2007 HEAVY-DUTY DIESEL PUBLIC HEARINGS

CHICAGO, ILLINOIS

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Record of Proceedings had before, Ms. Marge Oge, Presiding Officer, reported by Geanna M. Iaquinta, CSR, at the Rosemont Convention Center, Rosemont, Illinois, on the 20th day of June, 2000, commencing at 10:00 o'clock a.m.

MR. MATHUR: I think we'll start. If everybody could take their seats. Good morning. My name is Bharat Mathur, and I'm the director of the Air and Radiation Division for EPA's Region 5 here in Chicago. On behalf of the Agency and the regional office, in particular, welcome to Chicago and this public hearing.

The Agency's proposal, which is the subject of today's hearing, addresses emission standards for heavy-duty trucks and buses together with the low sulfur requirement for diesel fuel.

Heavy-duty vapors contribute to the health and welfare benefits -- effects, I'm sorry, of several air pollutants, including ozone, particulate matter, oxides of nitrogen and sulfur, and volatile organic compounds that include toxic pollutants such as formaldehyde.

In the Chicago area alone, it is our estimate that heavy-duty diesel vapors contribute more than 180 tons of nitrogen oxide or NOx emissions per day. This represents about 39 percent of the total mobile source NOx inventory, while only making up a little more than six percent of the vehicle mix.

The proposed program would have a substantial beneficial impact on the reductions of these types of emissions. It will reduce smog-causing nitrogen oxides by 95 percent and harmful particulate matter by 90 percent.

Every American who has driven behind buses or heavy-duty trucks is very familiar

with the smell of diesel fuel and the clouds of thick exhaust emissions. Such air pollution is not just dirty and annoying, it is a threat to our health.

I would like to thank you all for attending this hearing today and for your participation in this very important rulemaking. It is now my pleasure to introduce Margo Oge, director of EPA's Office of Transportation and Air Quality, who will be presiding over today's proceedings. Margo.

MS. OGE: Thank you, Bharat. Good morning. On behalf of EPA, I'd like to welcome you to this public hearing. I can see some familiar faces that were with us yesterday in New York City. Yesterday, we held our first of the five public hearings, and we are in Chicago today for our second hearing.

My name is Margo Oge. I'm the director of the Office of Transportation and Air Quality for EPA, and I will serve as the presiding officer for today's hearing. Today we'll hear testimony on the EPA's proposed rulemaking for cleaner trucks, buses, and cleaner diesel fuel.

We believe that this is a historic proposal. This program that we have proposed will exceed dramatic reductions in air pollution in the 21st century, the air equivalent of eliminating air pollution from 13 million of today's trucks on the road.

Last year, we established a new program called the Tier 2 program to dramatically reduce emissions from cars and light-duty trucks, like SUVs, minivans, pickup trucks, and

cleaner gasoline fuel. We are now focusing much needed attention on heavy-duty trucks and buses, applying the same principles in addressing the vehicle and the fuel as a single system.

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

This means that for the first time, heavy-duty trucks and buses, that is, diesel trucks and buses, would be able to use pollution control devices to meet emissions standards just as passenger cars have been doing over the past 25 years. These devices are extremely 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. These engines are more durable and get higher fuel economy than gasoline engines, but they also tend to pollute more. Over a hundred million people across the country today breathe unhealthy air. Trucks and buses contribute significantly to this problem as Bharat mentioned in his introductory remarks.

Diesel trucks and buses contribute 26 percent of the mobile source emissions of NOx in the city of Chicago and 16 percent particulate matter emissions. This pollution causes lung damage and respiratory problems, and there is increased evidence that diesel exhaust is linked to a human line of cancer.

The program that we have proposed will have a significant impact on these emissions.

In 2007, we're proposing a PM standard that will be 90 percent less than today's PM standards for those trucks. .

We're proposing NOx standards starting in 2007 and phasing into the 2010 time frame for diesel trucks that will be 95 percent cleaner than the current standard, and, finally, we're proposing that in 2006 the diesel sulfur fuel be limited at 15 parts per million. That is a 97 percent reduction of sulfur and diesel from the current level of 500 parts per million.

We estimate that the cost to produce and distribute the low sulfur diesel fuel will be about four cents per gallon, and we estimate that the cost for the engines will be $1,000 to $1,600, depending on the size of the vehicle.

We designed this program to include significant time for the introduction of both the new diesel fuel and the new diesel trucks and buses. Also, this program discusses a number of flexible approaches for both the diesel fuel and the diesel engines.

Before we start with today's testimony, I'd like to introduce all the panel members and describe how we will conduct this hearing. With me today, you met Bharat Mathur, who is the Air Division director of EPA's internal office here in Chicago. Thank you for coming, Bharat.

Next to me on my right is Chet France. He's the director of our Assessment and Standards Division. Next to me on my left is Dawn Martin. She's the chief of staff of the Office of Air and Radiation, and next to Dawn is Michael Horowitz, our lawyer from the Office of

General Counsel.

This is, as I mentioned earlier, the second of the five public hearings on this proposal. Today, 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 statements during those hearings, we will keep the public comment period open until August 14th to allow for written comments to this proposal.

We are conducting this hearing in accordance with Section 307-35 of the Clean Air Act, which requires EPA to provide interested persons with an opportunity for an oral presentation of data and views in addition to written submissions.

We are pleased to have received a large number of requests to testify. We'll do our best to accommodate everyone, and we ask the witnesses to limit their testimonies to ten minutes.

As you're testifying, there are two ladies in the front. Marion Hoyer, may you stand up? Thank you. And Robin? Thank you. These two ladies are very critical to running this public hearing very smoothly. They're going to be signaling you before the ten minutes is up. I would very much appreciate it if you respect their directions and conclude your remarks within ten minutes.

I will conduct this hearing formally. We request that the witness state their names and

affiliation prior to making their statement. Please write your name clearly on the paper provided and place in front of you. When a witness has finished his or her presentation, the members of the EPA panel may ask questions concerning the testimony.

Witnesses are reminded that any false statement or false response to questions may be a violation of the law. If there are any members of the audience who wish to testify who have not already signed up, please submit your name to the receptionist outside and we will do our best to have you come forward and testify.

Because of the large number of witnesses who will testify today, this hearing may go to the evening hours. We are prepared to stay here as long as it takes for the last person to testify. Also, we may have to move forward -- work during our lunchtime and breaks if we need to.

If you'd like a transcript of this proceeding, you should make arrangements direct with the court reporter during one of the breaks, and the transcript of this hearing will be available in the docket shortly after we receive them from the reporter.

Before we begin the testimony, I'd like to know if there are any questions. If not, I will introduce the first panel of today's public hearing. No questions. So let's proceed with our first panel. If I can call Mr. David Cugell,

Mr. Randy Trembly, Kalpana Kotgal, Mr. Jed Mandel, Mr. Charles Lagges, and Ms. Stephanie Williams.

Please print the names on the cards in front of you, and also I would like to ask for Ms. Danielle Estler to come forward. Mr. Cugell, we'll start with you. Good morning.

MR. CUGELL: Good morning. I'm David W. Cugell, a professor of pulmonary diseases at Northwestern University Medical School. I'm pleased to present testimony on behalf of the American Lung Association of metropolitan Chicago. I've been on the association's board of directors for 32 years. Diesel exhaust is more than just annoying, it's dangerous.

Composed of a hazardous stew of chemicals, diesel exhaust can cause airway inflammation and asthma attacks, decrease breathing capacity, and increase susceptibility to infection and allergic reactions. Diesel exhaust also contains potential cancer-causing agents.

Scientific research demonstrates that diesel exhaust contributes to the three major air pollution problems facing nearly every metropolitan area in the nation. They are, one, ozone smog pollution. Ozone is a strong respiratory irritant linked to over six million asthma attacks during the summer of ozone season. Including 300,000 in Illinois.

Two, fine particle or soot pollution: Fine particles are so small that they are easily inhaled and retained deep within the lungs. These fine particles aggravate asthma, bronchitis, emphysema, and heart disease. Studies suggest it is responsible for more than 40,000 premature deaths annually, including roughly 3,000 in Illinois.

The third major factor is toxic air pollution. The toxins in diesel exhaust alone have

been linked to 125,000 lifetime cancer cases. Diesel exhaust contributes to an air pollution problem that places us all at risk, but none more than those who live near heavy truck traffic. Scientific studies find that in children who attend school or live near heavy truck and car traffic are more likely to develop asthma, have asthma attacks, and be hospitalized for asthma.

The urgency of dealing with this problem in metropolitan Chicago is heightened by the fact that this is the nation's freight transportation hub. As a result, the entire region is effectively a dirty diesel hot spot.

Last year, the American Lung Association of metropolitan Chicago released a report that identified areas facing the greatest health risk from diesel exhaust. The report entitled Dirty Diesel Hot Spots, The Top Communities in Metropolitan Chicago, Exposure to Dangerous Levels for Diesel Exhaust, identifies areas within a half mile of highways, streets, intermodal transfer stations, and tollbooths with the most truck traffic in metropolitan Chicago.

For example, the report included limited access expressways that carry in excess of 15,000 heavy-duty diesel vehicles per day and arterial routes that carry more than 2,000 heavy-duty diesel vehicles each day. Such truck traffic volumes are among the highest in the nation for highways and local roads. More than 1.6 million people, including at least 100,000 with asthma, live in the worst of the area's dirty diesel hot spots. I am submitting a copy of the report for the record.

While we have made significant progress in cleaning up passenger cars, the same cannot be said about diesel trucks and buses. The national fleet of heavy-duty diesel vehicles emitted 17 percent more dangerous soot and 12 percent more smog-forming nitrogen oxides in 1997 than it did in 1970 when Congress passed the Clean Air Act.

During the same time, particulate emissions from gasoline-powered vehicles decreased 66 percent. Diesels are only two percent of all registered vehicles in the U.S., yet they produce roughly 27 percent of smog-forming nitrogen oxides and two-thirds of the soot emitted by the nation's entire vehicle mix. One diesel truck can emit as much air pollution and soot as 150 cars.

For these reasons, we support the proposed diesel engine and diesel fuel standards with the following enhancements: One, although EPA's proposed schedule for requiring cleaner, low-sulfur fuel in 2006 is adequate, we would like this provision to commence sooner; two, new trucks should be required to meet your proposed tighter limits on smog-forming emissions of nitrogen oxides by 2007, not 2010; three, it's not enough to require new trucks to be cleaner. Given the long life of diesel engines, EPA should also establish an in-use compliance program to commence in 2004; four, EPA's program should provide incentives for the use of advanced technologies that are cleaner alternatives to diesel.

Those who oppose our position on the basis of its economic impact overlook the fact that there are very real costs associated with the lung diseases that result from air pollutants,

particularly those due to vehicle emissions.

On behalf of the Lung Association, we urge you to include these provisions in your final program in order to protect public health. Please listen to the medical and health community on this crucial public health issue. Thank you.

MS. OGE: Thank you. Mr. Randy Trembly. Good morning. You may start.

MR. TREMBLY: Thank you. Good morning. My name is Randall Trembly. I am the vice-president of the National

Petroleum -- National Petrochemical and Refiners Association and a member of the executive committee of that organization.

The NPRA is a trade association of virtually all the large and small United States refiners and petrochemical producers. I am also executive vice-president of Crown Central Petroleum Corporation. Our company owns and operates two refineries in the state of Texas, and we move refined petroleum products through multiple distribution channels including pipelines, truck transport, through our product terminals, and retail service stations.

This morning, I'm here representing the National Petroleum Refiners Association, and I would just like to say that we are deeply concerned about the new diesel sulfur rule being proposed by the Environmental Protection Agency. The refining industry does not believe that we will be able to meet the proposed rule without spending substantially more than has been

represented by the Environmental Protection Agency.

I'd like to emphasize that NPRA is not objecting to a significant reduction in diesel sulfur. We favor a plan that will reduce the current 500 parts per million diesel sulfur cap to 50 parts per million. This is a 90 percent reduction in regulated sulfur limits, and it's a significant commitment by our industry. It's a very expensive plan, one we are committed to, at an estimated cost of about four billion dollars, and it will enable diesel engines to meet particulate matter standards sought by EPA and it will achieve significant NOx reductions. We believe that this level of diesel sulfur reduction is sustainable and affordable for many refiners.

