urges the EPA to reject the suggestion by some to include a technology review for the 2003 time frame. We believe that the review would be unnecessary, given the high degree of competence that clean fuels will enable rapid development of NOx emission control technology.

Moreover, we see the proposed technology review as a disincentive to actually develop cleaner engines, giving the industry an opportunity to escape from the new standards contingent on their own lack of future progress in developing NOx control technologies is far too much like the fox guarding the hen house. It should be remembered that this industry has a history of illegal actions to escape from pollution standards.

In addition, one could read this technology review as little more than opportunity to take advantage of the changing political landscape under a new administration and one that may not be as committed to protecting the public health.

To the extent that you do find a technology

review is warranted we urge you to ensure that it allows equally for the strengthening of the standards as for their relaxation. Finally, an advanced heavy-duty technologies should be encouraged. While diesel engines are known as the work horse of present day transportation system, it is important to acknowledge that far cleaner technologies are being commercialized.

The promotion of these technologies, including fuel cells, hybrid and electric propulsion systems can lead to critical additional public health and environmental benefits. We strongly support the inclusion of the Blue Sky program to define a set of propulsion technologies and/or a set of lower emissions standards for vehicles to be designated for receipt of incentive under subsequent local state or federal programs. Thank you

MS. OGE: Thank you. Mr. David Bartlett. Good afternoon.

MR. BARTLETT: Thank you. Good afternoon. My name is David Bartlett. I am here on behalf of the Diesel Technology Forum. The Forum is a new group that is working to enhance public dialog with a wide-range of stakeholders including the EPA, other government agencies, and other interested parties to explore a wide range of opportunity to reduces emissions from both existing and from new diesel engines, while recognizing the inherent benefits of diesel

technology.

Diesel power systems, that is the engines, fuels and aftertreatment systems that are the subject of today's hearing power our economy from package delivery trucks that you see on the street everyday to tractor/ trailers delivering fresh produce from the fields to the neighborhood grocery store. They are the very centerpiece of our Nation's supply and distribution network. But they are also much more.

With the age of the Internet and E-commerce, diesel power systems have taken on an even more important role facilitating the greatest economic expansion this country has ever seen. They are doing more work, moving more goods, and helping more businesses and people than ever before.

This proposal to reduce emissions and require cleaner fuels in new diesel trucks and buses starting in 2007 marks yet another milestone in the continuing improvement of diesel technology. New diesel engines powered with today's fuels emit less than one-eighth the emissions of engines built just over 12 years ago. If adopted, the proposal currently under consideration by the EPA could result in as much as a 90-percent reduction in emissions beginning in 2007, and that's on top of improvements already on line for 2002 to 2004.

We support the direction of the EPA's proposed rule that will result in lower diesel emissions and cleaner diesel fuel in 2007. We are especially pleased that for the first time EPA has used the systems approach in setting fuel and engine standards. An approach that recognizes that engines and fuel are both parts of an integrated diesel power system.

A systems approach is more important than ever because for the first time engine manufacturers, the companies that manufacture exhaust and aftertreatment equipment, and fuel refiners all will have important rolls to play in order to achieve the significant reductions in emissions that EPA has proposed.

Whatever the outcome of the debate over how much sulfur should be allowed in diesel fuel, everyone agrees that lowering sulfur content coupled with advances in diesel engine technology will help improve air quality. While this hearing is focused on future reductions in air pollution, we should not lose site of the tremendous progress that has been made in the past here in California and indeed across the entire nation.

For example, here in Los Angeles there has been tremendous progress in reproducing air pollution from all sources. During the period of 1994 to 1999, Los Angeles had over 54 percent fewer ozone exceedence days

than in the period 1987 to 1992. With only three exceptions, the number of days of unhealthy air uniformally declined from Sacramento to San Diego to the South Coast and San Joaquin to San Francisco Air Basins.

In many cases there were significantly fewer days of unhealthy air, as many as 88 percent fewer days in 1999 compared to previous years. What is most encouraging, we think, is that on a national basis overall criteria pollutant emissions have declined by 34 percent from 1970 to 1997. This reduction has taken place during the same time period that the U. S. population has increased by 31 percent, and the economy has more than doubled in size.

The gross national product has increased 114 percent in that same time period. How has pollution declined at the same time that we have seen massive increases in manufacturing, construction, transportation, agriculture, and all the other activities that constitute economic growth. The answer is that these activities have become cleaner at the same time that Americans are demanding more and more of them.

We see the future of diesel power systems in both these trends. Diesel power systems have become much cleaner and through continuous improvement, they will become cleaner still. This continues to prove that we can have economic growth, increasing the use of diesel

technology and cleaner air. These are consistent goals we would submit.

Diesel power systems are an essential part of the quality of life that we all enjoy today, providing the most efficient, economical and reliable power for whatever the need. It is a technology that is defined by innovation and continuous improvement meeting the ever-increasing needs of the customer, whatever the application and whatever the need.

Make no mistake about it. This proposal represents a significant technological challenge for the engine manufacturers, the exhaust aftertreatment suppliers and fuel refiners, all of whom are members of the diesel technology forum. However, we are confident that together we can build on our past progress and produce the cleanest, most economical and reliable diesel power systems ever.

The proposal under consideration today deals with new technology going forward. There are many opportunities to address some important issues in the existing fleet. Let me say a word about excessive smoke from diesel trucks and buses.

When properly maintained, diesel engines do not smoke. For over ten years California has been a leader in the development and implementation of diesel smoke emissions inspection programs. These programs have proven

benefits in identifying and eliminating excessive smoke emissions. And, frankly, we wonder why only 13 states have implemented such programs today.

We challenge the other states to consider adoption of smoke-testing programs. We have the tools and resources available to assist in that effort. This March EPA issued a challenge to retrofit 10,000 engines in the next two years and the Forum is pleased to be working along side the EPA. We are bringing together resources to identify engines of all types in a wide variety of applications to determine the feasibility of lowering emissions by adding exhaust aftertreatment systems, modifying engine emissions controls, and/or using cleaner diesel fuel.

We are encouraged by the possibilities for success for this program, which will include engines in a wide-range of applications from marine vessel to highway trucks. In conclusion, the members of the diesel technology forum while not taking a position on specific fuel sulfur levels or other issues on debate today, support EPA's decision to take a systems approach to reducing diesel emissions.

However the specifics of this debate are resolved, diesel power systems are poised to deliver more of the efficient, reliable and economical power demanded by

the American people. As leaders in the technology and innovation of diesel, members of the Forum are committed to working with the EPA with state governments and with other interested parties to continue the improvements in diesel emissions and to take meaningful steps now to address concerns in the existing diesel fleet.

Thank you and I would be happy to answer your questions.

MS. OGE: Thank you, Mr. Bartlett.

(Whereupon, Kathleen Cagney relieved Stephanie Gustave as the court reporter at 3:30 p.m.)

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REPORTER'S CERTIFICATE

I, Stephanie Gustave, a Certified Shorthand Reporter in the State of California, in Los Angeles County, do hereby certify that the foregoing proceeding was written by me in stenotype and transcribed into typewriting; and that the foregoing is a true and correct copy of my shorthand notes so taken.

_____

Stephanie Gustave
California CSR No. 8680

U.S. ENVIRONMENTAL PROTECTION AGENCY

HEARING ON PROPOSED HEAVY-DUTY ENGINE

AND VEHICLE STANDARDS AND HIGHWAY DIESEL FUEL

SULFUR CONTROL REQUIREMENTS

LOS ANGELES, CALIFORNIA

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Committee Members:

Robin Morin

Chet France

Dawn Martin

Michael Horowitz

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LOS ANGELES, CALIFORNIA, TUESDAY, JUNE 27, 2000

APPROXIMATELY 3:40 P.M.

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MS. CHAIRMAN: Thank you, Mr. Bartlett.

Professor William Hines, good afternoon.

MR. HINES: Thank you.

Good afternoon. My name is William Hines. I'm a professor at the U.C.L.A. School of Public Health in the Department of Environmental Science. I've been a researcher studying airborne particles or aerosols for more than 30 years. I've published more than 80 articles on this topic including the textbook which has become the standard textbook in this field. I am a member of the E.P.A. Southern California Particulate Matter Center and coprincipal investigator of the E.P.A. supersite for Southern California.

These are major multidisciplinary research efforts sponsored by E.P.A. to characterize particulate matter in the Los Angeles basin and its relationship to human health.

I support the proposed rule on heavy-duty engines and diesel fuel.

Airborne particles are a major problem in the Los Angeles basin. They are associated with demonstrated

increases in mortality and increases in hospital admissions. They contain many cancer-causing materials. They exacerbate asthma, and they affect lung development in children. In terms of diesel emissions -- in terms of particulate emissions, diesel vehicles are inherently dirtier than equivalent gasoline-powered vehicles.

During the past three decades, we've made great strides in controlling emissions from gasoline-powered vehicles and industrial sources but have failed to control those from diesel-powered vehicles to the same level. Consequently, diesel vehicles now account for nearly two-thirds of all particulate emissions from mobile sources from the Los Angeles area. Diesel vehicles also release significant amounts of gases and vapors that cause the formation of secondary particles or photochemical smog in the Los Angeles basin.

Currently, diesel engines are an essential power plant for heavy-duty transportation because of their durability, their longevity, their fuel efficiency, and their low life-cycle cost. Because of their longevity, they will continue to be widely used for many years. Thus, timely reduction of diesel emissions will require, in addition to the proposed control measures discussed here, the development of after-market equipment for retrofitting control technology to existing diesel

vehicles.

Incentives to do this need to be built in to the proposed control requirements. We know from our experience in controlling emissions from gasoline vehicles that both new emission control technology and fuel reformulation are needed to cost effectively control diesel vehicle emissions. Improved combustion in diesel engines requires advances in diesel engine design and clean diesel fuel. Catalytic aftertreatment requires technological development and clean diesel fuel. Thus, clean diesel fuel is a requirement for an effective control strategy for diesel vehicles.

The proposed measures are essential to protect the health of the people in the Los Angeles basin and to permit the continued air quality in this region.

I strongly support these measures and urge the E.P.A. to implement them as soon as possible.

Thank you.

MS. CHAIRMAN: Professor Hines, thank you for your testimony.

I'd like to thank the other panelists for taking the time to come and share with us your views about this very important proposal.

Thank you. I would suggest a 15-minute break.

We have, I think -- oh, we have a new reporter,

wonderful, but I need a break for about 15 minutes, and it would be wonderful.

So we will be back five minutes after 4:00 to start with our next panel.

Thank you.

(Brief recess in the proceedings.)

MS. CHAIRMAN: Mr. Steven Gallegos, Ken Ballard, Leland Stewart -- Dr. Jim Stuart and Monica Benitez, Leland Stewart and Mr. Herley Jim Bowling.

MR. STEWART: Not all of them are here.