Unfortunately, the Agency appears unwilling to make the major changes in its proposal which are needed to avoid supply problems and resulting price volatility. The EPA rule will be more expensive than has been represented for several reasons.

First, the cost to retrofit existing plants and build new capacity has been underestimated. The technology available to produce low-sulfur diesel requires a significantly higher investment for retrofits of existing desulfurization plants because the equipment design pressures, capacity shutdowns for maintenance and catalyst changes, and costs associates with disposing of spent catalysts.

There will be a strain on the industry's capital availability due to competing needs for other environmentally-related projects, including the eight billion dollars required for ultra-low

sulfur gasoline manufacture that will be overlapping with the proposed diesel sulfur requirements.

Limitations in the distribution system will tax our ability to move and segregate an ultra-low sulfur diesel fuel through the nation's pipelines and retail supply network without this product becoming contaminated, and, last, permitting and engineering and additional energy requirements will impact the contemplated construction requirements to meet these standards. I will elaborate more on these limitations as I explain our concerns regarding the proposed specifications.

First, I had mentioned the cost and technology of producing low-sulfur diesel. One of our members, CITGO Petroleum, has facilities at the LYONDELL-CITGO refinery in Houston, Texas. The EPA has referenced this particular plant as having desulfurization technology capable of producing ppm sulfur diesel.

Based on actual operating experience at that plant, the capital and operating costs are more than twice as high as the 15 ppm sulfur cap that has been claimed in the EPA proposal, and the ability of the technology to consistently produce 15 parts per million diesel has been problematic.

The actual capital cost for retrofitting this process unit was $86 million, almost three times higher than the $30 million revamp cost for a typical refinery as stated by EPA. A simple

retrofit is not possible on most units because the entire process is underdesigned with respect to pressure requirements and require support facilities such as high purity hydrogen, fractionation systems, storage, and other hardware are typically inadequate to support such conversions. In the real-world example at LYONDELL-CITGO, 17 million of the $86 million expended was just for supporting facilities. The company found that even with a substantial upgrade, they have had to exclude many feedstocks to consistently meet ultra-low sulfur levels.

The last piece I will mention regarding this LYONDELL-CITGO example is that in retrofitting their unit to accomplish the deep desulfurization, it was necessary to add reactor volume to increase the catalyst quantity in the process from 40,000 pounds to 1.7 million pounds.

Another item I mentioned that was leading to the underestimate of cost was the capital availability. During the 1990s, the refining industry was also called on to make massive environmentally related investments, totaling more than the actual book value of the entire industry. At this same time, the average rate of return on capital in the industry was two percent. We know what happens when proposed investments offer a return that is lower than banks pay on passbook savings. The investments aren't made, shortages develop, product costs escalate, and consumers suffer.

As a result of this crushing burden on refineries and fuel distributors, we are now seeing signs of stress in the system. Increasing stringency of fuel specification makes it more

difficult to produce and distribute the products. The impact of unforeseen situations, such as a refinery outage, a pipeline destruction, or even weather magnifies the problems. We experienced disruptions in the supply of home heating oil and diesel last winter.

Currently, logistical and supply problems in the RFG markets of St. Louis, Milwaukee, and here in Chicago have resulted in high gasoline costs. This situation occurs just as the industry is implementing changes to a new grade of reformulated gasoline with more stringent requirements. These occurrences are usually temporary, but they will probably occur with increasing frequency as we produce ever cleaner fuels. This situation is also addressed in a report published this year by the Brattle Group. The report, The California Conundrum, written by Phil Verleger, draws analogies between the sharp increases in gasoline in California -- the sharp increases in gasoline prices in California in the years 1996, '97, and '99, and claims that these spikes are analogous to heating oil price spikes on the east coast during recent cold periods.

Although some refineries may be able to meet the new specifications for diesel, many will be unable to make the large investments necessary to produce this product and will be forced to limit or forgo participation in the highway diesel market. They must find other uses or markets for their current diesel output, which will reduce the supply of highway diesel fuel available and will create volatility in prices. It could take as long as four years for the industry to respond to these market factors. Some refineries will likely go out of business.

The proposed 15 parts per million diesel plan has been estimated to cost the refining industry between eight and ten billion dollars. This amount comes on top of the eight billion dollars in costs the industry is already incurring to implement EPA's gasoline sulfur program in the very same time frame.

A study to be released this week by the National Petroleum Council, a joint industry government body, concluded refiners will not have the capability to make these investments within this time frame and that additional time is required for the low-sulfur diesel investments.

The refining industry is facing 12 major regulatory actions over the next ten years. Deep desulfurization requires more fired heaters and more energy consumption overall. The proposed diesel desulfurization requirements will be coming at a time when refiners are trying to reduce both the quantity and quality of emissions from fired heaters. The proposed NOx reductions from fired heaters will impose refining limitations that will compete directly with efforts to obtain permits to build more heaters for deep diesel desulfurization.

I'm going to skip a couple paragraphs in the information supplied to comply with my limitation. I'd just like to finally comment, the NPRA urges the Agency to discard their approach in favor of a more practical and sustainable 50 parts per million diesel sulfur cap, which the refining industry advocates. Thank you again for this opportunity. I'll be glad to respond to any questions.

MS. OGE: Thank you.

Ms. Kalpana Kotgal. Good morning.

MS. KOTGAL: I am Ms. Kalpana Kotgal. I am a concerned citizen, and I want to thank you for giving me the opportunity today to comment on a rule with important and far-reaching implications for our nation's air quality.

Most Americans living in urban and suburban areas encounter thick black clouds of noxious diesel pollution and suffer the foul-smelling taste, itchy eyes, sneezing, coughing, wheezing, and long-term health effects that are a direct result from breathing this exhaust. It's common sense that cutting the pollution from these trucks will result in enormous public health benefits and will vastly improve the quality of life in our cities and suburbs.

This common-sense notion was supported by 87 percent of people in a recent commission -- in a recent poll commissioned by the American Lung Association. Common sense in the case of diesel pollution is confirmed time and again by 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 as 89 percent. Earlier this spring, an association of state regulators estimated that more than 125,000 cases of cancer in the U.S. are the result of

breathing diesel pollution. Add to these 125,000 cases of cancer following health impacts, thousands of American lives cut short annually due to fine particulate pollution, thousands of hospitalizations and emergency room visits annually for asthma and other respiratory disease, and millions of days of restricted activity annually for vulnerable populations.

It is to prevent these health impacts that I strongly support the proposed standards to reduce heavy-duty bus and truck pollution. Three key pieces form the cornerstone of the proposed standard and must be preserved at all costs if the program is to be effective. The first is the 15 parts per million cap on diesel fuel sulfur content effective by 2006. The second is the .01 grams per brake horsepower-hour particulate standard effective in 2007, and, finally, the third is the .2 grams per brake horsepower-hour standard for NOx and hydrocarbons.

I support EPA's 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 ten years phasing in advanced engine and afterburner pollution controls for heavy-duty engines only to allow these controls to be poisoned and rendered ineffective by the presence of sulfur in fuel.

Given the ability of refiners to remove sulfur from diesel fuel as evidenced by the recent statement of support for the standard by two major oil companies, there is no reason to tolerate the scenario in which dirty diesel fuel damages or destroys the pollution controls.

Other observers have suggested alternative caps averaging systems. For example, the

American Petroleum Institute suggests that the cap of 50 parts per million would be sufficient. However, the consequences of setting a cap higher than 15 parts per million include, first, increased evidence of particulate filter failure; second, deterioration of engine performance, and, third, poisoning NOx catalysts. For the public, this means more pollution, more asthma attacks, more hospitalizations, more premature mortality, and more cancer. I urge the EPA to reject this alternative.

Similarly, I do not support alternative proposals which 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 grades of diesel fuel to remain in the market is basically impractical. It would be nearly impossible to ensure that the two grades of fuel would remain completely segregated throughout the distribution and refueling process.

Inevitably, under this scenario, trucks equipped with sensitive NOx and PM controls will fuel up with dirty diesel fuel that currently damage or destroy the pollution control systems. To the extent that these alternative proposals are designed to provide flexibility to small refiners, we believe this additional flexibility is unwarranted given the extremely long lead 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. The EPA proposal holds all new engines to a particulate matter standard of .01 grams per brake horsepower-hour in 2007, but allows a four-year phase-in period of the nitrogen oxide NOx standards, delaying full implementation until 2010.

I believe that this unnecessarily delays the smog-reduction benefits of the rules, prolonging the chronic smog problems faced by the more than 117 million Americans who live in ozone nonattainment areas across the country. The urgency of our need to reduce smog-forming emissions cannot be overstated. At the end of 1999, smog monitoring data was compiled from every monitor across the nation. What was found was that the health standard for smog had been exceeded more than 7,000 times. Moreover, according to a 1999 study by ABT Associates, smog causes more than six million asthma attacks, 150,000 emergency room visits, and 50,000 hospital admissions in a single summer in 1997.

I believe that all engines should be able to meet the .20 grams per BHP-hour by 2007. The Manufacturers of Emission Controls Association and association of companies who are most directly involved in providing 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 fuel.

In a recent letter from MECA to Administrator Browner, the director of our

organization stated, and I quote, we strongly believe that the NOx absorber technology will be commercially available in 2007, and any current engineering challenges involved with this technology will be addressed provided that very low sulfur fuel is available, end quote.

Thus, I urge EPA to eliminate unnecessarily -- unnecessary delay and apply the .20 standard to all engines in 2007. Short of this, I urge you to shorten the phase-in period to a length of no more than two years. I urge the EPA to reject the suggestion by some to include a technology review for the 2003 time frame. I believe that the review would be unnecessary given the high degree of confidence that clean fuels will enable rapid development in NOx emission controls technologies.

Moreover, I see the proposed technology review as a disincentive to actually develop cleaner engines. Giving the industry an opportunity to escape from new standards contingent or their own lack of future progress in developing NOx control technologies is far too much like the fox guarding the hen house. In addition, one could view this technology review as little more than an opportunity to take advantage of the changing political landscape under a new administration and one that may be less committed to protecting public health.

To the extent that you find this technology review is warranted, I urge you to ensure that it allows equally for the strengthening of the standards as for their relaxation. While diesel vehicles -- diesel engines are known as the workhorse of our present-day transportation system, it

is important to acknowledge that far cleaner technologies are being commercialized. The promotion of these technologies, including fuel cells, hybrids, and electric propulsion systems can lead to critical additional public health and environmental benefits.

I strongly support the inclusion of a blue sky program, to define with that propulsion technologies, or set lower emission standards for vehicles to be designated for receipt of incentives under subsequent local, state, or federal incentive programs.

Thank you. I'm actually going to yield the remainder of my time to Danielle Estler.

MS. OGE: Good morning.

MS. ESTLER: Good morning. Thank you for the opportunity to speak to you all today. My name is Danielle Estler. I'm a concerned citizen, and I'm here today to urge you to adopt the toughest possible standards to reduce pollution from heavy-duty vehicles.

Here in Illinois, smog sends more than 7200 people to emergency rooms each year and causes more than 310,000 asthma attacks. Making matters worse, a study by local air pollution control officials estimates that diesel exhaust is responsible for 125,000 cases of cancer in the United States.

I'm a resident of the city of Chicago, and as such, I rely primarily on public transportation to get everywhere. At the bus stop every morning, it is not unusual to see a lot of people going to work. However, during the school year, you also see a lot of children taking the

bus to school or standing on the corner waiting to cross the intersection on their way to school.

Every morning while I'm waiting at the bus stop, I find myself holding my breath as these heavy-duty trucks and buses drive past. While, you know, holding my breath may not be an effective solution to the diesel exhaust that I'm exposed to every day, I'm sure I'm not the only one here that developed this reflex every time I see these dirty vehicles.

So I strongly agree with the proposal to protect the public health by cleaning up big trucks and buses by over 90 percent by 2007. Also, since high-sulfur fuels poison new pollution control equipment, it makes sense that you're proposing to reduce sulfur levels in diesel fuel by 97 percent in 2006 before the diesel standards go into effect. I urge you not to weaken this provision by allowing an extended time line or higher sulfur fuels. If the newer, cleaner trucks do not have reliable access to 15 parts per million sulfur, they will not be able to meet the necessary pollution reductions.