MS. CHAIRMAN: We will start with you. Welcome to this panel, and we will start with you, Mr. Stewart.

MR. J. STEWART: Thank you.

Well, I certainly want to complement you on this amazing, wonderful outreach, and the breadth of the proposal is excellent. Of course, my understanding is is that if we could get it down to five parts per million, then things would really be clean. But that would be our request.

Now, you've heard already this morning the report from the MATES-II Study and, of course, you're well familiar with that, and there are two tables in the MATES-II Study. One says that diesel is 71 percent of the toxic risk, and another says that it's 82 percent of the toxic risk. And I want to emphasize we should be

using the 82 percent because that is properly weighted according to toxicity.

Then the other thing that is important, I think, in the MATES-II Study is the sources of diesel particulates. So I have -- I put on every one of your places there this. It says, "Jim Stewart Presentation," you know, "E.P.A. Presentation" at the top. So inside it talks about the sources of diesel particulates according to the MATES-II Study. This, I actually had to pull out of the MATES-II Study and just go through and present the numbers in a clearer form than is in there. But it's the same numbers as the MATES-II Study.

What you notice is that 49 percent is, as we expected, the heavy-duty diesel trucks. The 34 percent mobile equipment is the shocker. I mean this is -- we are talking about, you know, the kinds of construction equipment, right, the bulldozers, and all that sort of thing. So this makes it very clear that in terms of the South Coast Air Quality Management District we could not even consider having duel-fuel tracks. I mean we've got to get that mobile equipment down to exactly the same level as the main diesel trucks, and so that you can't even consider if you want to clean up the diesel issue in our region having anything other than everybody having the 15 parts per million. Is that clear?

Okay. The second thing, of course, we want to point out here is the ships. And that -- I mean, I don't know how you guys are going to do that. If we can't get these ships -- I mean if you turn over to the other page, you see that this is the map that shows, of course, what the air quality -- and, of course, it was nicer, I guess, this morning in color -- but what is so dramatic is that huge tongue going out to sea from San Pedro and L.A. ports there.

There's this huge tongue of black diesel soot heading out to sea, and that is, of course, the ships. And that 11 percent, a good portion of our diesel particulates across this whole region is coming right out of that harbor there. So you guys have got to clean up ships. I mean there's just no choice. I mean you are right now -- I mean inaction is killing the people in our harbor area. As you well know that's the reports of the death and illnesses in the San Pedro area.

You think, right, that we should be having nice clean air from the ocean, but it's not the case because of that huge amount of diesel soot coming out of those ships.

Then, if you turn back to my pie chart, you see that the next sources here are what you'd expect, a little bit from cars and light trucks, a little bit from

the trains -- and I certainly want to encourage you guys to clean up the trains -- and then we have a little less than two percent of the manufacturing and industrial sources which, of course, are the only sources of diesel soot that the Air Quality Management District can control except for urban diesel buses. And, of course, we're all thrilled about the fact that A.Q.M.D. has made the rule that we're not going to have any more diesel fleet buses in our area.

But, look, right now, with primarily urban diesel buses in our region, it's .2 percent. You can't even see on this chart how the thin line that is coming from buses. It's primarily all from other sources.

So here's our issue: Our issue is is that A.Q.M.D. can control two percent, the manufacturing and industrial, and the other 98 percent is up to you guys at E.P.A. So this is it. We've got to have it, and if you want to look at the actual numbers, it's on the very back, and that's the actual numbers in pounds per day that came out of the MATES-II Report, the heavy-duty diesel trucks -- yeah, right -- the 22,000 pounds per day, you know.

And then the next one this awful mobile equipment is about 16,000. And then way down at the end, we have urban diesel buses at only a 115 pounds per day

from all of the buses that are running around the whole South Coast Air Quality Management Region.

The second issue, of course, that we need to talk about is environmental justice, and I'm pleased that the environmental defense people talked to you earlier today. But if you go back to the map, you can see that the big, heavy-polluted areas are right in the same, essentially, as the heavily minority areas of Los Angeles. The center of Los Angeles, South Central Los Angeles, which is over 90 percent black and Hispanic, Southeast Los Angeles, that finger going off to the right there are 90 percent Hispanic and black. So as long as we do not clean up the diesel, we are causing terrible environmental injustice here.

Then my final point's a little off the topic, but I do want to mention that none of this work on cleaning up diesel is going to address the issue of global warming, and I want to stress that we are all concerned about the issue of global warming, and that the only thing I can see to tie global warming in to this issue today relative to diesel is we need full cost accounting.

In other words, the issue is is that right now we are essentially subsidizing the nonrenewable -- in other words -- the fossil fuel, burning fossil fuels,

adding CO2, raising the sea level, flooding the coasts of the country. Of course, in a few years we'll probably be losing the southern half of Florida, but the issue is is that we're not including that in the pricing. The pricing of diesel is well -- well, it's just the price of what it costs to pull it out of the ground and refine it. What's the cost to Florida? I mean I would say that, you know, it's probably a few trillion dollars to -- if you flood the whole coast of -- the southern half of Florida.

So the issue is is do we want to really address -- this is not the purpose of this thing, but I just wanted to mention to you guys from E.P.A. that it's time that we begin to continue to look at the full cost accounting of what burning fossil fuels is causing right now in terms of the rising sea level, the dangers relative to the whole issue of storms and the increasing temperatures right now. I mean, it looks like in California like we're going to be losing our snow pack which means we're going to be losing our water supply, and we're going to be in really terrible trouble.

I guess then my final point is really simple, and I'm sure you've heard this earlier today is that the truckers and the guys who are driving the bulldozers on this construction equipment don't want to be killing people. They'd like to be driving clean trucks, so do

the right thing.

Thank you.

MS. CHAIRMAN: Thank you, Mr. Stewart, appreciate your comments.

Mr. Ballard, good afternoon, welcome.

MR. BALLARD: Thank you for giving us the opportunity to present our various opinions.

I'm representing L.A. 10th District P.T.A. which is 30,000 members of P.T.A. south of the Santa Monica Mountains in the L.A. Unified School District. I gave you a two-page outline of what I wanted to say. I'm going to give you the short form however. I'm sure you'll be happy to hear that.

One is that the P.T.A., both state and national, has had a long history, at least back to 1973, of asking for clean-air studies, and full information to the public, and cleaning up the air. We recommend that school buses be included in all regulations relating to cleaner exhaust partly because in Los Angeles it looks as if we're going to be having busing for a long time, unfortunately, and the students, because they are not air-conditioned buses, are sitting in these diesel buses which really emit a lot of visible smoke, never mind the things that you can't see, and it's grossly unfair that the children should be exposed to that sort of thing.

The third point is the P.T.A. is concerned that the criteria that you use in measuring improvements in vehicle exhaust give the reality of increased safety and not just the appearance. And your web-posted rulemaking documents and facts sheets, chapter 2, pages 79 through 76 address this issue very well.

The issue loosely is there is a temptation when competing technologies go to the public to say "Well, our engine produces half as many pounds of particulate matter as this engine over here," and it doesn't take into account the very complex nature of the issue which has to do with particle size, where those particles go in your lungs, how much surface area has material that's the result of incomplete combustion on them, and what are those chemicals that are on the particles because absorbed particles of vapors which are absorbed do not leave your alveoli, the end ducts of your lungs, as quickly as they would if they would if they stayed as a gas.

Most of the explanations, perhaps of research necessity, that I've read tend to express parts per thousand, parts per million, but not in a biological sense. I'm a pharmacist, and I have a pharmacy background. The question is how do these things go into the body? How long do they stay, and what are the

effects? And I don't know how you can take a complex issue like this -- although it's well represented in your website and presented to the public -- but my concern is those who have not solved the technical problems will try to use arguments which are not biologically significant to express the advantages of their system over competing systems.

Finally, we support strongly any movement toward cleaning up the air. It doesn't have to be perfect. It should be technology-driven with serious consideration as to the cost. But by cost, I agree with my colleague here. It's the true cost, namely, all of us are breathing this stuff, and it's critical that we remove it from the air as soon as possible.

Thanks again for the opportunity to present.

MS. CHAIRMAN: We thank you.

I believe it's Reverend Leland Stewart.

Good afternoon.

MR. L. STEWART: Good afternoon.

I come with a somewhat different orientation to most of you who are here, and so the leave the technical details to the environmentalists to give that part of it. I did want to call attention, however, to two people that have spoken here who are not only friends of mine but also who represent the religious interests that I

have.

The first one is Reverend Al Cohen with the Southern California Ecumenical Counsel. That represents main-line Protestantism primarily, which is his orientation, and we used to share the same headquarters which was very close to here for many years. Then the other person is Dr. Gary Herbertson who spoke earlier. Gary is on our board.

The organization that I'm with is called the Unity-and-Diversity World Council which represents two kinds of organizations. We do a great deal of interfaith work. The difference between Al Cohen in terms of who I represent is that the work that we're doing represents religions rather than denominations. In other words, we work with Christians, Jews, Muslims, Hindus, Buddhists, and many others including a number of modern spiritual movements. So we have interfaith celebrations every month. So we represent something like 50 different religious and spiritual groups.

On the other hand, as the name implies, we not only work with religious groups and spiritual groups but also with many other kinds of groups, United Nations Association, World Federalists, and a huge number of groups. And the environmental issue is very important to us. Gary on our board is our environmentalist, but

there's also one other member who's very much into environmental concerns. So in our counsel we have a general assembly once a month to deal with these social issues, and Gary is at many of the meetings. Tony Blackstone is very much the environmentalist. So we come from a large number of both religious and other kinds of groups in our work.

So I would just like to say that we are very concerned to improve the climate here in Los Angeles and the air pollution. I've been here personally for 45 years, since 1955, and I remember these issues being discussed way back then, and I know there's been some improvement, and but there's a lot more room for improvement. So we definitely want to see as much as the E.P.A. can do to improve it.

I was talking with Jim on the way down, who is a personal friend and who spoke at one of our recent meetings, and I'd like also to see five percent rather than 15, if that can be done.

Thank you very much.

MS. CHAIRMAN: Thank you.

Ms. Monica Benitez, welcome.

MS. BENITEZ: Thank you. Thank you for having me here.

On behalf of the Mexican-American Legal Defense

and Educational Fund, I urge you to adopt tough emission standards for trucks and buses as soon as possible. The number of diesel trucks that go through the Los Angeles residential neighborhoods is a significant concern especially to our organization.

A group of U.C.L.A. students conducted a focus group in the Boyle Heights area. This is the part of the graduate studies in urban planning. And what they did is they monitored traffic for two half-hour time periods between 2:00 to 3:00 p.m. which is the exact time when elementary schools get out, and what they found was that a total of 123 diesel vehicles passed through that particular area.

Now, this is a big concern for obvious reasons because of all of the toxins and particulate matter that can trigger respiratory problems in children. And this is primarily this area, the Boyle Heights area, as well as, I believe, somebody had previously mentioned these areas that have the most minority children, minority families, are the areas that have to face these highly contaminated toxic air polluted areas.