Furthermore, these newer, cleaner trucks should be required to meet the emission standards as soon as possible. The availability of low-sulfur fuel will allow for soot and smog-forming pollution from diesels to be reduced to 90 and 95 percent, respectively, by the year 2007.

However, the EPA is proposing to wait until 2010 to clean up smog-forming pollution, and we are already going to have to wait until 2007 before we see any major reduction in soot

pollution. We should not have to wait until 2010 before we can get any relief from smog-forming pollution from these trucks and buses. Instead, the emission standards for both soot and smog-forming pollution should be fully implemented in 2007.

Finally, cleaning up existing diesels makes sense for a healthy environment. Replacing diesel with cleaner technologies makes even more sense. Therefore, you should provide incentives to increase the use of advanced technology vehicles such as fuel cell and electric buses and trucks. These measures are critical to the public -- to the protection of the public health and the environment, and I hope you seriously consider them in your final decision-making, and I thank you for allowing me to speak here.

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

MR. MANDEL: Good morning, Margo. Good morning members of the panel.

My name is Jed Mandel, and I'm here today on behalf of the Engine Manufacturers Association. Among EMA's members are the principal manufacturers of truck and bus engines covered by today's proposal.

As we sit here today, we are on the cusp, 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 motive power available today and the backbone of our nation's transportation and delivery system.

The diesel engine can be as clean, if not cleaner, than any other power source. It is capable of meeting emission standards significantly below today's levels, and let me remind everyone 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. The key, of course, is to greatly reduce the sulfur content of diesel fuel. Future reductions of diesel engine emissions are going to require much more than new engine designs and technologies.

As the EPA appropriately recognizes, future emission reductions require a systems approach involving the engine, aftertreatment, and fuel. In a sense, the future of clean, low-emitting trucks and buses rests on a three-legged stool, and the stool will fall without all three legs in place. One of those legs, fuel quality, enables the technologies 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 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 low sulfur fuel. It enables substantial NOx and PM emission reductions, it provides direct PM emissions reductions, and it provides benefits, not just from new engines, but from the entire fleet of diesel fuel engines.

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 the entire fleet and enables the use of known aftertreatment technologies, such as oxidation catalysts and catalyzed particulate filters, which can reduce the organic and carbonaceous components of PM emissions, can reduce hydrocarbon emissions, and enables technologies to reduce NOx which, in turn, will reduce secondary PM.

We will applaud EPA for recognizing the critical role of fuel sulfur. We strongly support the need for a uniform, 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, 15 ppm does not go far enough, and fuel improvement shouldn't only be limited to trucks and buses. Nonroad fuels also must 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. Nationwide, ultra-low sulfur fuel can -- no, must be achieved, and it can be done cost-effectively without undue economic harm to either the oil industry or to the trucking industry, the users of

both our engines and the oil industry's fuel. We will provide detailed comments on the need for ultra-low sulfur fuel in our written submission.

So today, we are enthusiastic, we're excited, and we're hopeful about the future of the diesel engine and our industry's 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 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 flexibility, and testing certainty, and tremendous emission reductions can be achieved.

Thank you for allowing me to testify. If you have any questions, I will be pleased to answer them.

MS. OGE: Thank you. Mr. Charles Lagges. Good morning.

MR. LAGGES: Good morning. My name is Charles Lagges. I'm the director of the Cook County Department of Environmental Control here in the Chicago area, and I'm a past president of ALAPCO, the Association of Local Air Pollution Control Officials, and this Agency represents my own agency as well as more than 165 other local air pollution control agencies across the country. I'm here also on behalf of STAPPA, the State and Territorial Air Pollution Program Administrators, which represents the Air Pollution Control Agencies in states and territories. I'm pleased to have this opportunity to provide the Association's testimony on EPA's

recent proposal to set more stringent emission standards for on-road heavy-duty engines and vehicles and to reduce levels of sulfur in the on-road diesel fuel.

On behalf of STAPPA and ALAPCO, I would like to commend EPA for its continued leadership in reducing air pollution from the mobile source sector. Your final promulgation last December of Tier 2 motor vehicle emission standards and a national low sulfur gasoline program was a remarkable accomplishment that will benefit the entire country. This month's heavy-duty engine and low-sulfur diesel proposal is a further demonstration of your Agency's commitment to efficiently and cost-effectively reduce a wide variety of mobile source-related emissions and achieve meaningful improvements in air quality across this nation.

We applaud this initiative and the systems approach upon which it is based which addresses both the engine and the fuel. We are especially pleased that the proposed heavy-duty engine and diesel sulfur programs reflect the key recommendations made by my STAPPA and ALAPCO over the past year and a half. This program is of vital importance to our members, and for this reason, our Association adopted with overwhelming support a resolution calling upon EPA to establish a stringent low-sulfur diesel fuel cap and enable the introduction and effective operation of advanced technologies, such as lean NOx catalysts and absorbers and particulate filters. We have placed the highest priority on participating in the rule-development process, and we're very proud that EPA has concluded that the most appropriate strategy so closely mirrors

that for which we have advocated.

As the officials with the primary responsibility for achieving and maintaining clean and healthful air across the country, the state and local agencies are keenly aware of the need to aggressively pursue emission reductions from a heavy-duty mobile source sector, which contributes substantially to a variety of air pollution problems. As EPA acknowledges in its proposal, by 2007, when the proposed engine standards would take effect, the on-road heavy-duty diesel engines and vehicles will account for 29 percent of the mobile sources and NOx emissions, 14 percent of the mobile source PM emissions.

Under the control strategy EPA has proposed, however, by 2030, the on-road heavy-duty vehicle NOx emissions would be reduced by 2.8 million tons and PM emissions by approximately 110,000 tons. These emission reductions as well as others that the proposed rule would affect will play a pivotal role in addressing an array of significant environmental problems that continue to pose health and welfare risks nationwide, including those associated with ground-level ozone, coarse and fine particulate matter, sulfur oxides, air toxics, visibility impairment, acid rain, and global warming.

Based on the substantial contribution of the heavy-duty vehicle emissions to air pollution and very serious public health and environmental problems, we have no alternative but to impose greater controls on these sources and on their fuels and to do so in a truly meaningful

way. Further, because many of these vehicles constantly travel back and forth across this country, their emissions are ubiquitous, and for this reason, regulation of the heavy-duty mobile source sector and of the fuels used by these sources must be done on a national basis as EPA has proposed.

In the coming weeks, STAPPA and ALAPCO will be providing more comprehensive written comments on the complete proposal, but today I would focus my comments on few fundamental issues related to heavy-duty diesels and the fuel.

The air pollution that comes from the large diesel buses and trucks is not only among the most visible there is, it is also among the most offensive. What is worse, however, is that the exhaust from these vehicles brings with it adverse health impacts that can be dire.

It poses a serious threat to public health nationwide. Perhaps, the greatest risk posed by heavy-duty diesels comes from toxic emissions. Diesel exhaust contains over 40 chemicals listed by EPA and California as toxic air contaminants, known human carcinogens, probable human carcinogens, reproductive toxicants, or endocrine disrupters. In 1998, California declared particulate emissions from diesel-fueled engines a toxic air contaminant based on data that supported links between diesel exposure and human cancer.

Further, last fall, the South Coast Air Quality Management District released a draft report, the Multiple Air Toxics Exposure Study in the South Coast Air Basin or MATES-II,

which included an analysis that cancer risk in the region from exposure to diesel particulate. Based on this analysis, South Coast concluded that the cancer risk posed by air pollution, 70 percent is attributable to diesel particulate emissions with mobile sources being the dominant contributor.

STAPPA and ALAPCO were alarmed by the South Coast findings. So, this past spring, based on a tailored, more conservative version of MATES-II, we sought to extrapolate the evaluation of cancer risk from diesel particulate to other cities across this country and to estimate how many cancers nationwide were the result of exposure to diesel particulate. We found that on a nationwide basis, diesel particulate may be responsible for 125,000 cancers over a lifetime.

Let me be clear, this is not a precise number. Instead, it's an approximation of a potential national impact of exposure to diesel particulate that highlights the need for swift and certain regulatory. Further, it allows us to estimate that EPA's proposal, which includes a 90 percent reduction in particulate emissions for on-road heavy-duty diesels could prevent 35,000 of these cancers. We just cannot afford to forgo this opportunity, and EPA, much to its credit, has issued a proposal that ensures that we will not.

STAPPA and ALAPCO congratulate EPA for responding to a serious environmental problem with an equally serious strategy that establishes rigorous emission standards for on-road

heavy-duty diesels and a commensurately low cap on sulfur in diesel, all within the time frame that will allow us to reap the benefits of this program beginning with the 2007 model year, and although there are several aspects of the proposal with which we have concerns, we will offer recommendations to address these in our written comments. The fact remains that the key components of this proposal are rock solid, and we do support them.

With respect to the emission standards, we strongly endorse the levels EPA has proposed; a particulate matter standard of .01 grams for brake horsepower-hour and a NOx standard of .2 grams for brake horsepower-hour, which are 90 and 95 percent cleaner than today's standards respectively. Although, we are very pleased that the PM standard will take full effect in 2007, we do have concerns regarding the four-year phase-in period that's proposed for the NOx standard, and, again, we'll offer these in our written comments.

Inextricably linked to the proposed engine standards is the issue of low-sulfur diesel fuel. The ability of the heavy-duty diesels to comply with the stringent engine standards that EPA has proposed is directly dependent on the timely and nationwide availability of diesel fuel with ultra-low levels of sulfur. Without this fuel, technologies capable of achieving the low emission standards will be rendered inoperable, and for this reason, STAPPA and ALAPCO vigorously support the 15 part per million cap of sulfur and diesel fuel to take full effect across the country in mid-2006 with no phase in.

This provision of the proposal is absolutely essential, and while an even lower cap may prove to be necessary, it is crucial that the final rule include a fully effective, nationwide cap of no higher than 15 parts per million.

While nonroad diesel engines are not addressed by this proposal, STAPPA and ALAPCO view the control of nonroad diesels to be just as critical as onroad diesels, and we firmly believe that the technological advances that will occur in order to meet the onroad heavy-duty diesel standards will eventually carry over to nonroad equipment. We're extremely concerned, however, that EPA may not be proceeding as quickly or aggressively to develop nonroad diesel engine and fuel requirements that are commensurate with the enormous contribution these engines make. We recommend that EPA adopt engine standards and a sulfur cap for the nonroad diesel engines that are equivalent to those for onroad diesel engines and within the same time frame.

In conclusion, I thank you for this opportunity to provide the associations' preliminary perspectives on this important proposed rulemaking, and, again, we applaud you for seizing the opportunity to take another enormous step toward cleaning the air. We commend your leadership in developing a technologically, economically, and environmentally credible approach for addressing this problem and preserving the integrity of the framework that you have proposed is imperative to the viability of this program.

On behalf of our associations, I offer you our continued cooperation and partnership as you move ahead. Thank you.

MS. OGE: Thank you. Thank you very much. Stephanie Williams.

MS. WILLIAMS: I'm Stephanie Williams from the California Trucking Association. We represent 2500 companies operating into and out of California. More than half of our membership are interstate carriers.

California has a unique approach to diesel fuel. We support EPA's proposal in its entirety and would urge them to move ahead in 2004 rather than 2006. We're taking our quest for low sulfur diesel fuel on the road. We attended the hearings in New York and will be attending all the hearings. This is one of the most important proposals for the trucking industry that's ever been proposed.

Let me explain to you why. Diesel technology is very important to this country and every country. Fuel standards are not new. We're talking about 15 ppm fuel. This is something that's been in Sweden and Denmark for a number of years. The European communities are now -- they have 2005 reformulation to 15 ppm and recently have decided to re-evaluate that because lower than 15 is feasible and something they want to move towards. So the sky isn't falling here, it's just not.

California reformulated its diesel fuel in 1993 to what falls between 120 and 160 parts

per million, and hanging around in Chicago this week, I kind of noticed your fuel is a lot higher than ours. So the fuel price and the fuel quality do not seem to be connected. We had similar problems in California with fuel prices upon the introduction of low sulfur -- it's low -- we call it by-product low sulfur because of hydrodraining. So we ended up with a low aromatic, low sulfur fuel, and the California Trucking Association sent many letters to legislators and to our governor to investigate oil company price gouging, and we believe the biggest danger to this country is the regional fuel supplies. Regional fuel supplies provide different fuels to different regions. California has a regional fuel supply. We paid up to 40 to 50 cents a gallon more in '93 and '96 because of one thing, because we had regional fuel supply. We didn't have the economies of scale that come with a national fuel supply.

Some of the oil companies in our region have gone into Texas and gone into Arizona advocating regional fuels. Why would they do this? Stock prices, profit margins. If you can limit supply, the price will be higher. This is the biggest danger to the trucking industry, the diesel users' industry in this nation, high prices without the benefits of low sulfur clean diesel fuel. If we're going to pay more for fuel, shouldn't we get something cleaner out of it? The California Trucking Association members believe yes, we should. We don't have a choice other than changing the Federal Clean Air Act to move ahead with these standards. Air quality is a zero sum game.

In California, we've moved a little farther ahead than some and missed some of our strict attainment dates. The San Joaquin Valley didn't meet its standards for 1999. It's going to be bumped too severe. Sacramento has gone to the legislature asking for $75 million because our highway funds have been blocked in Sacramento because we have not failed to demonstrate that we can meet the 2005 standards. I don't know how many people have been to L.A. lately, but the 2010 standards have never really looked very feasible. This brings problems to our region, problems where air districts, for example, come in, like the South Coast Air Quality Management District did Friday and banned diesel fuel in garbage trucks and buses in the four county region of Riverside, L.A., Orange, and San Bernardino.

The price of a natural gas garbage truck is astronomical. The citizens of Los Angeles, a very diverse area, cannot afford to have alternative technologies that don't provide the maintenance costs and even air quality benefits of diesel because these standards far surpass natural gas technology. These gasoline standards today will take the pressure off the trucking industry. We don't make engines. We don't make fuel. We move freight. We bring food to the grocery stores. We bring goods to market. That is our function. We should be using the cleanest and safest technology available.

Fuel prices will be higher. Reformulating the 15 ppm standard is a maximum of price and product. What I mean by that is if you go from 15 to 30, you increase the fuel penalty.

That's us. When we drive a truck using the 15 ppm standard with the technology they talk about today, we get a certain fuel economy, and right now we're getting about eight miles per gallon in a heavy-duty semi. If the fuel standard is up to 30, that's a -- we get a penalty of one percent in fuel economy, a penalty. If it goes up to 50, that is a higher penalty. So by accepting the higher fuel standard, you are putting more cost on the end user in the form of fuel economy. So you've got price on one end and you've got efficiency on the other end. That is something that has to be evaluated, and that is something our members feel very strongly about. The fuel penalty hit is important, just as price.

One of the most important things that we talked about today is maintenance cost. How would you like to buy a car that you had to change the catalytic converter, you know, every 30 days? That's not reasonable. The cleanest fuel possible provides us with a product where we drive the truck, not spend all of our time fixing the truck. Our job is to move freight, not keep vehicles that are not in well maintenance. The elements of sulfur, sulfur is a poison.

If sulfur is in the fuel, then the -- what is similar to the catalytic converter in a car, the NOx absorber, the continuous particulate regenerator, which are the favorite technologies of the trucking industry because they're low maintenance, will be spoiled. If they're spoiled, who ends up with the price? Who ends up with the cost at the end? The trucker. The trucker wants a maintenance-free vehicle, clean, maintenance-free, and a fuel price that's reasonable as well as

economies of scale within the efficiency of the engine.

So we're asking today that EPA look at all of these things, look at the end user, the maintenance, the fuel economy, efficiency, price, which 15 ppm provides the best of all. The threat to this nation of reasonable diesel fuels, a fuel in the northeast that looks only at sulfur, a fuel in California that looks only at air matter, a fuel in Texas that looks at whatever they feel like looking at, we want a national clean 15 ppm diesel fuel so we can continue to move freight and bring goods to market for the public. Thank you.

MS. OGE: Thank you. I have a question for Ms. Williams. You stated that your preference or the associations' preference is 2004?

MS. WILLIAMS: Yes.

MS. OGE: Could you please elaborate the importance of 2004 for your association?

MS. WILLIAMS: Many of the states -- I think if other states were to look at their SIP attainment plans, we'd see that 2005 is actually a better date for a national fuel standard and for some of these clean -- especially for NOx technology to come forward. We believe the technology is feasible. NOx absorbers have been used on gasoline turbines for a number of years. That's the best available control technology. Technology pricing rules are how we got to where we are in this country today with cars. Pushing towards the electric vehicle brought cars to a cleaner place, and we believe that 2004 is feasible.

Many of the oil companies in California are producing 15 ppm fuel today. We have a rule on the books that says garbage -- not garbage trucks, transit buses must use it starting next year, I believe. It's produced quantities statewide for transit buses. That California Air Resources board is coming out with some more rules for the needs assessment on diesel listing as a toxic air contaminant and they will push probably sooner for national fuel standards. So retrofit and different technologies can be used to clean the air, but we cannot meet a 2005 Sacramento deadline with a 2006 fuel reformulation, and most of the states, if you look at Atlanta, and some of the other major metropolitan areas, California, we're not even number one in dirty air anymore. We're just more used to the process of SIPs and what it means to the independent companies, and we believe that 2004 would be preferable.

MS. OGE: Thank you. I have a question for Mr. Trembly. Thank you for your testimony. Obviously, one of the most significant issues that we are dealing with in this rule is the level of the sulfur in the diesel fuel, and we have proposed to cap it at 15 parts per million in order to enable aftertreatment technologies that we allow for very significant NOx and PM reductions, 90 to 95 percent reductions.

We accept the oil industry's proposal of 50 parts per million, however, we clearly articulated in the proposal that such a sulfur level, 50 parts per million, will severely impact aftertreatment technologies, both PM and NOx. In our analysis, in 50 parts per million sulfur and

diesel, we allow only for 20 percent reduction in NOx and PM.

In your testimony, you are referring to significant NOx reductions and PM reductions if we go forward with 50 parts per million. Could you elaborate how you envision those reductions to take place?

MR. TREMBLY: I believe that -- I believe that the 50 parts per million diesel we do meet the particulate standard, and that for the NOx standard, the standard that EPA had selected, was lower than a standard. I think the words in the commentary was an arbitrarily low number, lower than is even being used in Europe and Japan and it didn't think it was necessary to go that low. I don't think we were saying that at ppm you could actually meet that number, and I think also we are not certain of the technology on these aftertreatments. I think some of the statements this morning by different members were that they expected this technology to be available.

MS. OGE: So your testimony refers to particulate standards, that your association believes that 50 parts per million could exceed the .01 PM standard, but not the NOx standards?

MR. TREMBLY: That's right.

MS. OGE: Okay. Mr. Mandel, could you give us the assessment of your association about this aftertreatment technology both for PM and NOx catalyst, what your members are telling you as far as their capability of meeting the standards that we are proposing based on the 50 parts per million?

MR. MANDEL: We won't be able to make it. With respect to the particulate standard, sulfur is a poison. It will poison the aftertreatment technology that will be required to get the additional 90 percent reduction in PM. In addition, sulfur is a particulate itself, which is emitted through the engine as sulfate, and just as the pure conversion of sulfur to sulfate will exceed the particulate standard or the 50 ppm level.

So on two fronts, your particulate standard will not be achievable. The technologies -- the aftertreatment technologies will be poisoned. That will not last the life requirements that the customer as well as the Agency would like to see, and the absolute particulate levels itself will not be achieved with the sulfur to sulfate conversion.

With respect to NOx emissions, as we've testified and as you've heard from others and will hear today, low sulfur fuel enables the aftertreatment technologies for NOx without the very, very low sulfur levels that we're advocating, the technologies that will be required, the new aftertreatment technology required to reduce NOx, simply will not be able to function on the engine, and with in-cylinder type controls, which is the way that emissions have been controlled to date in diesel, and I might say to a significant degree, as you know, engine manufacturers have been able to achieve remarkable reductions within the engine itself, 90 percent reductions, but those reductions while, perhaps, can be marginal improvements without aftertreatment technologies will never achieve the additional lower levels that the Agency is seeking.

MS. OGE: Thank you.

Ms. Williams, I have a question for you. In Europe, there has been significant experience with catalyzed traps, and based on our analysis of data that we have, with 50 parts per million sulfur level, the failure of those catalyzed traps is about ten percent.

Could you tell us what are your members willing to accept as far as competence of this technology's durability and percent failure?

MS. WILLIAMS: Some of those tests were using 30 ppm fuel. It's a mix in Europe. You've got some of Italy and I think some of the southern countries using 50, and you have a mix of 30. In Sweden, they're using five ppm in the cities, in Denmark also, I believe, for the commercial trucks. So you have no problem in Sweden and Denmark, zero, which is just to give you an idea where our members will stand on this.

We passed a law in 1993 in California that said that the government couldn't have a test with any false failures, zero false failures. We were successful in passing that legislation, which set down our inspection and maintenance program for four years. So maintenance failures, false testing, any of that kind of thing we have a very strong position on.

It's just not right to do that to the end user because they are driving their trucks, not here at this hearing evaluating their sulfur control of their fuel, evaluating how often they're going to have to change their particle trap, and the technology spoken of by the oil companies is a

different trap than is favored by the trucking industry.

We prefer the continuous regeneration particulate trap, and 50 ppm fuel will not, not may, will plug that trap. The reason we prefer that trap is because we stay away from it. It continuously regenerates, burns off, and it's a safer way to go. As the director of environmental affairs, I also have the petroleum carriers tank conference that I manage and the waste haulers conference, and this urea ammonium waste is a stream that for our industry we are not rocket scientists like some of the oil company and engine manufacturer scientists. We're truckers. We move freight and to have hazardous waste on site, we try to minimize that, to minimize our exposure to that. We prefer a less or more benign particulate trap.

MS. OGE: Thank you. I'd like to thank all the panelists for taking the time to meet with us this morning and offer your testimonies. Thank you very much.

I'd like to ask for the next panel. We have a group of students and I believe a teacher from Lyons Township High School with us this morning. I don't know if you have signed in already. If you are, please come forward. Also, Ms. Barbara Flynn Currie, if you're here, please come forward. We'd like to ask you to please print your names on the cards placed in front of you before we start.

Good morning. Could you please state your names for us and we can start.

MS. SULLIVAN: Linda Sullivan.

MS. THULLEN: Angela Thullen.

MS. OGE: Good morning.

MS. SULLIVAN: Three years ago, Angela was a student in my U.S. history class. At the end of the year, she and I and several of my students formed the Social Action Club of Lyons Township High School with the idea that we would bring improvements to our community.

MS. THULLEN: Our major project that year was working with the American Lung Association on collecting data on diesel truck exhaust in our community. We used the visual opacity reading procedure, which is on page two of our testimony, set forth by the Illinois Pollution Control Board in 1992 and measured the diesel exhaust at eight community sites following the same process at each test site.

First, we only tested trucks that came to a complete stop. Second, we did not measure the initial compounded black cloud of exhaust expelled from the diesel smokestack, but only the exhaust after the initial burst.

Third, we compared the exhaust from the diesel trucks to the exhaust emissions chart provided by the American Lung Association and in accordance with the Illinois Pollution Control Board guidelines, and, fourth, we kept tallies of the trucks as either dirty or clean, depending on the opacity of the exhaust.

In the end, the Social Action Club measured close to 250 diesel trucks and buses,

nearly half of which failed to meet the standard set by the Illinois Pollution Control Board. Our actual calculations, as it says up there, were that 44.58 percent of diesel trucks in our community failed. On the map of the area that we have up there, we have marked out with a yellow triangle, those are our testing sites.

MS. SULLIVAN: We also have a map. The second page shows the map, and we have all of the thing marked on the map.

MS. THULLEN: Actually, the green triangle isn't there, but those are our testing sites. The little red house is our schools in our area, and the blue cross is the hospital of the area. As you can see, the testing site that produced these results are all within proximity to our schools, which is of great concern to us due to the fact that truck traffic intensity and the concentration of emissions measured close to schools have been found to be significantly associated with chronic respiratory symptoms, specifically asthma, and, furthermore, proximity of a child's residence to a major road is linked to hospital admissions for asthma, and of the nearly 4,000 students who attend Lyons Township High School, many live quite close to our testing sites or in similar areas, which are all equally affected by truck pollution.