Not only air pollution, we're talking about all sorts of kinds of pollution, soil pollution. But it is these inner city children and families that are the most affected by diesel pollution. 70 percent of the Latino

children live in areas that exceed the ozone standard compared to 51 percent of white children. And, unfortunately, these are the people that live in poverty and cannot afford to move out and, also, people that rely on public transportation.

L.A., without a doubt, needs more buses, but it is just as important to have buses and transportation vehicles that don't pollute the community and that don't make people sick.

And I just want to end with one last comment in that I think that it's time that we really start investing in the children that are the most vulnerable, the neediest, and the poorest in our country. I hope that you consider the testimony here today in your final decision-making, and that you really do adopt the toughest possible standards to reduce pollution.

Thank you.

MS. CHAIRMAN: Thank you, Ms. Benitez.

Mr. Jeff Yann, good afternoon.

MR. YANN: Thank you for your patience and perseverance.

My name is Jeff Yann. I am environmental chair of the Hacienda Heights Improvement Association which is a mutual-benefit corporation that represents 55,000 residents in our unincorporated community. I'm also a

member of the Sierra Club's air quality committee.

Hacienda Heights sits in a crucial position in the South Coast air basin. We're essentially where the funnel starts that conveys the off-shore breezes over San Gregornio pass every afternoon. In addition, we're just downwind of the 605 Freeway, and the Pomona Freeway bisects our community. The Pomona is among the busiest in the basin for traffic from the harbors to the Interstates 10, 15, 40, and points in the eastern United States.

Plans are being developed right now for a dedicated truck lane which will likely parallel the Pomona Freeway to haul traffic from the Alameda Corridor to the east. In addition, we have the nation's second largest landfill immediately up-wind of our community which generates over 4,000 vehicle trips per day. Most of those vehicles are trash trucks powered by diesel engines.

We were delighted to see South Coast A.Q.M.D. take strong steps toward requiring diesel buses and trash truck fleets to clean up their act by moving to compress natural gas and alternative fuels along with installing particulate traps for existing engines. We ask E.P.A. to take even stronger steps toward eliminating the severe health impacts that diesel engines pose to our community

and, in fact, to the whole Los Angeles basin.

When I started my career as an engineer in the electric utility business, power plants had thermal efficiencies around 40 percent, poured sulfur fumes and high NOx out their stacks. When I worked in the field, our cars were covered with yellow spots of sulfur corrosion spots at the end of the day. When I left the business 31 years later, it was a very different industry.

Before I retired, I was project engineer on a project to repower one of these older facilities using two new gas turbines in a combined-cycle mode. Each of the gas turbines was more efficient, larger, and cleaner than the whole power station they were repowering. Their hot gases could generate enough steam to fully run the existing steam turbine. The result was a power plant with three times the output for twice the fuel -- a 50 percent efficiency increase with nine parts per million NOx and no sulfur.

At the same time, the conventional units were being equipped with selected catalytic reduction. Though the utilities complained a great deal when that was imposed, ultimately technology developed led to those installations being installed at a fraction of the cost that were initially proposed. These innovations allowed

the industry to point with justifiable pride with what we were able to accomplish. And why? Because regular authorities set the standards that forced us to make this remarkable progress. Cleaning up our air basin has spawned new technologies, created new jobs, and you can now see the mountains occasionally during the summer.

I urge the E.P.A. to continue these same incentives for the diesel industry and help prevent 40,000 premature deaths that result from soot pollution nationwide by adopting strong regulations to reduce sulfur, NOx, and particulate releases from diesel trucks. It is well documented that a direct relationship exists between fine particulate pollution in the air and hospitalization for respiratory ailments.

I'm a firm believer in capitalism as a means for driving economic progress, but I also believe that subsidies impede that progress. Subsidizing polluters by letting the health industry bear the costs, bear the economic impacts is the worst kind of subsidy. E.P.A. certainly knows this firsthand. Right here in the San Gabriel River Aquifer, E.P.A. is conducting an evaluation of how to prevent health impacts in a Super Fund Site that used to be one of the best groundwater aquifers that we have in the basin.

The message of that pollution is clear. Once

the pollutants are released into the environment, there is no easy way to get them back or prevent their impacts. The same is true of diesel emissions. The only way to control these toxic and carcinogenic emissions is to keep them out of the exhaust pipe. Your proposed regulation is the right step. Let this technology pay the cost to clean up the problems they create for the rest of us who breathe the air in Los Angeles. Only on that basis can we then decide if clean diesel is still the way to go or what other -- some other technology that has already paid these clean-up costs can do the job better, electric technologies, compressed natural gas, other technologies have been mentioned that can move freight around this country.

As Jim mentioned, these technologies not only cut emissions of criteria pollutants but of greenhouse gases as well. This is not an issue of jobs versus the environment. It is simply a question of a technology bearing the cost burden necessary to keep from putting people at risk. Although much is made of negative impacts upsetting environmental standards, these standards do not cause jobs to go down. Instead they promote new technologies and the workers to bring those new technologies into production.

Often technology is developed to reduce smog in

Los Angeles spread throughout the country and even the world as other regions face the same problems that we face creating even more jobs. As a result, those workers and all of us can live healthier, more productive lives. It's not the job of E.P.A. to figure out what these technology developments will be or how industry will go about meeting them.

Just as with putting catalytic converters on automobiles as with getting the lead out of gasolines, as with putting S.C.R.s on utility boilers, let the industry that say this can't be done put their wisdom instead into figuring out the best way to do it. We simply need to make sure the standards are high enough that when they do finally get the job done, those of us in Hacienda Heights, the basin, and the world can live better, healthier lives.

I urge you to adopt the proposed reductions for diesel emissions.

Thank you.

MS. CHAIRMAN: Thank you, Mr. Yann.

I'd like to thank all the panel members for caring enough about this issue to come share your views with us. Of course, we will consider all your comments seriously as we're moving forward towards the end of the year to finalize this problem. Thank you again.

I will call the next panel: Mr. John Duerr; Mr. Jason Mark; Ms. Marie Valentine; Ms. Jerilyn Lopez Mendoza; Ms. Gladys Mead; Mr. Larry Weick; Mr. Rong Lu; and Ms. Jaqueline Domac.

I have seen a number of you around since the morning, so I appreciate your patience in staying until late afternoon to testify.

So we'll start with you, Mr. Duerr. Good afternoon.

MR. DUERR: Good afternoon.

My name is John Duerr, and I'm here to today representing Detroit Diesel Corporation. Detroit Diesel is a major manufacturer of diesel engines including heavy-duty on-highway engines which are the subject of today's rulemaking. Detroit Diesel is pleased to have this opportunity to present our views on this important rule. At the outset, let me say that Detroit Diesel is a member of the Engine Manufacturers Association and the Diesel Technology Forum, and we support the statements made by both of those organizations earlier today.

Detroit Diesel wants to congratulate the Agency in adopting a systems approach in this rulemaking by proposing substantial fuel quality improvements in support of the extremely challenging new engine emissions standards. Heavy-duty highway engines have been

regulated since the early 1970s, and, since that time, there have been remarkable reductions in engine emissions. By the time the 2004 emission standards take effect, NOx and particulate emissions will have been reduced by approximately 90 percent. Carbon monoxide, hydrocarbon, and smoke emissions from diesel engines have also been reduced substantially and today stand at levels that are roughly 10 percent of the current standards.

For the most part, these impressive emission reductions have been achieved through improvement in engine design. Although this approach has been successful in the past, I believe I can state without fear of contradiction that the 2004 standards are very close to the limits of what can be achieved with engine modifications alone. Any substantial emission reductions beyond those reflected in the 2004 standards will require the use of exhaust aftertreatment. Efficient and durable exhaust aftertreatment systems depend on the availability of very low-sulfur diesel fuel. Thus, Detroit Diesel not only supports E.P.A.'s approach of considering diesel fuel quality and engine emission standards together in this rulemaking, we believe this is the only viable path for achieving significant reductions of significant magnitude.

While Detroit Diesel believes that reductions in

diesel fuel sulfur levels are key to achieving the next level of emission standards, we are not certain if the NOx standard that E.P.A. has proposed will be feasible even with fuel meeting a 15-ppm sulfur cap. The proposed 0.2 grams per horsepower-hour NOx standard will require the development and use of an aftertreatment system with over 90 percent effectiveness over an extremely broad range of engine operating conditions. Detroit Diesel is not aware of any systems that have demonstrated this level of effectiveness in the laboratory, let alone meet the requirements of a production feasible system with minimal deterioration in effectiveness over the full 435,000 mile useful life period. We're continuing to review and analyze the available data and will provide more detailed information regarding the feasibility of the proposed NOx standard and adequacy of the 15-ppm sulfur cap before the end of the comment period.

On a related issue, the preamble to the proposed rule indicates that supplemental Not-To-Exceed and steady-state provisions which are yet to be finalized as part of the still-pending 2004 rulemaking will apply to the proposed 2007 standards. It is further noted that a number of modifications to these provisions are expected relative to the proposal that was released in October of 1999. These provisions have a very significant impact on

the stringency and feasibility of the proposed standards.

Since we have not, as yet, seen these finalized provisions, we cannot assess their impact or comment meaningfully on how these provisions affect the technical feasibility of the proposed standards. Because of the extreme importance and complexity of these provisions, E.P.A. must provide assurance that there will be adequate time in this rulemaking for comment on the technical feasibility of this proposed rule after the 2004 rulemaking has been finalized and the supplemental provisions have been made available for public review.

Detroit Diesel appreciates E.P.A.'s intent to provide flexibility by proposing an optional phase-in for NOx, N.M.H.C., and formaldehyde standards. While this approach has been successful in managing the transition to the new standards for light-duty vehicles, we believe this program will be unworkable for heavy-duty engines because customer preferences, cost factors, competition between engine manufacturers, and issues related to truck design will make it impossible for engine manufacturers to manage sales to meet the proposed phase-in schedule. As an alternative, we suggest that two-step implementation for the substantial reduction in the NOx plus N.M.H.C. standard applicable to all heavy-duty diesel engines in 2007 and the second large reduction in

2010.

We believe a two-step implementation will avoid the problems associated with managing engine sales is more aligned with technology readiness and can achieve emission reductions that are equivalent to E.P.A.'s proposed phase-in schedule.

One aspect of the proposed rule that Detroit Diesel finds troublesome is that the Agency did not include any changes to the emission test procedures. The emission test procedures that manufacturers are required to use in certifying and auditing engines were developed in the early 1980s and were first applied when NOx and particulate standards were 10.7 and 0.6 grams per horsepower-hour respectively. These procedures were never designed to provide reliable measurements at the extremely low emission levels represented by the proposed standards. Testing programs conducted jointly by E.P.A. and industry show that the emission measurement variability using these procedures is approximately the same magnitude as the proposed standards. With testing variability of this magnitude, it will simply not be possible to reliably determine if the proposed standards are being met. Clearly, substantially improved test procedures and equipment need to be developed.