As you can see, if and when our students are hospitalized for asthma, even at the hospital they would not escape from truck pollution. LaGrange Memorial Hospital is surrounded by testing sites where trucks failed to meet the Illinois Pollution Control Board standards.

MS. SULLIVAN: And I wanted to say that this is a very personal thing to me. I've had students in my classroom who've suffered from asthma. Four years ago, I had a student by the name of Brittany Groves who, right in my history class, had just a terrifying attack. One minute she was learning about the world wars, and the next minute she was gasping for air, and she absolutely appeared to -- as if she were drowning in front of us. She was obviously terrified. So was I. So was every student in that class. I pushed the button for the emergency nurse, and it seemed like an hour until she came, and I'm sure it was minutes. We were watching this girl just struggling for her life in front of us.

Eventually, the nurse came. Eventually an ambulance came for her. Her parents missed work, of course, that afternoon as they rushed to meet her at the hospital, and it wasn't the first time for them that they had to do that, of course. I had another student by the name of Maling Keck who I knew through the Social Action Club who had to go on a respirator three times a day to preserve her life, and in grade school she had been hospitalized for asthma for a week, and as I understand it, she almost died.

Childhood asthma accounts for 10.1 million missed days of school in the U.S. each year. The estimated cost of treating childhood asthma each year is $3.2 billion. We would like to thank you for tackling this issue, and we think you've written some good rules that we hope you go through with.

There's three things that we're asking you to consider though. One is that we feel that new trucks should be required to meet the limits on smog-forming emissions of nitrogen by 2007, not 2010. As I was on my way here and trucks were billowing smog in my face, I was thinking how great it would be when these emission rules went into effect, and then I was thinking, oh, that's ten years from now. I'm going be retired and old by that time.

Also, we think it's not enough just to require that new trucks are cleaner. We're asking that by 2004 the EPA should also establish a program for checking emissions on used trucks, and also we hope that the EPA will provide incentives for the use of advanced technology. My students stood on busy street corners on a cold day in December. They could have been home playing video games or studying for school or shopping for Christmas gifts. Instead, they were testing trucks because they care about pollution. This is an important thing for our community.

We know you care about pollution, too, and we're asking you to pass the strongest regulations possible. Thank you.

MS. OGE: Thank you.

Ms. Flynn. Good morning.

MS. FLYNN: Good morning. My name is Barbara Flynn Currie. I'm a state representative, and I'm also the majority leader of the Illinois House of Representatives, and I am

here today to applaud the Environmental Protection Agency's proposals to require cleaner diesel fuel in 2006 and strict limits on particulate pollution from new trucks in 2007. Diesel fumes contribute to the smog problem right here in Illinois. Diesel particulate matter is directly connected to long-term heart and respiratory illnesses among our citizens. Although the diesel-powered trucks account for only two percent of highway traffic, they're responsible for nearly 30 percent of the nitrous oxides that contribute to ozone, and they're responsible for more than 60 percent of the soot, and it is the soot of the particulate pollution that contributes to large numbers of premature deaths, approximately 3,000 a year in Illinois.

So it isn't just that I get cranky calls from my constituents, particularly after they've taken their gas-fired cars through the emissions checkpoint, they come home and they call immediately to let me know that they were following after that exercise a nasty burning sooty car, truck, or bus. It isn't just that they're cranky about it, the reality is that there are reasons to be concerned about the nasty stuff that is currently being emitted by those very diesel machines, and my understanding is that your proposals would reduce particulate matter by approximately 90 percent and the nitrogen oxide emissions by even more. These measures would certainly go a long way towards ensuring a healthier Illinois, and I applaud you and support the proposals you make.

We, in the Illinois General Assembly, under the strong leadership of House Speaker

Michael J. Madigan, have already been at work with standards and enforcement efforts that we hope will protect our citizens from diesel pollution. Illinois law today provides for annual emissions testing for most diesel-powered vehicles that weigh 16,000 pounds or more and are registered in our federal nonattainment areas, Metro East and the Chicago metropolitan area. Awaiting the governor's signature is a measure that would in addition, and I think this is very important, give the Illinois State Police the authority in those nonattainment areas to perform nonscheduled tests for any truck that meets the weight requirement no matter where it's registered if the truck emits smoke that is visibly opaque. Clearly, the USEPA's current proposals for new trucks would set a higher standard than applies under Illinois law today. We support the proposals.

We think our enforcement program offers some security that should the USEPA rules go into effect for new trucks, we will be prepared to make sure that strong standards continue to apply as trucks age. I know Speaker Madigan is committed to cleaner diesel fuels and a reduction in diesel particulates, and I know he is committed to do an effective enforcement program for older trucks that apply to Illinois roads. Thank you for your time and attention. I'm happy to answer any questions, although nothing technical, please.

MS. OGE: We thank all of you, and obviously this is a public hearing. We're traveling across the country because we are extraordinarily interested in hearing from everybody affected,

we're interested, but most especially we're interested in hearing from the general public and the state representatives of this beautiful state of yours. So thank you very much.

We're going to go to our third panel, and I'd like to call for Mr. John Deaton, Ms. Maureen and Kyle Damitz, and it's Maureen Damitz and her son Kyle, Warren Slodowske, Mr. Bruce Bertelsen, and Jura Scharf. We'll start with Mr. John Deaton. Good morning.

MR. DEATON: Good morning. I'd like to have Mr. Remster speak first.

MS. OGE: Okay. That is fine. Could you please state your name and affiliation for the reporter?

MR. REMSTER: Thank you. Good morning. My name is John Remster. I am a farmer from Northwest Indiana. I farm 700 acres of corn and soybeans, and I also raise 50 head of beef cattle. I'm here to share my concerns about the proposal to lower the amount of sulfur in diesel fuel as a farmer and member of the local cooperative.

I'm a third generation farmer/producer farming the farms where both my grandfathers farmed. I have been a farmer member and owner of a local cooperative all of my career, and the local cooperative has been a supplier of refined petroleum products for 73 years in our community. My local cooperative is a member/owner of Countrymark Co-Op, a regional refining and distribution cooperative in Mt. Vernon, Indiana. As a side note, our refinery

operates on 100 percent U.S. crude oil pumped from the Illinois basin down in Southern Illinois and Southern Indiana and Kentucky.

Countrymark supplies approximately 60 percent of the farmers in Indiana with Super Diesel X4 gasoline and other petroleum products used to run tractors, combines, trucks, and irrigation equipment 12 months of every year. We need the refinery to continue to operate -- to be able to continue to operate to supply these products to the farmer. The past three years have been financially difficult for producers, and operating efficiently has become a way of life on my farm. Part of that efficiency comes because I know I will always have quality diesel fuel and other petroleum products delivered in a timely manner and at a competitive and fair price to my farm from the Countrymark refinery. For producers like myself who continue to receive quality diesel fuels and other fuels, Countrymark must operate at a profit. Operating profitably can happen only if there are not unreasonable restrictions put on our refinery in regards to lowering sulfur levels in diesel fuel and gasolines. Neither Countrymark, my local cooperative, or I have the extra money to invest in all that will be needed at our refinery under these proposed regulations.

Currently, I own four diesel-powered tractors. The range in age on these tractors is 27 years for the oldest to 12 years for the newest. In addition, the combine I use to harvest crops is eight years old. All this equipment is used throughout the year and is in good working condition.

These engines were manufactured in an era when higher rates of sulfur were used because sulfur gives better lubrication to the internal parts of a diesel engine. I am concerned that an extreme reduction of sulfur would disrupt supplies of fuels to my farm, raise prices, and increase maintenance costs, and also lead to expansive retrofitting to adapt to extremely low levels sulfur.

I am not aware of all the technical problems concerning sulfur phase down, but John Deaton, who is vice-president of refinery operations for Countrymark, Incorporated, is here with me and will make comments in that regard. He has many years of refining experience and is highly regarded in the refinery industry. Thank you very much.

MS. OGE: Mr. Remster, thank you. Mr. John Deaton, good morning.

MR. DEATON: Good morning. Can you hear me okay?

MS. OGE: Yes, we can.

MR. DEATON: I'm going to read excerpts from my written comments. My name is John Deaton, and I'm the vice-president of refinery operations and the refinery manager at Countrymark Cooperative in Mt. Vernon, Indiana. I am a chemical engineer by education. I've been in the oil refining business for 26 years. Countrymark Cooperative, Incorporated is owned by 118 local cooperatives who are owned by approximately 200,000 farmers in Indiana and Ohio. Coutrymark operates a 24,000 barrel per day petroleum refinery located in Mt. Vernon, Indiana. Countrymark Co-Op is a small refinery as defined by the Small Business Administration and by

EPA.

Countrymark's refinery provides over 60 percent of any items agricultural fuel needs. Our refinery feedstock is low sulfur crude oil obtained 100 percent from the Illinois basin. Countrymark's capital cost estimate to produce onroad diesel is as much as $21 million. This cost estimate includes $16 million for a diesel hydrotreater and $5 million for a sulfur recovery unit. These estimates are based on preliminary proposals and discussions with two engineering companies, Howe-Baker Engineering Company and IFP. We estimate that it will require 15 percent more capital to construct a desulfurization unit to meet a 15 parts per million sulfur cap versus a 50 sulfur -- ppm sulfur cap, and in our case, this amounts to over $2 million. In our opinion, cost versus benefit has not weighed heavily in EPA's proposed rulemaking.

Countrymark will also have to spend as much as $10 million to desulfurize gasoline. Our capital cost estimate is based on estimates from four technology vendors, CDTECH, IFP, Phillips Petroleum Company, and Universal Oil Products, also known as UOP. Novel technologies are still developing for both diesel and gasoline desulfurization and it would be premature for a small company like Countrymark to invest until the technology in mature. In addition to the capital cost, there will be ongoing operating costs which EPA itself has estimated to be four cents per gallon and which would increase Countrymark's annual operating cost by approximately $7.6 million per year.

Constructing these units within a short period of each other will strain the human resources of small and cooperative refiners. We simply need more time for permits, engineering, construction, and, most importantly, time to select a

new -- to select and train new employees from a limited rural labor pool. We are concerned about the safety risk in our small, rural refinery if we are pushed too far too fast.

In conclusion, Countrymark, other small refiners, and other cooperative refiners asks for your consideration for all of the following four recommendations. Our first recommendation, we recommend that EPA delay issuing the proposed rulemaking on onroad diesel sulfur until three criteria are met. The first criteria, until more is known about the effectiveness and cost of various new processes now in development. The second criteria, until more is known about the level of diesel sulfur reduction needed for the aftertreatment technologies, and the third criteria, until EPA includes their intended sulfur reduction for offroad diesel and home heating oil in the same rulemaking.

Our second recommendation, if EPA cannot delay a rulemaking on the onroad diesel sulfur, then we recommend that EPA set the onroad diesel sulfur cap at 50 parts per million. This will reduce the capital needed for small refiners and will reduce Countrymark's capital required by over $2 million.

Our third recommendation, if smaller refiners construct diesel desulfurization units

within the time frame of the proposed rulemaking, then we recommend that EPA grant small refiners at least two more years extension for the construction of gasoline to desulfurization units. This would be in addition to the two-year extension that has already been granted to small refiners. This will allow small refiners a longer time over which to secure and pay back capital, obtain engineering services and permits, and safely complete construction and start-up.

Our fourth recommendation, we request that EPA recommend to the administration and to Congress that some level of tax relief or guaranteed loans be provided to smaller refiners and cooperative refiners for the construction of diesel and gasoline desulfurization facilities. This will preserve a vital part of the petroleum industry and the mostly rural economies in which many small refiners and cooperative refiners are located. Countrymark Cooperative appreciates the opportunity to testify in these important hearings, and we are ready to answer any questions now or in the future. Thank you.

MS. OGE: Thank you. I'd like to welcome Ms. Damitz and your son Kyle. Good morning.

MS. DAMITZ: Good morning. Kyle will go first.

MR. DAMITZ: Hi. My name is Kyle Damitz. I have come here today to tell you how our bad air affects kids like me with asthma. The air pollution is worse in the summer on ozone days. During these ozone days, I will almost always have an asthma attack if I go outside. On a

good day, I take two pills in the morning and three pills at bedtime. I do an IV treatment every two weeks.

On a bad asthma day, I take four pills in the morning, more at lunch, and, again, more at bedtime. I have to do breathing treatments with my nebulizer every three hours and do 15 puffs of inhalers. Having asthma puts a lot of limits on my life. I can't go outside a lot of the time. I can't go near pets with fur. I can't swim at my grandma's on days with bad pollution. I have to go to the doctor and get allergy shots.

I came here today to help make breathing -- to ask you to help make breathing for kids with asthma easier. By making some changes in the laws, you can make the air cleaner. By making the air cleaner, you are giving asthmatics a chance to breathe easier. If our air was cleaner, I would be able to take less medicine, be able to play outside more. If you make our air cleaner, I will be able to live longer.

MS. OGE: Thank you, Kyle.

MS. DAMITZ: I've come here today to tell you why the new diesel guidelines up for consideration are so important. My name is Maureen Damitz. I have lived in Chicago all my life. Currently, my husband is an employee of the city. So, therefore, we are restricted to living within the city. I have three children with asthma, two sisters with asthma. I, myself, have asthma. I have one niece and two nephews with asthma. I'm here to represent all of them and the

many other families living with this disease.

Living with asthma has been a very difficult challenge in our lives. It is not just a little difficulty breathing. It is a disease that reaches out to so many areas in the family. Two years ago, my husband switched jobs for insurance reasons. Kyle had, at the age of nine, used up $500,000 on our existing medical coverage, which had a lifetime cap of one million.

Before you, this pile of papers in this bag is our medical bills since Kyle was born. While instituting new guidelines is going to cost some money, asthma and lung disease are costing us all plenty. This is the medical bills for one family with asthma. There are 17,000 Americans in this country living with this disease. Asthma has both direct and indirect costs, and its indirect cost is costing this country billions each year. There have been great strides over the last ten years in the management of asthma. There are new drugs developed each year to help all asthmatics live much fuller lives. There are products that develop that help us maintain much cleaner, dust-free homes. There are bigger and better air filters available to help us keep the air in our homes cleaner for better breathing. The one

problem we cannot clean up is the air our kids breathe every time they go outside the door.

Kyle will spend much of the next three months indoors while many of his friends are outside playing. I have learned through education and trial and error how best to keep Kyle's indoor environment healthy, but I cannot change the outdoor air he breathes in. It is one area of

asthma that many parents struggle with. You have the power and ability to change the outdoor air for Kyle and other children like him. Kyle's life is very limited by his disease, but despite that, Kyle has learned to excel beyond his limitations. Kyle has always maintained a high B average in school. He has always been on sports teams and has even been had a spot on a traveling soccer league the last two years, but despite all his efforts to succeed, our air quality has interfered in so many ways in his life.

Many a day, Kyle is kept home from school because the air quality has been too poor for him to safely leave the air-conditioned house and go to an unair-conditioned school. Many times Kyle has had to be pulled out of a soccer game to use his inhaler because the air pollution that day was too much for him. Many days Kyle has had to skip soccer all together because there are ozone warnings posted for the day that do not permit him to go out.

Children with asthma live a difficult life. They live a life of pain, needles, shots, tests, X-rays, and IV treatments. They lead a life of looking at summer from the safety of their homes watching out the windows at other children playing. They lead a life of frustration. I hope when you make your decision on whether or not to institute the new guidelines, you remember Kyle and all the other children like him. They live in America, the land of freedom, but because of our air quality, their freedom has been taken away. Give them back their freedom. Give them back their lives. Give them back the cleaner air so that they can lead a life they have a right to. We

have made some great strides in cleaning the air in the last ten years. Unfortunately, we have a ways to go. We have a responsibility to the children of America. We need to clean up our country so that our children have a future. I can control so many areas of our homes, lives, and Kyle's future, but I cannot control the outside air he breathes. You can. We can pass the standards before you. You can help asthmatics everywhere breathe a sigh of relief. Thank you.

MS. OGE: Thank you. Mr. Warren Slodowske, good morning.

MR. SLODOWSKE: Again, good morning. My name is Warren Slodowske. I am Manager of Environmental Staff for the Engine Group of International Truck and Engine Corporation, which, as many of you know, formally was known as Navistar.

I am here on behalf of Patrick Charbonneau, vice-president of Engine Engineering for 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 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 towards meeting the challenging new emission standards beginning in 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 hundred of millions of dollars in the development of new technologies for all the markets where our engines are sold. We are reinventing all of our engine lines through revolutionary engine design and the 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 ppm diesel fuel commercially available. These oil companies have earned recognition and our applause for their efforts to bring clean diesel fuel to the marketplace early.

With this ultra fuel available so soon, International will commercialize its green diesel engine technology next year and thus achieve EPA's proposed model year 2007 hydrocarbon and PM emission standards six years ahead of schedule. This is just one example of the impressive environmental benefits that accrue from the systems approach involving both clean fuel and clean engine technologies, and we have an example of that green diesel technology in a school bus out front, and we invite you all to come out, to see, and smell.

I also commend the Agency for its willingness to phase in the proposed NOx standards. We strongly support a NOx phase-in approach, which underscores the challenges facing the industry in meeting NOx control targets. EPA's proposal goes far in addressing these technological challenges, but we believe that even more can be done without compromising important environmental objectives. In that regard, I'm pleased to say that 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 engines in 2007. The NOx standard in 2007 would be significantly below the NOx standard applying to model year 2006 engines. Then, in 2010, the NOx standard would 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 flexibility to meet these 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 we 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 emission reduction objectives. We look forward to discussing in our written comments these and other technical details of EPA's proposed rule.

Thank you for giving me the opportunity to present International's views today, and I welcome any questions. Thank you.

MS. OGE: Thank you for your testimony. Mr. Bruce Bertelsen, good morning.

MR. BERTELSEN: Good morning. Thank you very much. For the record, my name is Bruce Bertelsen. I'm 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 vehicle standards as well as the highway diesel sulfur control requirements. We believe an important opportunity exists to significantly further reduce emissions from highway heavy-duty diesel engines by utilizing and engineered systems approach that incorporates and combines advanced engine designs, advanced emission control technology, and very low sulfur fuel.

EPA's regulatory initiative recognizes the importance of promoting a systems-type approach, and the Agency's proposal constitutes a carefully crafted and balanced program. If 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 members have over 30 years of experience and a proven track record in developing and commercializing exhaust control technologies for motor vehicles. These technologies have made an enormous

contribution to efforts to clean up this country's air quality.

Today, I will briefly summarize MECA's position on EPA's proposal. We submitted a somewhat more detailed statement to the panel, and we will be following up with written comments before the close of the comment period, but today I would like to focus on two items. First, the technological feasibility of the diesel heavy-duty engine standards and, secondly, the critical need for very low sulfur diesel fuel to meet these standards. With regard to technological feasibility, we believe the emission standards proposed for highway diesel powered heavy-duty engines can be achieved in a cost-effective manner and within the lead time provided if very low sulfur diesel fuel is available.

EPA, in its 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 optimize the filter systems for the specific engines to which they will be applied. Worldwide, there are over 20,000 engines equipped with filters, and I think it's important to know that in areas in Europe where diesel fuel with a sulfur level of less than ten ppm is available, filters equipped on engines have been operating for extended periods with no problems.

In fact, some of these vehicles have achieved mileage accumulation rates in the hundreds of thousands of miles and the filters continue to provide excellent PM control performance. Development and optimization of NOx absorber technology is progressing at a rapid rate, and our members fully expect that with the availability of very low sulfur fuel, this technology will be commercialized in 2007 for diesel engines. Our members believe there are no barriers to this technology and that the challenges are engineering in nature. Indeed, these companies are making a substantial R & D investment development because they believe the technology will be commercialized.

The fact that EPA proposed a 15 ppm sulfur cap has had a very, very significant positive impact on the rate of effort to commercialize this technology. Turning to the need for very low sulfur fuel, meeting a .2 NOx and a 0.1 PM standard over the full useful life of an onroad heavy-duty diesel engine as certified over a combined transient and steady state certification test procedure not to exceed limits will be very challenging.

As previously stated, however, we believe these challenges can and will be met, and the ultimate goal of a truly clean diesel is possible, but, again, very low sulfur diesel fuel will be needed.

While we continue to recommend to EPA that it establish a sulfur cap of five 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 levels of .01 PM, and that NOx absorber technology will be optimized to help meet the .2 NOx standards. At levels above 15 ppm, we doubt these proposed standards can be met.

In closing, I would like to take the opportunity to commend the Agency for its comprehensive and balanced proposal. It certainly presents challenges, but we believe these challenges can and will be met, and our industry is prepared to make the necessary commitment to ensure that if the standards are adopted and if low sulfur fuel is available, we'll develop the technologies to get to that goal. Thank you very much.

MS. OGE: Thank you for your testimony. I'd like to welcome Ms. Jura Scharf. Good morning.

MS. SCHARF: Good morning. For the record, my name is Jura Scharf. I am the executive director of the Chicago Asthma Consortium, and I do welcome this opportunity to provide testimony on an issue of great importance to my organization and the people of Chicago.

You've heard from individuals who have had experience with asthma here in the Chicago area, and I'm hoping that my testimony will at least begin to show you that these are not isolated incidents, but a part of an alarming pattern that is happening not just here in Chicago, but

across the country.

The Chicago Asthma Consortium was formed in January of 1996 as a joint project of the American College of Chest Physicians and the American Lung Association of Metropolitan Chicago in response to the asthma crisis facing us here in Chicago. The purpose of CAC was and remains to reduce morbidity and mortality and enhance the quality of life of persons with asthma. We do this by bringing together in an organized fashion many of the important players in the field of asthma, institutions, organizations, individuals, researchers, educators, persons with asthma and their caregivers.

Separately, each of these, obviously, has firsthand knowledge of asthma, but only by bringing together all of these people can we begin to synthesize our knowledge as a way of addressing the runaway rates with which we're faced in the Chicago area. In the brief four years since our formation, we have brought together a great deal of data from the field through all our various members and collaborators, and I think that we have a couple of things that might be instructive to understand just exactly what is going on.

We know from research available that while asthma is a complicated disease, it is much influenced by environmental factors. A great deal needs to be done in terms of basic research, but it's become clear from all the studies that have been going on for a great many years that high ozone levels and particulate matter, particularly particulate matter in diesel exhaust as

well as secondhand cigarette smoke, leaves, and that kind of thing, are definite triggers of asthma attacks. There is no question about it. We also have data from the Illinois Health Care Cost Containment Council that shows that the number of hospitalizations for asthma in Illinois has grown over the last three years in all parts of the state, rural as well as urban, with a great increase in the Chicago Metro region.

Now, I've heard some, you know, some discussion here about EPA's cost should take into account cost benefit analysis. Several hundred million dollars are spent on hospitalizations alone for persons with asthma in Illinois. I'm quite sure that given the population of the state if you multiply that by 50 states in the union, you're talking about a very, very major investment in dollars, both public dollars and private insurance dollars, that, quite frankly, do not need to be spent if asthma could be controlled, if we could do away with some of the triggers of these asthma attacks.

Over the last six years, the city of Chicago has seen an increase in the number of community areas where much higher than average asthma hospitalizations. Attached to my testimony are maps that show the track of those increases.

The very interesting thing about this is that the most effective zip codes track very, very closely with the diesel hot spots identified by the study that was shared with you by the teacher and her student in the last panel. The study, Dirty Diesel Hot Spots: The Top

Communities in Metropolitan Chicago for Exposures to Dangerous Levels of Diesel Exhaust. Now, given what we know, no child should ever die of asthma, and yet in less than ten years in the city of Chicago, 69 children have died of asthma. That's in the city alone. We also have estimates from various researchers that ozone smog causes more than 300,000 asthma attacks during an average Illinois summer. I could go on citing more statistics that our members and our organization have pulled together, but I think the picture is very clear. We have to do something to turn that situation around, and first and foremost we have to begin to curb sources of known triggers for asthma attacks.