Further, the procedures must be developed with

sufficient lead-time to allow manufacturers to obtain and install the necessary equipment to upgrade their laboratory facilities and complete the development of compliant engines before the new standards take effect. Because of the --

MS. CHAIRMAN: Mr. Duerr, you may want to take a short break and get a glass of water. We can wait. We can be here late in the evening.

MR. DUERR: I just have a little bit more.

MS. CHAIRMAN: Okay.

MR. DUERR: Because of the magnitude and time criticality of this task, we believe E.P.A. must take immediate action to convene a group of Agency and industry experts to begin the important work of developing improved emission tests procedures.

Again, Detroit Diesel appreciates this opportunity to present our views on this important rulemaking. We will follow up with more detailed comments on a number of issues before the end of the comment period.

Thank you.

MS. CHAIRMAN: Thank you.

Ms. Valentine, good afternoon.

MS. VALENTINE: Good afternoon.

My name is Marie Valentine. I am here to speak

on behalf of DaimlerChrysler on the subject of the E.P.A.'s proposal to modify heavy-duty vehicle emission control regulations and on-highway diesel fuel requirements.

DaimlerChrysler is a vehicle manufacturer of light-duty and heavy-duty vehicles that operate on gasoline and diesel fuels. DaimlerChrysler is a demonstrated leader in the development of environmentally sound vehicle technologies. This is evidenced by our commitment to support the pursuit of tough emission performance goals.

Reducing heavy-duty emissions will aid in achieving the nation's air quality emissions goals, and we stand ready to do our part. This is a logical follow-up to the Tier 2 light-duty vehicle emission regulations adopted last December. We agree that E.P.A. needs to look at all pollution sources when determining a comprehensive emission reduction plan.

In our opinion, the combination of the low-sulfur on-highway diesel program with feasible, stringent new emission standards for heavy-duty engines and vehicles will assist in improving air quality nationwide. We congratulate E.P.A. for continuing to link vehicles and fuels as was recently done in the Tier 2 regulations. This system approach is the only way to

achieve the emission reduction envisioned.

We commend E.P.A.'s initiative to propose a 15-ppm sulfur cap for the on-highway diesel fuel. This critical first step will enable the continued development and advancement of diesel emission control technology that is necessary if the heavy-duty industry is to meet the new proposed standards which reflect a 90 percent reduction in NOx and PM.

Sulfur is a poison that blocks the use of aftertreatment technology by rendering the hardware inoperable at today's 500-ppm level. The developers of the aftertreatment technologies have indicated that a very low level of sulfur in diesel fuel is critical for future development of these devices. The lower level will permit catalyst-based control strategies to be optimized for maximum emission reduction efficiencies.

Recent data indicate that sulfur-free diesel fuel is the enabling requirement for the use of NOx absorbers, Continuing Regenerating Technology systems, and Selective Reduction Catalysts due to their sensitivity to sulfur. Further information on this will be included in our written comments.

The world's engine manufacturers have defined sulfur-free diesel fuel, as specified by the "World-Wide Fuel Charter," as the correct fuel to enable the use of

NOx and PM aftertreatment technologies where stringent emission standards are required. Therefore, the sulfur level in diesel fuel must be reduced to allow the use of aftertreatment technology as an emission control strategy for diesel vehicles as has been so successful for gasoline vehicles.

Let me emphasize that the proposed sulfur cap is only the first step needed for diesel fuel. A sulfur-free diesel fuel with a minimum cetane of 55 and a maximum 15 percent aromatic limit is ultimately necessary. This fuel composition would support the use of diesel fuel in the light-duty vehicle market and provide the benefits of reduced emissions and increased fuel economy -- another goal of the current administration -- while also maintaining customer satisfaction.

A diesel powertrain is an important option for passenger vehicles. Diesel vehicles could have a significant role in the reduction of fuel consumption by offering a 40 percent fuel economy advantage over gasoline vehicles on a miles-per-gallon basis. The sophisticated diesel vehicles currently in the European market have higher endurance, reliability, and torque, which is a desirable performance attribute. On the emission side, diesel vehicles have inherently low

hydrocarbon and carbon monoxide emissions, no evaporative emissions, and have long-term stability of emissions, which will be further reduced with aftertreatment, but the enabling fuel is necessary.

We applaud the incentives by some oil companies to deliver clean diesel fuel to some localized markets in advance of the regulations. The lesson learned is that cleaner fuel can be made available, and it is being done at an affordable price.

Should a phase-in of clean on-highway diesel fuel be found necessary, we encourage E.P.A. to have it start in 2004. The oil industry has previously challenged E.P.A. to make all known changes in one step, not two separate steps so capital investment strategies can be optimized. Therefore, the 2004 suggested start date would link diesel with the gasoline sulfur control required by Tier 2, and allow light-duty clean diesel as a viable powertrain.

In conclusion, let me restate the key points of our message:

First, E.P.A.'s proposal of a reduced sulfur diesel fuel for on-highway is a great first step.

Second, clean fuel packaged with feasible emission standards is the correct path to enable further reduction in emissions.

DaimlerChrysler believes that the diesel fuel as specified in the "World-Wide Fuel Charter" is necessary to enable low emissions and fuel-efficient technologies.

DaimlerChrysler is continuing to review the proposal and plans to submit written comments addressing other issues in the N.P.R.N. and expands further on our diesel fuel position.

Thank you for the opportunity to speak to you.

MS. CHAIRMAN: Thank you.

Mr. Jason Mark, finally. You've been here the whole day. Thank you for your patience.

MR. MARK: Well, thank you very much, and I thank you for your patience as well. I think you've experienced a real outpouring of support from concerned citizens in the Los Angeles area. I think it's probably an experience you've had all around the country, and it suggests that we really have a significant challenge ahead of us, and everyone is very exited about it.

My name is Jason Mark. I am the transportation codirector of the Union of Concerned Scientists, and I want to share with you a couple of thoughts, and I've got a couple slides in just a second. But I recently did an interesting -- what I found actually surprising -- back-of-the-envelope calculation and just try to put this diesel solution issue in perspective.

It turns out that the average diesel truck on the road, on the highways today in America emits three times more smog-forming pollution and three times more soot than the average coal-fired power plant per unit of energy burned. In other words, in terms pounds per BTU, NOx with hydrocarbon was three times higher for the average diesel truck than the average coal power plant in the United States and three times higher for cities, as well.

It sort of, I think, helps us puts in perspective that what we're really talking about here are smoke stacks on wheels rolling through our neighborhoods, our urban centers, and on our highways. Fortunately, over the course of a number of regulatory proceedings in California, both in the Los Angeles area and statewide over the last year, we've heard proof-positive from the industry that they've got the technology that will bring diesel in line, hopefully, with coal power plants and much, much cleaner over time.

If I could just show a few slides here, three short ones, and then I'll be out of your hair, one of the pieces, obviously, that is quite critical for EPA to rule is developing strong engine standards as soon as possible. We certainly encourage you to accelerate or eliminate the phase-in for the for the NOx standards.

I -- also, on the diesel fuel issue near-zero sulfur is clearly an absolute priority. In my perspective, there is really -- you left yourself no room for bargaining when it comes to sulfur levels. You can't go any higher technologically. It's an absolute priority to hold the line, no room for bargaining, per se, with the oil industry on this issue.

Then I want to spend the bulk of the -- just a couple minutes talking about real-world emissions. I see this as a critical issue, one that we have to address right now before we get into a situation, at least in California, where we're dealing with a smog check program that is in substantial financial and political difficulty as well as creating emissions losses for the state.

And there I think while history has shown that cars in the real world are much dirtier than they are during an emissions test, either administrated by the E.P.A. or the California Air Resources Board, the conventional wisdom is then that diesel trucks don't have a real-world emissions problem. I think that conventional wisdom changed -- if I may have, I think, on the next slide -- conventional wisdom changed when there are a series of testings that suggested the number of engines -- a number of engines were having troubles with this defeat device.

In consulting the consent decree is based on E.P.A.'s estimates on per-mile emissions rates for noxious hydrocarbons for the 1998 model engine, and the next bar would be the emissions a, quote, unquote, legal truck. By E.P.A.'s own estimates, those emissions increased by 70 percent per mile as a result of defeat devices. And then this, there's the final bar in California estimates is from the yet-to-be-finalized Amfac (phonetic) 2000 analysis, but it suggests that in reality the increase from defeat devices is well over a factor of two.

It suggests that the world is changing, that, in fact, when we didn't have to worry about deterioration and any of these problems in the past, now we do. I would suggest that that situation is only going to get worse as we consider exhaust control technology, that, at least in the light-duty sector, is clearly demonstrated, had some kinks worked off that took us several decades to get substantial progress.

I certainly applaud the engine -- excuse me -- the auto industries and the exhaust control manufacturers for really beginning to seriously address the emission problem for automobiles. Let's make sure we don't create a similar problem from heavy-duty vehicles.

So the next chart, please. This is your

U.C.S.'s more on-the-back-of-the-envelope calculation estimating the impact deteriorations could have on the E.P.A.'s projected benefits. As was noted earlier, E.P.A. projects for the year -- these are emissions results for the year 2030, assumes that engines starting in the year 2007 don't deteriorate whatsoever, that despite the fact even E.P.A.'s modeling suggested 2004 engines will deteriorate.

The assumption is that magically deterioration goes away in the year 2007 as a result of this rule. Clearly I would suggest that the history, if passes any prologue, that perhaps that it's not a fair assumption. What we've done is looked at a couple different scenarios. What if, for example, heavy-duty engines deteriorate just at historic rates, the same rate you assume the emissions deteriorate for model year 2004 engines? What if that continues for the next 30 years? Turns out that emissions for particulates, for example, would double in the year 2030.

Now, what if we assume that because we're including exhaust control equipment that may be prone to failure in the real world, in real-world driving conditions, that the historic deterioration rate actually doubles, perhaps deterioration because of malfunction. Then, all of the sudden, particular emissions quadruples

compared to E.P.A.'s projected benefit. What that suggests is that while we may be assuming we're going to get a 90 percent reduction for smog-forming pollutants and particulate matter as a result of the E.P.A. rule, those benefits could be substantially eroded. In fact, they could perhaps be cut in half as a result of deterioration of malfunctioning engines.

We clearly think that advanced technology has an important role to play here by providing an intrinsically clean technology that may not be prone to deterioration or which the technology has much less of a burden placed upon it. That, you can deal with that. And that's what the final bar on this chart suggests is that aggressive introduction of advanced technology can help mitigate the impacts of real-world pollution.