As Representative Barbara Flynn Currie said, you know, Illinois has had strict maximum allowable emission limits for heavy-duty diesel vehicles since 1992, but it's only last year that advocates were finally successful in requiring trucks register in Metro Chicago and Metro East St. Louis to undergo an annual diesel exhaust test. This is quite a step forward, but we really need to have a federal plan to ensure that all trucks, not just those registered in Illinois, become cleaner over time, and the time really needs to be as short as possible, particularly for us in Illinois because Illinois has the second highest truck traffic load in the entire country, 7.7 billion miles every year, which makes us second only to California. A federal standard is absolutely necessary to safeguard the health of our citizens.

We believe very strongly that not only should the EPA stick to its schedule for

requiring cleaner diesel fuels, but we believe that it is imperative that tighter limits on emissions for new trucks joining fleets be pushed forward. We support the American Lung Association's proposal of 2007 rather than 2010 as the target date.

It's also critical that the EPA and the federal government go beyond mere standard setting, but also establish a program for checking in-use emissions, especially for used trucks which, of course, fall outside the requirements for newly manufactured vehicles. It took Illinois nearly eight years to put inspection mechanisms into place. During that same time period, uncontrolled exacerbated asthma has been on the rise. Illinois citizens, especially those with asthma and other respiratory problems can't wait to breathe easier.

I appreciate the opportunity to provide this testimony.

MS. OGE: Thank you. I'd like to thank all the panelists, especially Kyle, for sharing your views with us. Thank you very much.

I would like to call the next panel. Please come forward, Ms. Kathy Schubert, Ms. Lloyd Eagan, Mr. Mark Bishop, and Ms. Jane Friedman. If you can please print your name on the cards placed in front of you.

MS. EAGAN: Hello. I'm very happy to be here. My name is Lloyd Eagan, and I am the director for the Bureau of Air Management for the Wisconsin Department of National Resources, and before I get into my testimony, I want to say I was very moved by the previous panel, and

Kyle in particular. His childhood was my childhood, and it had something to do with motivating me to work on air quality in my adult life.

So good morning, and I thank you very much for the opportunity to address you about the long awaited and much anticipated proposed federal regulations to address heavy-duty vehicle emissions through an integrated approach.

I would like to recognize the federal administration and the U.S. Environmental Protection Agency for their leadership in this issue. I also want to point out why this legislation is important for the federal government to do. The states need the emission reductions, but we don't have the appropriate authority, and we don't want to see a patchwork of state and local regulations on this particular issue.

I am appearing at this hearing because I believe that the integrated approach of the proposed regulations will go a long way towards improving air quality by reducing pollutants emitted from heavy-duty vehicles and their effect on public health and welfare. These regulations will also help states achieve their air quality goals and meet federal air quality standards for ground level ozone and particulate matter, otherwise known as soot. A comparison of the cost of the proposed regulations with the emission reductions that they are estimated to achieve indicates that these standards are a cost-effective way to reduce pollution.

Heavy-duty diesel engines are significant contributors to air pollution. Nitrogen oxide

emissions from diesel engines are primary precursors to the formation of ground level ozone. It is estimated that by 2010 more than half of nearly eight million tons of nitrogen oxide emissions nationwide for mobile sources will be coming from diesel engines. One-third of this is attributed to onroad heavy diesel vehicles. In Wisconsin, it is estimated that by 2007, annual nitrogen oxide emissions from highway vehicles will be nearly 158,000 tons. The proposed regulations would reduce smog-causing nitrogen oxide emissions from those vehicles by 95 percent. This amounts to a reduction of 2.8 million tons each year when the program is fully implemented in 2030. Diesel engine emissions are a threat to public health. They generate particulate matter or soot emissions which account for 20 percent of direct PM10 emissions.

The projection is that by 2010 nearly 70 percent of the 600,000 tons direct PM10 emissions from mobile sources will be contributed by diesel engines. In Wisconsin, we project that by 2007, annual PM10 emissions from heavy-duty vehicles will be about 4,460 tons. Heavy-duty diesel engines are also a major source for fine particulate matter, which contributes to a variety of respiratory health problems.

The proposed regulations would reduce soot emissions from these vehicles by 90 percent, which is estimated to be about 110,000 tons of reduction each year by the year 2030. Diesel engine emissions are a hazardous mixture of toxic air pollutants such as benzene and formaldehyde and other toxic substances, which are known human carcinogens or probable

human carcinogens. Reducing diesel exhaust emissions will result in a reduction of 33,000 tons of toxic air pollutants each year.

Finally, reducing diesel engine emissions will significantly improve other environmental impacts, including regional haze, acid rain, and global warming. The stringent diesel engine emission standards proposed in the regulations would require the broad application of advanced high efficiency emission control technologies, which are very sensitive to sulfur in diesel fuel. The proposal for reduction of sulfur in diesel fuel to 15 ppm, a 97 percent reduction, will allow the application of these advanced emission control technologies to achieve the stringent emission standards. In addition, low sulfur diesel fuel will also provide emission and maintenance benefits in the existing fleet of highway diesel vehicles. Overall, the projected cost impacts of the proposed regulations as an integrated clean vehicle-clean fuel approach are small when considered with the lifespan of heavy-duty engines which remain in operation for a considerable length of time and mileage. We also believe that the proposal allows for adequate lead time and flexibility for the industry to meet the new vehicle emission standards and diesel fuel sulfur levels.

In conclusion, I would like to reiterate Wisconsin's support for the proposed regulations. We believe that this integrated approach to address the harmful emissions from highway heavy-duty engines is very cost-effective and will ensure cleaner and healthier air for all

Americans. Again, Id like to thank you greatly for the opportunity to testify before you.

MS. OGE: Thank you, Ms. Eagan. I'd like to welcome Ms. Kathy Schubert. Good morning.

MS. SCHUBERT: Good morning. Since I'm speaking on behalf of the Chicagoland Bicycle Federation, I want to tell you what we stand for. The mission of the Chicagoland Bicycle Federation is to improve the bicycling environment and thereby the quality of life in the region. The Federation does this by promoting bicycle safety, bicycle education, and bicycle facilities, and by encouraging the use of the bicycle as an energy-efficient, economical, and nonpolluting form of transportation, and as a healthful and enjoyable form of recreation. In other words, we're out there in the street right behind those dirty trucks.

Like many others in Chicago, I often ride my bicycle instead of driving my car, for business purposes, for personal errands, and just for pleasure. I cycled over 5,000 miles last year, and my 11-year-old car just topped 50,000 last month. So that's a whole lot less than I ride my bike. While I still enjoy riding in traffic for the exercise I get and the money I save on gasoline or bus and train fare, I'm increasingly annoyed and concerned by clouds of black soot from passing trucks and buses, and especially when they start up at the stoplight.

On a typical day, at least 20 of these vehicles pass me by spewing this smelly and unhealthy mix of pollution. In the winter, the exhaust from the buses is enough to warm the air.

It feels good for a while, but then I remember that I can't take the heat without getting the pollutants with it. There's a host of other reasons to worry about the damage that this pollution is doing to my health.

I'm sure you all know well air pollution from diesel trucks and buses has been declared cancer causing by the state of California. Diesel exhaust also contain tiny particles that are known to shorten the lives of tens of thousands of Americans each year. Diesel vehicles also contribute to ozone commonly known as smog. For otherwise healthy individuals, the effects of ozone exposure is often described as a sunburn on the lungs leading to shortness of breath, chest pain when inhaling deeply, wheezing, and coughing. Cyclists with asthma or other lung diseases, older riders, and children can fare worse.

It's ironic, given that physical activity such as cycling is beneficial to asthmatics, as exercise strengthens the lungs and increases resistance to infection, physical activity also increases cardiovascular health in the elderly, and cycling is a healthy activity for our increasingly overweight youths and also overweight adults, but what we gain from the exercise is wiped out by the loss from pollutants.

So, while I need the exercise I get from my riding, one might think I might be better off sitting in a car or on a bus instead, but, then again, air inside a car is often more polluted inside the vehicle than outside. So there really is no escape from these noxious clouds.

Leaving me only the choice of deciding where I breathe harmful fumes is not a choice that I or any other resident of the Chicago area should have to make. In reality, it's not a choice at all. We deserve clean air, and cleaning up diesel trucks and buses is one positive step towards that goal. I urge the EPA to greatly reduce the pollution emitted by diesel trucks and buses by instituting this rule and by ensuring that trucks and buses are cleaned up as soon as possible. This program is needed to make our city and the entire country a healthier place to breath and a better place to ride a bike.

MS. OGE: Thank you. I'd like to thank both of you for coming forward and offering your testimony. We have two additional individuals that have been scheduled to testify at 12:30. The good news is that we are ending early actually. Mr. Mark Bishop and Ms. Jane Friedman, are you here?

Basically, what we will do, we'll take a break for 15 minutes and we will come back at 12:30 to see if Mr. Bishop and Ms. Friedman are here, and from there on we'll take a lunch break and come back for 1:45 -- 1:15 for additional organizations and individuals. So let's break for 15 minutes.

(Break taken.)

MS. OGE: Can you print your name on the card in front of you. Why don't you let the receptionist know that if Ms. Jane Friedman comes in to please come forward.

Good morning. I'm Marge Oge. I'm the presiding officer of this hearing, and we're allowing ten minutes to each speaker. So please state your name and your affiliation and you can testify.

MR. BISHOP: My name is Mark Bishop. I'm director of communications at Meandaur Internet, and today I'm here representing myself and my views that I express today are all my own. I live in Chicago, Illinois, and I am a registered voter. I am here today to testify in favor of EPA's proposal to reduce emissions from diesel engines. As a resident of Chicago and a former of St. Louis, Missouri, I am all too familiar with environmental regulation and how it affects the everyday consumer's life. We are in a position where we have to decide whether a clean, healthy environment is worth a potential economic cost. From personal experience, I answer this with a resounding yes.

To date, cleaning our air has meant the creation of a list of environmental controls, most of which are too technical and too small in scale for your average citizen to understand, myself included. However, I am acutely aware of the efforts to reduce emissions from cars on the road, including the annual emissions test, cleaner burning gasoline, and tax breaks for using public transportation. Consumers have been doing their part to clean their automobiles, while diesel engines have been left out of this mix. As my tax dollars fund reductions in automobile emission, diesel engines continue to belch thick toxic smoke throughout the environment.

It is time that they clean up their emissions just as the rest of us have done. As a resident of Chicago, I enjoy spending my time outdoors. I am a runner. You can find me five or six days a week running to or from my Wicker Park neighborhood. On cold days, I can bundle up, but on hot, polluted days, I contemplate even staying indoors. I can prepare for the weather and for my environment.

However, one thing I can't prepare for is the diesel engine traffic. When I run past a truck or bus, which is filling the air with toxic diesel fumes, I can't help but hold my breath, stop running, and hope a breeze will pass by before I am forced to take a deep breath and then cough and gag from the belching smoke. Diesel smoke is unbearable, and it must be cleaned up. Besides healthy people like myself, there are children, elderly, and people with chronic lung conditions who are severely affected by diesel exhaust. There are real medical and social costs associated with air pollution.

The EPA's proposed schedule for requiring cleaner, low-sulfur fuel is an important step to providing a healthy and enjoyable environment for everyone. Although six years might seem like more than an adequate time frame, sooner would be better. Technology has always supported environmental advancements, and there's no reason why this won't continue. New requirements for trucks to meet tighter limits on nitrogen oxides should also be phased in a shorter time frame, possibly along a similar time period to that of the cleaner gasoline.

Finally, diesel engines should, at minimum, have the same requirements as consumers' automobiles do, cleaner emission standards, cleaner fuel, and emission testing to make sure the diesel engine fleet we have is a clean fleet. Thank you.

MS. OGE: Thank you. Thank you very much. Ms. Jane Friedman, good morning.

MS. FRIEDMAN: Good morning or afternoon. Can you hear me?

MS. OGE: Yes, I can.

MS. FRIEDMAN: I'm very pleased that the Environmental Protection Agency's plan for cleaner low-sulfur diesel fuel is what brings us here today, rather than a need to convince the Agency that diesel fuel particulates and nitrogen oxides emitted by trucks and buses are dirty, ugly, smelly, and dangerous to all who breathe, particularly those who are elderly, have asthma or allergies, cardiac, pulmonary, or respiratory problems. Thank you for eliminating any need on my part to present the reams of corroborating, disturbing scientific data that the USEPA proposal implicitly acknowledges and accepts.