If we can go back to the first chart, just to summarize. We certainly feel that in-use tests, on-board diagnostics, Not-To-Exceed limits are absolutely vital in your 2004 goal. The incentive for inherently cleaner technologies, however, is the prudent pathway. It's the diversified, no-regret strategy for dealing with an issue that I think we have yet to really grapple with in the regulatory community and the public health community the fact that heavy-duty engine technology is, in fact, much dirtier in the real word than it is during the

laboratory-like Federal tests.

Thank you.

MS. CHAIRMAN: Thank you.

Mr. Larry Weick, welcome. The microphone should be on.

MR. WEICK: Is it on.

MS. CHAIRMAN: Yes.

MR. WEICK: Okay. Very good.

Good afternoon, Madam Chairman, and members of the committee. My name is Larry Weick, and I'm the vice-president of business development for Syntroleum Corporation. My company has developed a commercial process to convert natural gas into ultraclean fuels, this fuel here, and is a leading licensor of this technology in the oil and gas business. Of specific interest of this hearing is that Syntroleum has developed a paraffinic, high-cetane synthetic diesel. My comments will focus on the impact synthetic diesel can have on the U.S. transportation industry. Syntroleum strongly believes that blending this synthetic fuel in the present diesel fuel can assist refiners in meeting the 10-cap-15 diesel sulfur requirement by 2007.

Synthetic diesel has been developed and tested by Syntroleum and others, and they meet or exceed all the properties of the ASTM D975 and are highly suitable for

conventional and advanced compression ignition systems in both North American and the European markets.

Additionally, Syntroleum synthetic diesel has been demonstrated to be viable for fuel cells. So it's a bridging fuel. Synthetic is psychically similar to petroleum-based diesel, but it has superior combustion emission characteristics containing no sulfur, no aromatics, no olefins, and no metals. Just as significant, it's compatible with the existing fuel distribution infrastructure from the refinery tank all the way to the pump.

Syntroleum has recently submitted a petition to the Department of Energy requesting that the secretary initiate a rulemaking to add these synthetic fuels to the list of alternative fuels under EPAct. Syntroleum synthetic fuel has the qualities which make an ideal fuel for assisting refiners in blending this 10-cap-15 limit. As part of the EPAct process, Syntroleum has independent testing that compared the engine emissions from this fuel with conventional E.P.A. Number 2 California CARB spec diesel, and Swedish City diesel. CARB diesel and Swedish City diesel, as you know, are the cleanest diesel fuels currently commercially available. Under a variety of test conditions that are part of the written testimony, Syntroleum synthetic diesel reduced the

criteria pollutants, NOx and particulate emissions range from 11 to 38 percent. These are significant percentage reductions. These benefits can also be realized immediately because synthetic diesel can be used in existing conventional diesel engines incorporating advanced sulfur exhaust treatment technologies that we heard about earlier today.

Moreover, it's a relief and a pleasure to point out to the E.P.A. and the American public and, particularly Californians, that this synthetic diesel under discussion has a very low solubility in water. Additionally, laboratory testing indicates that this fuel has significantly lower toxicity than conventional diesel and is much more biodegradable.

As large trucks and SUVs continue to grow in popularity, including in California, the shift from gasoline to diesel engines is growing each year as evidenced by a 12 percent growth rate for the two-year period '96-'98, and a 44 percent growth rate for '97-'98.

Of particular interest to this hearing is the need for clean diesel fuel to meet Tier 2 standards. The demand for diesel in U.S. transportation sector is growing. This is diesel is growing three times faster than gasoline. If this growth and diesel demand continues, an additional 100,000 barrels a day of

incremental diesel fuel will be needed each year just to keep pace. The available synthetic diesel will help the industry meet this growth. Synthetic diesel will enable the refining industry to have more flexibility to blend and meet the anticipated increased demands for diesel.

This fuel is a proven technology-neutral fuel that has the potential to revolutionize the transportation fuels and reduce emissions. But meeting the 2007 deadline for 15-ppm diesel is not the only consideration of this hearing. There is the issue of how to refiners will meet increased demand. World clean diesel production will need to increase in the face of well-documented deteriorating fuel quality, oil quality, as evidenced by the increasing -- steadily increasing sulfur content and increasing oil gravity. The expected increase in competition between the U.S. and the EU and and elsewhere for these high-grade crude oils as a strategy for making low-sulfur fuels will not help. There's not enough clean oil to go around.

If production of ultra clean diesel was dependent only on conventional feedstock, the task would be daunting indeed. However, the production of synthetic fuels and synthetic diesel changes the equation. These synthetic fuels are the future. The potential resource of natural gas for synthetic fuel production worldwide is

a very large and, as accounted for by some, larger than the present world oil reserves. It may take a decade before total synthetic fuel production exceeds a million barrels a day.

However, synthetic fuel production is expected to grow exponentially as technology improvements continue to lower production costs and increase returns on project investments. During the next 10 to 15 years, blending of conventional diesel with synthetic diesel would be an effective means of upgrading lower quality diesel fuels and meeting expected growth.

By the end of the decade, we believe any synthetic fuels will be well on their way to becoming a significant component of this world fuel pool.

In conclusion, the broader use of these synthetic fuels will bring significant environmental and energy security benefits to the U.S. during the next decade and beyond. Syntroleum strongly believes that the expected increased availability of these fuels will dramatically assist refiners in meeting the 10-cap-15 targets by '07 by blending the in-place fuel streams and augmenting refining capacity that will be economically challenged by required reduced sulfur production.

Thank you, again, for this opportunity to speak.

MS. CHAIRMAN: Thank you.

Mr. Rong Lu, good afternoon.

MR. LU: Thank you for the opportunity for me to speak.

My name is Rong Lu. I'm a research scientist at the University of California in Los Angeles. I have studied the air quality problem for many years. The greater Los Angeles area is still the most polluted area in the whole nation. Toxic gases and the fine particles in the air have a very harmful effect on public health and welfare. I'm here to urge you to adopt the toughest possible standard to reduce the emissions of toxic gases and particulate matter, especially those from the diesel exhaust.

I'd like to show one slide here. Here, I want to show one. Based on recent scientific research, the average cancer risk in the Los Angeles basin is about 1,400 per million people. And that means that the individual person who stayed in the Los Angeles basin for 70 years and have 1,400 per million chance -- in a million chance of contracting cancer. Mobile sources include cars, trucks, trains, ships, and aircraft with the greatest, largest contributors.

However, it's obvious that about 70 percent of the risk is attributed to the fuel particulate matter

emissions. So, in other words, diesel particulate emissions lead to one in a thousand chance of contracting canister.

In order to protect the public health, we must require the dramatic reduction of the pollutant emissions, especially the diesel emissions from these large trucks and buses as soon as possible. I strongly support the E.P.A. proposal to significantly reduce the emissions from heavy-duty engines and vehicles. Based on advanced technology, such as the highly efficient catalytic converters and low-sulfur fuels, the approach could be the most cost-effective way to reduce emissions of ozone precursors and particulate matters.

Specifically, I urge you to reduce the diesel sulfur level to no more than 15 parts per million nationwide for both on- and off-road diesel engines by 2006 and also clean up all the big trucks and engines, and ensure that the big trucks to meet the emission standard on-road, not only just during the test.

Finally, I urge you to increase the use of diesel alternatives such as clean fuel, electric, and fuel cell buses.

These measures are critical to protection of public health and environment. I hope you seriously consider them in your final decision-making.

Thank you.

MS. CHAIRMAN: Thank you.

Ms. Jerilyn Lopez Mendoza, good afternoon.

MS. LOPEZ MENDOZA: Good afternoon. Thank you for the opportunity to speak to you today. Sorry, the mike is having trouble.

My name is Jerilyn Lopez Mendoza. I'm a staff attorney in the Los Angeles office of Environmental Defense. Our office in Los Angeles is dedicated to environmental justice issues. We have three main areas of focus. The first is alleviating exposure to toxins. The second is promoting the equity in transportation. And the third is increasing the amount of green space, clean and green, schools, parks, and playgrounds for the children of Los Angeles.

I know it's the end of the day. I'm going to try to be as brief as possible. I do have written comments that I brought that I believe you have before you.

Two main points I want to make: First of all, our office is very much in favor of the new standards that you have before you that you are considering. We are very much in support of any new regulations that will decrease the amount of particulate matter, NOx, toxicity, and other carcinogens that in the air in Los Angeles.

However, the second point I want to make -- and it's the only big point I want to make -- I do want to import to you a sense of urgency about these issues.

Everyone is talking about the MATES-II Study that the A.Q.M.D. has done. I think all of us have drawn from their report in bringing up various matters, one I will bring up to your attention is on page 2 of my written comments. We know that the areas that are most impacted by air toxins in the Los Angeles region are South Central and Southeast Los Angeles. What we have done is put together census data -- admittedly from 1990, however, we don't think the demographics have changed very much -- just to show that who is impacted by air toxins in the Los Angeles region.

If you look at the numbers, over 60 percent of people living in South Central Los Angeles live below the poverty line. Over 90 percent of the people who live in South Central are African- American or Hispanic. In Southeast Los Angeles, over 40 percent of people living in that community are living below the poverty line. And, again, over 90 percent of the people in that region are also African-American or Hispanic.

The most vulnerable areas of our communities are being the most impacted by air toxins, and this is true of a lot of areas throughout the country where there's

environmental injustice and where the people living in low-income communities are doubly impacted because they do not have access to the decision-making process, and they bear the brunt of the environmental degradation of their community.

For these reasons, we are urging you as quickly as possible to enforce these standards. Seven to 10 years down the line is simply too long to wait, especially for people living in these communities who bear the brunt of these problems. Human health and air quality are affected every day. It's getting worse every day. It's to promote cleaner air for all of us in Los Angeles, to improve human health, to bring the entire region closer to attaining of public health standards, relieve the burden on low income and communities of color, overall to just achieve environmental equality for all of us living in Los Angeles.

We really urge you to move as quickly as possible to enforce the strongest standards available to try to decrease the amount of toxins that our communities are being exposed to every day.

Thank you very much.

MS. CHAIRMAN: Thank you, Ms. Mendoza.

And our final person in the panel -- is it Ms. Jacqueline Domac. Good afternoon.

MS. DOMAC: Thank you. Hi. My name is Jacqueline Domac, and I'm a high school health teacher at Venice High School, and I'm happy to be here. Thank you.

When I was first asked to testify here, I was very stressed about knowing all the facts and making sure as an educator I would be able to convince you about the statistics and about how many people are dying and how horrible it is and the pollutants. I realized that I really didn't need any facts to be here.

I'm sure there was a time when people sat at tables like this and debated whether or not there should be slavery or whether people actually had the right to be free. And there is also a time when people sat at tables like this debating whether or not women have the right to vote. And, to me, there just doesn't need to be any statistics for that. Clean air seems to be a right, and I don't think that it is debatable.

My students have a really tough life, and I have to face many problems with them every day from their back grounds that they come from. It is not uncommon for me to hear that their friend was shot on the corner and their head blown off and now they're dead. It's not uncommon for me to hear of students who can't have their permission slips signed because they land in so many foster homes, they don't know who now is their legal

guardian, and just simple economic necessities, just the burdens placed upon them just to get to school every day and to have food in their bodies so they are able to learn.

As a teacher of health, I tell them there's a lot of things not in their control, and I would like to be able to tell them that at least their air quality, the air that they breathe every day, is in their control and that they will not be doomed, and that the E.P.A. is doing something about that to help their environment, because where I teach is a polluted area, and a lot of them come from severe economic back grounds, and, as the previous speakers have said, those people are being affected the most.

I grew up in Pacific Grove, California, where the air was very, very clean by Carmel and Pebble Beach, and I went to Berkeley which was then at least clean air up in the area, and I'm really saddened to be in Los Angeles teaching where the air is really, really gross. I'll be giving a lecture in class and have a diesel truck go by, and all the fumes come into the classroom, and it's disgusting.

At least when pot comes in through the windows, there's something I can do about it. I can call the dean and have that removed and alleviate the situation. But

we look upon you to do something about the diesel fuel emissions, because there is little someone can do at this level other than to pressure you to do that for us. And since we are facing so many other problems in schools right now, this is the very least that you can do is to provide clean air for our students to breathe and for the animals and for the plants and the little lizards outside my house.

Everything deserves to have some clean air, and I hope that you will pass the strictest possible laws and do it in the most efficient manner as possible.

Thank you.

MS. CHAIRMAN: Thank you.

Mr. Duerr, I have one question. I know it's late in the day. Probably my colleagues are saying, "What is she doing?" Well, this morning and, actually, during this whole day today and the other hearings that we have had on this very important proposal, we have heard very positive, actually amazingly positive support from the companies that are going to make those technologies, and this morning you heard the representative of the Association and Mr. John Mooney from Engelhart (phonetic) with the positive support that they have given us that indeed those technologies if they're not here today, they're going to be here by the

time that these standards are required.

So my question to you is in your testimony, both your oral testimony and your written testimony -- and I'm reading it -- it says that Detroit Diesel is not certain if the NOx standard that the E.P.A. suggests will be feasible even with the fuel meeting the 15-parts-per-million sulfur cap. And I wanted to ask you, first of all, are you going to be able to provide more definitive input to the record, because indeed we're going to be making decision by the end of the year? And, obviously, we're talking about six, seven years' time frame, and what is your view, optimism or lack of optimism, as far as the ability of your company to exceed those standards given the time -- today, the colleagues in your industry and the aftertreatment technology manufacturers?

MR. DUERR: I hope we can provide some more definitive information, although, I'm sure our crystal ball is not going to become totally clear before this rulemaking is concluded. One of our concerns -- and I tried to express it here -- is that we have not yet seen the final regulations regarding the supplemental test procedures.

And I think as the Agency is well aware, that is a concern of not only Detroit Diesel but manufacturers as

a whole. And we certainly recognize that that will have impact on the feasibility of the standards. And, in addition, you know, we can look at the particulate side, and we can look at the NOx side independently and maybe get some optimism that those standards can be individually achieved. But then it's the issue of can we integrate systems in such a way that both standards can be met and be met through the extended useful life that that equipment needs to perform? We just don't have all that knowledge yet. We're trying to build that knowledge, and hopefully we can be more optimistic.

MS. CHAIRMAN: I appreciate your comments.

Again, what strikes me throughout this public hearing process is the positive feedback that we're getting through these public hearings from all the colleagues, many of your colleagues, in the industry and especially the aftertreatment technology companies that obviously, as you heard this morning, are spending millions of dollars in developing those technologies.

So we all need to continue the dialogue including your company and those companies that are going to be providing those aftertreatment technologies. After all we're talking about seven, 10 years' time frame, and we're hearing from other members of this panel that seven, 10 years is too long.

Thank you very much. I want to thank especially the concerned citizens for taking time in coming forward to testify on this important proposal and your comments will fully be considered as we're moving forward to finalize this.

Thank you.

We will proceed with our next panel:

Mr. Nicolas Economides, Jim Morales -- Tim -- Mr. Lawrence Lebowsky, Martin Schlageter, Cathy Chang, Ms. Mary Edie, Dan Muhtar, and Andrea Van Hook.

Please forgive me if I didn't pronounce your names properly.

Mr. Economides, we'll start with you. Good afternoon.

MR. ECONOMIDES: Good afternoon.

MS. CHAIRMAN: Definitely I'm pronouncing your name correctly.

MR. ECONOMIDES: I'm comfortable with that.

MS. CHAIRMAN: Okay.

MR. ECONOMIDES: Good afternoon.

My name is Nick Economides, and I am the director of refining and reformulated fuels at Hart Fuel Information Services. For almost 20 years, Hart has provided quality information, consulting services, and analysis to the worldwide refining and automotive

industries as well as the state, federal regulatory and legislative officials and public policy makers.

As part of these overall efforts, we feel we have a unique perspective on the individual and collective needs of the industry, and we're happy to be here today to discuss a little bit more of the refining economics of the proposal particularly as it pertains to the synthetic diesel aspects that you heard a little bit about earlier from Syntroleum Corporation which develops and licenses a cost-effective process based on Fisher Drokes (phonetic) technology from clean natural gas.

Understandably most of the testimony you received here today and in the previous hearings held in the past week involved the feasibility, necessity, cost effectiveness, and economic implications of producing a cleaner, conventional -- that is based on petroleum refining -- diesel fuel.

We applaud your efforts to address the significant pollution contribution the diesel sources represent. We're comfortable that the proposed maximum of 15 parts per million is not only technologically feasible but also necessary to propel us into the next generation of cleaner diesel fuels. Such fuels will undoubtedly be needed as we struggle to meet the greenhouse gas emission targets that lie ahead of us.

It is already widely recognized that diesel provides a substantially more fuel efficient fuel than gasoline and is generally more reliable and easier to maintain. Your action or your proposed action will drive the last remaining aspect of diesel marketability in our view, and the one that has suffered the most up to today, that is environmental performance.

Diesel can be made cleaner. In fact, diesel can and should be made clean enough to compete with alternative fuels for similar operations. E.P.A.'s action ensures that this long overdue change is finally under way.

From the synthetic fuels perspective, the debate over the cost impacts of your proposal in conventional refining is only a small piece of the picture, and, although presently the loudest, it is certainly not the one with the longest term strategic implications from the national energy policy and the global environmental significant standpoint. Rather, we believe that the wide-scale introduction of such technology holds the potential to profoundly affect the oil and gas industries, as you heard earlier, and to fundamentally change the way we approach the challenges of cleaner fuels that lie ahead of us such as the low-sulfur diesel fuel requirement.

You've heard about the technical aspects in the strategic significance of the process already in the previous panel, so I'm not going to dwell on that. What I do want to talk about is the opportunities that this process provides us within the context. This process can be applied effectively both at the oil well to unlock what we call "stranded natural gas resources" or to allow the development of oil resources that would otherwise not be produced unless the associated gas that you typically get when you explore for oil is handled in an economic and environmentally friendly manner.

More importantly in the context of this rulemaking, it be can used to produce superior synthetic fuel that can be used directly as finished diesel or introduced in the conventional refining schemes as clean blend stock components that can extend the volume of clean diesel that any refiner of conventional fuel can produce.

The diesel products of the Syntroleum process are totally free of sulfur, as you heard, nitrogen, metals, cetanes, aromatics, and all the other undesirables that are typically found in traditional hydrocarbon products derived from crude oil. Furthermore, it's almost exclusively paraffinic with few or no complex cyclic hydrocarbons or oxygenates that

would require further separation processing before a finished product can be obtained.

Therefore, the environmental attractiveness of Fisher Drokes diesel standards beyond the fact that it is sulfur-free the synthetic diesel is also of exceptional cetane and, of course, aromatic quality. Prospects for diesel among the strictest in the world require emissions performance equivalent to a reference fuel with a cetane value of 48 while Syntroleum's diesel product in cetane value nexus of 70. Similarly, the maximum aromatic specification of car diesels reference fuel is 10 volume percent. As you heard, this synthetic has no detectable aromatics.

The combined impact of the absence of sulfur, nitrogen, and aromatics coupled with the high cetane value yields a substantially improved emissions performance for this fuel. This, in turn, makes it a prime candidate to be used as a dilution blend stock to enable refiners to accommodate substantially inferior blend stocks in their fuel while meeting the progressively stricter standards that we have in front of us today.

The Naptha portion that is produced in the Syntroleum process is also completely paraffinic and also making it suitable for further processing in a

conventional refining scheme. In fact, the C6 plus the Fisher Drokes Naptha could represent the valuable dilution of blend stock for the existing refinery pool of aromatics and olefins, particularly if it's octane that can be accommodated in an integrated refinery scheme, for example, one where we are planning on using a combination of down-stream methanol blending.

Lastly, we have the transportation advantages of Fisher Drokes which enable us to move the products in the conventional scheme, in other words, the same ships and the same pipelines that are used to use move conventional fuel are the ones that will be used to move the synthetic products. All of these advantages, however, the strong favorable environmental characteristics, and so on, are pointing an increasing application of gasoline (unintelligible) technology for the years to come. However, the marketplace has taught us a clear lesson that none of this would have -- would come to pass if the economics did not walk side by side with all the rest of us.

And what I'm here to emphasize for you is that this technology's potential from an economic standpoint is every bit as attractive as it is from an environmental standpoint. There are some five trillion cubic feet of worldwide gas reserves, according to the "Oil and Gas

Journal." Approximately half of that gas is stranded, in other words, without any ready application.

Given a ratio of conversion of 10 to 1, that gas could be converted to 250 million barrels of synth fuels which is almost equivalent to all the estimated oil reserves of Saudi Arabia. I mean we are talking about tremendous volumes of material, clean fuel that can be produced in this range.

Now, what will that mean? Let's say, in a recent study that was done actually by the Arthur Andersen Company, we found that by unlocking enough gas to make 100,000 barrels of Fisher Drokes' products, a company of the size of Texaco, for example, could increase its price and its earnings per share by approximately 26 percent assuming the same PE multiple.

This would result just by reducing depreciation, depletion, and amortization on a per-barrel basis as the DBNA pool is spread over a larger reserve base. And this will be -- in addition to that, we would have substantial economic benefits accruing from the Fisher Drokes' plant itself.

And what are these benefits? We have been conducting a number of refinery linear model simulation runs at Hart/IRI to see what the value of these products are in the conventional refining scheme. We have found

them to be in the vicinity of five to 10 dollars per barrel over conventional diesel in a low-sulfur environment. These economics are driven not only by increased clean product values, but also by economics as it appears that refiners with access to this material as a blend stock component will be able to increase crude as well as process a more economical crude slate.

As you might expect, the highest value scenarios are those involving refiners processing heavier crude, such as local California crudes, Mexican crudes, and so on, with limited hydrocarbon processing and little dearomatization capability. New markets requiring the strictest new standards, again, such as the ones we have here in California.

And I will conclude by saying that the proposed rule to reduce sulfur content is, again, the necessary first step on the road to tomorrow's cleaner fuels, and we applaud the Agency for its initiative. We're confident that the future holds even more promise for the environmental performance of the diesel engine and fuel system, and we look forward to the combined advent of superior diesel fuels and the engine advances that will undoubtedly accompany them.

It makes little sense for us to dwell on the fact that 15-ppm sulfur spec versus the 30-ppm average

spec while the market forecloses on diesel. Let's concentrate on taking diesel to the next level of environmental performance as quickly as possible. We have a lot of ground to make up and a lot of impatient folks, as we heard out there, who have been waiting for us to step up to the plate for quite some time now.

Thank you very much for the opportunity to speak today.

MS. CHAIRMAN: Thank you, Nicholas.

Mr. Dan Muhtar, good afternoon.

MR. MUHTAR: Good afternoon. My name is Dan Muhtar. I'm a student at U.C.L.A. and a member of CALPIRG. I was asked to read a statement from Mary Ann Garvey. She's the president of the Los Angeles 10th District P.T.A.

She says: "I regret that I'm unable to attend the E.P.A. (unintelligible) public hearing on June 27th in Los Angeles. I am instead representing Los Angeles 10th District P.T.A. at the national P.T.A. convention in Chicago. However, I do want to commend you for the E.P.A. proposal that will require engine makers to meet tight particulate and carbon monoxide tailpipe limits and require the oil industry to remove sulfur from diesel fuel. Reducing particulate

matter by 90 percent and nitrogen oxide by 95 percent as well as reducing the sulfur component of diesel fuel by 97 percent will go a long way to improve the quality of air in Los Angeles.

"As early as 1973, the California State P.T.A. adopted a resolution on air pollution with the result that continuing encouragement could be given to legislative policies which would promote solutions for the existing problems of air pollution. Thus, I encourage you to adopt a strong diesel fuel policy. In 1997 the national P.T.A. adopted a clean-air resolution which is recognizing -- that air pollution such as nitrogen oxide, and particulate matter, sulfur dioxides, and other -- others have a detrimental affect on children's health.

"(Unintelligible) College based organizations to support regulations addressing air quality. The 10th District P.T.A. supports this strong E.P.A. regulation. Since diesel vehicles emit at least 50 percent of the dangerous soot particles in Los Angeles, nearly one-third of the smog-forming nitrogen oxides.

"Los Angeles needs cleaner air. Most

of the driving I do on the freeway -- is on the freeways, and the emissions from buses and trucks is most noticeable. However, last week I was driving on a surface street and came upon a school bus that was spewing clouds of black exhaust. I immediately rolled up my window and switched lanes to avoid the pollution. People on the street do not have this option. In fact, while I was planning to turn on a to a particular street, I elected not to because the school bus was making the same turn. Instead, just to avoid traveling behind the bus, I chose a different route.

"Diesel exhaust is dangerous for everyone to breathe. It is a particular health risk for children and the elderly. I urge the E.P.A. to act with stringent regulations. Let's clean up the air in Los Angeles and the rest of the nation.

"Sincerely, Mary Ann Garvey."

MS. CHAIRMAN: Thank you.

Miss Cathy Chang, welcome.

MS. CHANG: Good afternoon.

My name is Cathy Chang. I am a student at the University of Los Angeles -- University of California,

Los Angeles, and I'm also a representative of the organization of CALPIRG, and I was asked today to share with you a short letter from the Wilmington North Neighborhood Association.

And the letter reads: "Dear Administrator Browner, on behalf of our 120 members of Wilmington North Neighborhood Association, we urge the E.P.A. to adopt tough new emission standards for heavy-duty trucks and buses as soon as possible.

"Our community of Wilmington is adjacent to the Port of Los Angeles. We suffer the abuse of thousands of container trucks daily spewing their diesel exhaust fumes whether traveling or just idling their motors waiting for a load. This is in addition to open storage of petroleum, coke, and an open storage pile of sulfur.

"We have elementary schools that are just blocks away from container traveling and idling trucks that ply our streets daily, and, what with the expansion of the Port of Los Angeles and adjacent Port of Long Beach, it will continue to get worse.

"Won't you stop and listen to the affected persons who, with increasing health

problems, are trying to tell you something? Passenger cars had to comply with the rules. You should have had the trucks and buses comply at the same time. Is it going to be too late for anything to be done before more people have to suffer with continuing health problems?

"W.N.H.A. urges you to act as soon as possible to rectify this health problem.

"Sincerely, Gertrude Schwab, president of the Wilmington North Neighborhood Association."

Thank you for your time.

MS. CHAIRMAN: Thank you, Miss Chang.

Mr. Martin Schlageter, good afternoon.

MR. SCHLAGETER: Good afternoon. Thank you.

My name is Martin Schlageter, and I am here representing the Sierra Club and its 60,000 members in Los Angeles and Orange County welcoming you to Los Angeles, and I'm very pleased that you are not only undergoing this process but that you came to visit us here today. I also want to appreciate that you've had a long day, and I do have copies of my testimony, so I'll be brief.

Because you've come all the way to Los Angeles, let me tell you a little bit about what's happening here,

and I apologize if I'm repeating something.

The City of Los Angeles has recently affirmed its commitment to a clean-air policy and its support for alternatives to diesel fuel. It's also beginning to look into how it could retrofit diesel with cleaner technology.

The Metropolitan Transportation Authority here has, again, rejected diesel in favor of purchasing cleaner alternative-fuel buses. It has a longstanding policy for this, and it, too, has begun to look toward retrofitting the existing dirty diesel buses with cleaner technology.

In Orange County, the transportation authority has also rejected dirty diesel buses in favor of purchasing cleaner buses.

Private fleets and operators, as you may have heard from today, have begun -- albeit somewhat slowly -- have begun to move towards alternative fuels and cleaner technology. And, most recently, the A.Q.M.D., the Air Quality Management District, has set a strict regulation that effectively bans the purchase of diesel buses in -- for new additions to public streets. It not only will encourage alternative fuels, but it is beginning, then, also to look towards retrofitting some of the old fleet vehicles with cleaner technology.

Now, all of this is just what's happened within the last month, so you can see that there is a lot of momentum to go in the direction you're going, and that momentum here locally has affirmed what the Sierra Club and other environmentalists believe, and that's there is no going back to dirty, deadly diesel.

So all more reason for you to be here today. We appreciate what you have in front of you. We appreciate the process you're undertaking. I do want to encourage you to go as quickly as possible and as strictly as possible to reduce the sulfur content to as near to zero as possible certainly by no later than 2006, to reach a 90 percent emissions reduction as quickly as possible, certainly no later than 2007, and to keep in your rules strong incentives for alternative fuels and the advancement of cleaner technology.

We can't live literally with diesel, and so we are relying upon your rulemaking here to allow us to breathe easier. And, in the end, if you don't clean up diesel aggressively enough, we're going to be looking at how to eliminate diesel. So the chance is in front of you today to act with conviction, to act with urgency and immediacy, and to act with firmness on behalf of public health and the environment, and then at the same time then avoid a more difficult conflict later, a more

difficult choice later.

So I appreciate your time and your commitment to this, and I thank you for the chance to take a little bit of that time.

MS. CHAIRMAN: Thank you.

Mr. Lawrence Lebowsky, welcome.

MR. LEBOWSKY: Thank you.

Again, thank you for the opportunity to address you here today. My name is Lawrence Lebowsky, and I'm a lawyer in private practice here in Los Angeles, and I'm also the immediate past chair of the American Lung Association of Los Angeles County.

Today I'm speaking to you on behalf of our board of directors and the thousands of children with asthma and the people with lung disease whom we serve. We have made great strides in cleaning up our air here in Los Angeles. We worked hard at cleaning up cars, paints, and other solvents, dry-cleaning plants, and industry.

On June 16th, our Air Quality Management District took the bold step of adopting rules requiring public fleets to make the switch to alternative-fuel vehicles. In the South Coast air basin, I believe it is safe to say that we are leaders in the fight for clean air.

We have to be leaders because our air pollution

problem is huge. We breathe some of the worst air in the nation here in Los Angeles. We consistently rank Number 1 in ozone smog pollution. The A.Q.M.D. Zone Study shows that 70 percent of our cancer risk from the air we breathe is due to diesel exhaust, and this means a thousand cases of cancer per one million people, and that is why we are serious about cleaning up our air.

At the American Lung Association, we have witnessed an explosion in pediatric asthma rates over the last 15 years. Between 1982 and 1995, the asthma prevalence rate, the rate per thousand persons, among children increased over 86 percent. We do not know all of the reasons for this result.

We do know that air pollution significantly affects children with asthma. These children miss 100 million school days annually because they cannot breathe. Through our pediatric asthma programs, we warn parents to watch the air quality index and not to allow their children to play outside on bad air days. The A.Q.M.D. sends out warnings to schools and coaches telling them to keep all children inside during health advisories. We do so much to protect our children, and yet every weekday, these same children go to school on a bus that emits thick, black clouds of asthma-inducing diesel exhaust, and this must stop.

Diesel trucks and buses have been getting a free ride for too long. Since the 1970 Clean Air Act, diesel vehicles have actually been getting dirtier while cars are getting cleaner. We cannot allow diesel trucks to undo all the good work we are already doing to clean up our air. These trucks must be required to have the same emissions as cars.

The American Lung Association is pleased to support the proposed rules regarding a low-sulfur diesel fuel and new diesel engine standards. We strongly support the low-sulfur diesel fuel provisions and view the cap at 15 parts per million on sulfur as critical so that the pollution controls can indeed work.

We would urge the E.P.A. to consider implementing these rules earlier than proposed particularly with regard to the nitrogen oxide standard in 2010. We believe it is desirable from the viewpoint of public health and feasible from an engineering standpoint to have the new nitrogen oxide standards go into effect in the same year as does the particulate standard in 2007.

Through the adoption of these rules and though the adoption of these rules would make history, the fact is that we will not see the benefits immediately in terms of a reduction of ozone air pollution. That is why we

are urging you to move up the schedule. We must start eliminating dirty diesel now and not in seven to 10 years. Our lungs and our children's lungs deserve it.

I thank you for your attention.

MS. CHAIRMAN: Thank you.

Mr. Tim Morales.

MR. MORALES: Thank you very much.

I am the director of the Mexican-American Community Foundation. I'm also a board member of the American Lung Association. I'm here to ask you to adopt your common-sense approach to cleaning up heavy-duty trucks and buses. Mexican-American Community Foundation administers 22 child care and Head Start centers throughout the state of California primarily in urban centers such as East Los Angeles.

East Los Angeles has the most minority neighborhoods in the U.S., bears more than its fair share of the air pollution burden. We have in our community more industrial plants and more freeways which means we have more diesel trucks rumbling through our communities. African-American, Hispanic, and Asian-American children are disproportionately represented in areas of high ozone pollution.

Almost 70 percent of Hispanic children live in areas like East Los Angeles that regularly exceed Federal

ozone standards. Due to this disparity, we are experiencing in our community and our child care centers an increase in respiratory diseases such as asthma and bronchitis. This is why we need the E.P.A. proposal as not only a clean-air issue but environmental justice and quality-of-life issue.

I'm here to today to support your proposal to protect the public health by looking at big trucks and buses. It makes sense that you are proposing to reduce sulfur levels in diesel fuel by 90 percent by 2006 before other vehicle standards go into effect. I urge you not to weaken this provision by allowing an extended time line or higher sulfur levels. If the newer, cleaner trucks do not have the 15-parts-per-million sulfur cap, we will not have the necessary pollution reductions for healthier life in our centers.

We need to also make sure that new trucks and buses are meeting the emission standards on the roads not just during the engine testing. Furthermore, these newer, cleaner trucks should be required to meet the emission standards as soon as possible. We're already going to have to wait until 2007 before we see any major reductions in pollution. We should not have to wait until 2010 before we can get relief from smog-form pollution from these trucks and buses. Instead, emission

standards should sense for smog-forming pollution should be firmly implemented in 2007.

Finally, improving existing diesels makes sense for our health and environment but also replacing them with cleaner technologies makes more sense. Therefore, you should consider providing incentives to increase the use of advanced technology vehicles such as fuel cell, electric buses and trucks.

We need to push the engine manufacturers, oil industry, and the transportation industry further to develop these new technologies because our children's lungs depend upon it.

Thank you very much for your time.

MS. CHAIRMAN: Thank you.

Ms. Andrea Van Hook, welcome.

MS. VAN HOOK: Thank you.

My name is Andrea Van Hook. I am a staff member with the American Lung Association of Los Angeles county. We asked several of our children who are in our pediatric asthma classes -- we teach these classes in the public schools -- to write letters to you about what they think about the proposed new rule, and I have these letters to give to you today. I just want to briefly read you a few of them so you sort of now what the kids are thinking.

"Dear E.P.A.: I am so glad that you

people are protecting us people with asthma, because in a decade over 12,000 people die of polluted air (read it in an article.) I mean why did the trucking corporation know that the smokestacks on trucks would make people stay inside, children will miss school, adults will miss work. And when I was first diagnosed as asthmatic, I felt like I should move to Hawaii because of the fresh air and clean water.

So on the first day I knew I had asthma, I wanted to carry an oxygen tank stuck on my mouth and covering my nose. So my mom told me about the E.P.A., and told me the E.P.A. will protect you. And, now, what do you know? I'm writing the letter to the E.P.A.," exclamation point, exclamation point, exclamation point. Sincerely, Christian, age nine of Alhambra, California"

"Dear E.P.A.: I would like to thank you for your appreciation and for caring so much about us kids that have asthma. I really appreciate your work and consideration. You are really good people. Yours Truly, Sarah, age 10 of Los Angeles."

"Dear E.P.A.: Please clean those trucks

that have smoke for kids like us that have asthma. Your Friend, Byron." Byron wasn't sure if he was eight or nine, so he finally settled on nine. So he's nine.

"Dear E.P.A.: We deserve cleaner air. Why I think so is because if we don't, more people will get sick because of the polluted air. One cause are those big dirty trucks. We should get rid of them. Lots of people have asthma including myself, and if our air keeps getting polluted, our asthma will keep getting worse. So help us to create a cleaner air. Ashlee, age 11 of Long Beach."

One more, "Dear E.P.A.: Thank you for helping us and doing your job. Arica, age eight of Long Beach."

And we have more for you from children as young as five. They all know that trucks pollute because they can see it, they can smell it, and they can taste it, and they want you to do something about it. Please keep the 15-parts-per-million cap on sulfur and develop a program for checking in-use emissions.

We also ask you to seriously consider moving up the nitrogen oxide standard to 2007, as that will most directly help our smog levels in L.A. We also

urge you to provide incentives for advanced technologies so that research and development of cleaner, zero-emission transportation is encouraged.

By 2010, all of these children will be in their late teens, and they will have grown up breathing some of the dirtiest air in the U.S. But if you push forward with this proposal, then for their children, things will be a lot different. The air will be cleaner, and the skies will be blue.

Thank you.

MS. CHAIRMAN: Thank you, Ms. Van Hook.

Obviously the testimony from these children is a reminder of why we are here today and what we are trying to do which is to protect the public health of everyone, especially our children. Thank you very much.

I'd like to thank you all for your testimonies and taking the time to come and share with us your views about this very important proposal. Now, I'm told that there are some additional individuals here to testify so I will call the names.

Thank you.

Richard Rolfe, Smitha Gottimurkala, Joan Holmes (phonetic), Danielle Misolik (phonetic), Gene Krisher (phonetic), and Karyn Ihara.

If there is anybody else here in this room, there are a few people left, if you're interested in testifying, please come forward.

MS. IHARA: Hello, my name is Karyn Ihara. I am a student here at U.C.L.A. I am here today because I strongly support proposals calling for tighter fuel and engine standards across the nation. I think that replacing dirty diesel with clean diesel is important for everyone but especially for people with respiratory problems.

I have asthma, and I can't fully describe how relieved I'd be if I could actually breathe clean air all the time. Although I moved down here to go to school, I used to live in Sacramento. In the summer when it gets really hot, we sometimes get an inversion layer. That's when the air in the valley all gets trapped in. All the pollutants get trapped in, also, and the P.S.I. gets really high.

When the P.S.I. finally reaches 100 or so, people with respiratory problems are encouraged to stay inside all day. On those days, I stay at home if at all possible because I don't want to get an asthma attack. Compared to diseases like cancer and Aids, asthma seems pretty harmless, but having an asthma attack is a really miserable experience. It can even

be fatal. Just imagine trying to breathe by taking breaths that are only a quarter as deep as normal. Not only is it exhausting, it's scary.

Fortunately Sacramento's air only gets really bad in the summer. And I now live in Westwood where the air is also generally safe to breathe. However, even when the air in Sacramento is only marginally unhealthy, it can still make it difficult for me to breathe. And, since I often need to travel to places outside of Westwood, I often have to breathe unhealthy air.

If you're still not convinced of the damaging effects of dirty diesel on public health, I just want to remind you that the number of people with asthma and with other respiratory diseases has increased dramatically. Not only does dirty diesel exasperate (sic) respiratory problems, it also creates them.

By replacing dirty diesel with clean diesel, we can take a small step towards making the air across the nation healthier to breathe. Clean air is not just something that would be nice to have. For some of us, it's a matter of life or death.

Thank you for your time.

MS. CHAIRMAN: Thank you, Ms. Ihara.

And Miss Smitha -- if you would, pronounce

your name.

MS. GOTTIMURKALA: Yes. My name is Smitha Gottimurkala, and I'm actually a representative of CALPIRG, and I was a campus organizer at U.C.L.A. this past year. And for the last three weeks, I have had the opportunity to work with a lot of the community members, the doctors, the lawyers, also the environmental interest organization to come out to testify today.

In the interest of time -- I know that you guys have had a very, very long day -- I thank you for your time and your patience and also extreme attentiveness, like, throughout the entire day.

So I'm going to simply say that the varied and the very, very passionate testimony that we've heard all day from all these individuals, I fully, fully support as a comprehensive whole. And in addition, I also am fully supportive of the E.P.A.'s proposal.

And so -- I hate to do this to you -- but my father is an invasive cardiologist, and he made me promise, promise, promise to read his letter into testimony.

MS. CHAIRMAN: Please do that.

MS. GOTTIMURKALA: So I'm going to go ahead and read that on his behalf.

MS. CHAIRMAN: Please.

MS. GOTTIMURKALA: He states: "Dear Members of the Board: My name Dr. Marthi (phonetic) V. Gottimurkala, and I've been a practicing cardiologist for the past 13 years. Thank you for giving me the opportunity to voice my concerns regarding health hazards of air pollution due to diesel exhaust and to support clean air.

"As a practicing cardiologist, I have seen many patients with lung disease and congestive heart failure who live in inner-city neighborhoods and close to highways where there is increased air pollution.

"These patients are generally elderly with heart and lung problems with very poor functional reserve. These patients have acute exacerbation of asthma and they feel breathless when exposed to polluted air with particulate matter and other toxic substances which are irritant and carcinogenic.

"Several scientific studies have indicated there are increased incidents of lung cancer and decreased longevity in patients who live in areas with increased air pollution due to

diesel exhaust. This was documented not only in this country and in Europe, but in urban areas and India as well.

"The prevalence of asthma is on the rise in the United States as well as an increased death rate due to asthma by 118 percent." And I think that we heard from a lot of people today that that is the case. "Young children and older adults who work and breathe an increased volume of polluted air and those patients with advanced lung disease and congestive heart failure are a lot more vulnerable.

"In order to protect public health, you must require a drastic reduction in pollution from large buses and trucks powered by diesel fuel. We must act now to prevent disease, suffering, and death.

"I was disappointed to learn that the E.P.A. has proposed waiting until 2010 before implementing clean-up measures. Large trucks and buses are among the biggest source of air pollution. These must be cleaned up to protect public health.

"I urge the E.P.A. to reduce diesel sulfur levels to no more than 15 ppm nationwide

for all on- and off-road diesel vehicles nationwide by 2006.

"Secondly, to clean up all trucks and buses by at least 90 percent by 2007.

"Third, we must make sure that the big trucks are meeting the emission standards on the roads, not just during the engine tests.

"And finally, I strongly urge to increase the use of diesel alternatives such as in fuel cell buses and those that run by electricity.

"The above measures will prevent human suffering and protect the environment, and I hope you give serious consideration to the above issues in your final decision-making process.

"Thank you very much for your time. Sincerely, Marthi V. Gottimurkala."

He's never done anything political or written any sorts of letters of testimony in his life, so he's quite proud of this.

MS. CHAIRMAN: And we're honored to have his testimony.

Thank you very much, and this concludes our fourth public hearing in this beautiful city of Los Angeles.

Thank you.

I'm reminded we're committed to keep this open to 6:30, so we will be here until 6:30.

(AT APPROXIMATELY 6:30 P.M.,

THE HEARING PROCEEDINGS CONCLUDED.)

REPORTER'S CERTIFICATE

I, Kathleen P. Cagney, a Certified Shorthand Reporter in the State of California, with principal office in Los Angeles County, do hereby certify that the foregoing proceeding was written by me in Stenotypy and transcribed into typewriting; that the foregoing is a true and correct copy of my shorthand notes so taken.

_____
California CSR Number 10850

Dated: _____