Chicago is a large, lively city continually traversed by diesel-fueled buses and trucks. In the last two years, two northside Chicago community organizations I represent have doggedly sought accurately designed and implemented scientific studies to evaluate the impact of a 300-bus Chicago Transit Authority diesel bus garage on the air quality of a newly built high school. The school, which opened in August 1999, is located several hundred yards from the bus

garage, and its athletic fields abut the bus garage.

Two studies were conducted by the Chicago Board of Education environmental consultants, but experts from the University of Illinois School of Public Health and the Illinois EPA found both studies seriously flawed in design and assessment, consequently, invalidating the Board of Education's conclusion that air outside the school and on the athletic fields posed no hazard. Today, a third, and potentially well-designed study stands stalled since January 2000 because USEPA Region 5 has not responded to official requests for assistance and guidance in determining its protocol.

While today's hearing focuses on much needed long-term diesel cleanup I ask you to make an impact today by urging Region 5 officials to act now so an air quality test at the garage and the school can be accurately conducted and evaluated. Thank you.

MS. OGE: Thank you. Thank you very much for coming forward. We will take a break, and we will get back at 1:15.

(Break taken.)

MS. OGE: Good afternoon. We will start the proceedings for 1:15. I'd like to call for Nat Silverman to please come forward, Jane Clougherty, and Paul Ruedinger. These are the three names that have been given to me of individuals interested in testifying between 1:15 and 1:45. If anybody else is here and is interested in testifying that has signed in, please come

forward.

I would like for you to place -- sign your name. There's a card placed in front of you. Print your names and state your name and your affiliation.

Mr. Nat Silverman, good afternoon. We'll start with you.

MR. SILVERMAN: Good afternoon. Thank you for taking my testimony. My name is Nat Silverman. I'm vice-president of Metro Seniors in Action, which is a seniors group in the city of Chicago. I represent around 10,000 seniors, and I'm here to speak in favor of these higher standards of air quality.

Seniors are particularly vulnerable to contaminants in the air, and you all know and you've all heard on the radio or TV we have days in the year, you know, where seniors, among others, are advised to stay in the house, stay -- do not go outside because the air quality is injurious to your health, and we don't want to be confined because of things likes that. We want to be able to go out and join the rest of the population outside enjoying what can otherwise be fine weather and fine conditions. We'd like to be out there and to be able to breathe without worrying about our next breath what we're going to be taking into our lungs, and so we approve highly of the higher standards of air quality, which the EPA is demanding, and that's really all I have to say.

I mean, I certainly can sympathize with the asthmatics who, you know, find it

especially hard to breathe, but for us, just the noxious fumes are frequently too much for us to bear, and so, again, I thank you for the opportunity to testify, and I certainly hope that you will be able to impose these standards.

MS. OGE: Thank you for coming forward and giving us your testimony. Mr. Paul Ruedinger, good afternoon.

MR. RUEDINGER: Good afternoon.

MS. OGE: Please state your name and your affiliation.

MR. RUEDINGER: I'm Paul Ruedinger Associated with Farmland Industries in Kansas City, Missouri. I'd like to thank you for the opportunity to appear before you today. I am Paul Ruedinger, as I said before. I'm a dairy farmer from Fond du Lac, Wisconsin, and a former board member of my local cooperative, Agriland Co-Op in Wisconsin and its regional affiliate, Farmland Industries of Missouri. As a farmer, I would like to state that we are committed to improving the overall quality of our environment. Also, we appreciate the EPA's recognition of the unique structural challenges of farmer-owned cooperative refiners and their willingness to work with our representatives on this important issue. However, we are deeply concerned about the potentially adverse consequences this proposed rule might have on American agriculture and rural Americans.

Cooperatives and petroleum: Since the early part of this past century, farmers, through

the cooperative system, invested in petroleum refining and distribution infrastructure to ensure adequate, affordable supplies of petroleum products to rural America. Approximately, 40 percent of the farm fuel needs are supplied by the farmer-owned cooperative system. Farmland entered the petroleum business in 1929 as a distributor of petroleum products to the under-served rural market of Kansas, Missouri, and Oklahoma. In the 1930s, Farmland built its first refinery in rural Kansas. Since then, Farmland has expanded several times and recently established a joint venture refining alliance with a neighboring cooperative refinery. However, compared to the rest of the petroleum industry, Farmland's 95,000 barrels-per-day facility in Coffeyville, Kansas, is relatively small. Combined with our partner, National Cooperative Refinery Association in McPherson, Kansas, the total production capacity is 175,000 barrels per day.

Our concerns: The EPA proposal to lower sulfur in diesel to 15 ppm would potentially create supply disruptions. It could precipitate local price spikes, and it could threaten the viability of farmer-owned refineries. It also could impose major costs to farmers and rural Americans, precipitating greater consolidation on, therefore, less competition in the petroleum market.

It could also threaten fuel security due to the cumulative effect of implementing several rules at one time, and, lastly, it could create disruptions in the gasoline market. For these

concerns, it is essential for the EPA to give substantial consideration to the implementation of the proposed rule.

The first would be start -- first starting at the refining level, Farmland's refining operation can reduce sulfur levels in diesel fuels to 50 ppm. This is a 90 percent reduction in sulfur while avoiding the potential to precipitate supply disruptions. This reduction could have substantial costs to the cooperative. However, it will not be as severe as a reduction to the 15 ppm.

Second, as a former director of Farmland and Agriland Cooperative, I understand the decisions that need to be made by my successors and how best to invest the equity of our farmer-owners. Through our cooperatives, we own refineries, pipelines, terminals, tanks, delivery trucks, and convenience stores, all of which will have substantial costs for the cooperative.

Third, cooperatives have a unique problem in resolving the capital-intensive challenges this rule creates. Unlike other petroleum companies which can issue stock and debt, farmer-owned cooperatives only have two primarily sources of capital. Either farmers can invest their own money or the cooperative can borrow from the bank. The latter option is the main road of choice for cooperatives. However, many cooperatives do not have the flexibility to make a substantial capital investment of this nature without risking the value of the organization.

Fourth, some refineries may choose to sell their facilities rather than implement the rule, thereby contributing to greater consolidation in the petrochemical industry, in which case, farmers and rural Americans will be left at the hands of fewer players, who, unlike their cooperatives, have little intrinsic interest in the success of rural America.

Fifth, the cumulative effect of this rule and the gasoline desulfurization rule will contribute substantially to the financial stress of farmer-owned refining operations, and, finally, as a farmer and cooperative member, we will be the ones who will pay the price for additional fuels and fuel upgrades. Farmers like me will pay for this through reduced patronage from the cooperative system and higher costs at the pump.

What should the EPA do? Set a petroleum industry cap of 50 ppm for sulfur and highway diesel fuel in order to achieve major environmental benefit and avoid extreme cost. Provide maximum compliance flexibility. This includes allowing more time for implementation and flexibility on gas and diesel desulfurization efforts.

Provide some form of financial assistance in recognition of the unique financial structure and clientele of farmer-owned cooperatives and their role in serving rural America. Do not require, and I repeat, do not require a phase-in of this rule. A phase-in period will have substantial cost to the local cooperatives for additional tanks and pumps.

In conclusion, adequate fuel supplies at affordable prices have always been very

important to the farmers of rural America. Because of the special needs of farmers and their cooperatives, we ask that you consider these items as you finalize the rule. We look forward to working with the EPA and state voters to develop a final rule that is compatible with the continued economic viability of American agriculture and environmental progress. Thank you.

MS. OGE: Thank you. Ms. Jane Clougherty.

MS. CLOUGHERTY: Thank you. I am here to represent two organizations today. The first is the Center for Neighborhood Technology and the second is the Chicagoland Transportation and Air Quality Commission. Again, thank you, for the opportunity to speak today.

On behalf of the Center for Neighborhood Technology, I am here to voice our support for EPA's proposed regulations on diesel engines and heavy-duty trucks. CNT is a Chicago-based nonprofit agency dedicated to sustainable urban development with a focus on improving environmental health in urban communities. We are particularly concerned with diesel buses and trucks because, as mobile sources, they travel through urban neighborhoods every day releasing dangerous emissions in much closer proximity to sidewalks, parks, schools, and other community spaces than do most stationary sources, including power plants.

In the aim of protecting public health and in decreasing the 7200 smog-related visits to Illinois emergency rooms and the 310,000 asthma attacks suffered in Illinois annually, we urge

EPA to enact strict controls on all diesel engines, both new and existing. Additionally, we urge EPA to create strong incentives for the development and implementation of diesel alternatives, including electric and fuel cell buses.

We strongly support EPA's proposal to achieve the following: To reduce diesel fuel sulfur levels to 15 ppm nationally; to reduce NOx emissions from all trucks and buses to .2 grams per billion horsepower-hour by, at the latest, 2007; to encourage the deployment of cleaner fuel alternatives in the development of advanced clean air technologies; and to require all states to implement the new diesel regulations simultaneously in order to establish a common standard for diesel fuels and recognizing that trucks continually cross state borders relying upon uniform nationwide fuel supplies.

Opponents of cleaner diesel regulation have argued that tighter emissions control may mean exorbitant prices for diesel fuel and retrofitting. The costs, however, were urge must be put into perspective. The cost for retrofitting a bus for NOx control is approximately 1,000 to $1600, which is equivalent to one-third of one percent of the $3,000 average cost for a city bus. As pointed out by other clean air proponents, the $12 million profit that Exxon cleared in last quarter alone is higher than the estimated cost of compliance for this entire rule nationwide.

California has already taken bold and admiral steps to protecting the public health and the environment, including last Friday's South Coast Air Quality Management District decision,

requiring large metropolitan fleets to purchase only fuel alternative trucks and buses. The District's decision demonstrates the feasibility of implementing cleaner technologies today, significantly decreasing exhaust from diesels in urban areas. EPA's proposed regulations and California's example serve to urge other metropolitan areas to prioritize public health by investing in cleaner technologies. Again, thank you for the opportunity to speak today, and we look forward to working with you further in this effort, and, again, I have a second testimony to read from another organization that's asked me to speak today. May I continue with that now?

MS. OGE: Yes. If you can just state the name of both the organization and you have something in writing?

MS. CLOUGHERTY: Certainly.

MS. OGE: Great.

MS. CLOUGHERTY: The second organization that I represent is the Chicagoland Transportation and Air Quality Commission. On behalf of CTAQC, I am here, again, to voice our support for EPA's proposed regulations on diesel engines and heavy-duty trucks. CTAQC is a regional coalition of over 140 widely varied organizations working together to promote compact urban development, the integration of land use and transportation planning, and citizen participation in the planning process.

We are particularly interested in brown field redevelopment and the maximization of

use of urban space rather than development on agricultural areas. CTAQC is dedicated to improving quality of life and public health for all residents, and it's particularly concerned for the health of seniors and children. With these concerns in mind, CTAQC continues to advocate the development of cleaner transportation alternatives, including alternative fuel, and believes that the transportation of intermodal freight, that's so important to our economy, can certainly be achieved in better ways.

CTAQC strongly supports the EPA's proposal to achieve each of the following: Reducing diesel fuel sulfur levels by 97 percent; reducing NOx emissions from all trucks and buses by 95 percent by the year 2007; to ensure that engines are meeting these standards on the road as well as under controlled testing conditions; to encourage the deployment of cleaner fuel alternatives; and to require all states to implement these new regulations simultaneously.

CTAQC urges EPA and state regulators to following California's lead prioritizing public health and the environment as evidenced by the South Coast Air Quality Management District decision requiring large metropolitan fleets to purchase only alternative fuel trucks and buses. EPA's proposed regulations and California's example will greatly help CTAQC and other concerned organizations to advocate for these available clean air technologies and wiser use of fuel in our metropolitan area.

Again, thank you for the opportunity to speak. We commend your attention to this

issue, and we look forward to working with you further. Thank you.

MS. OGE: Thank you. I'd like to thank all the panelists for coming forward with your testimonies. I'd like to ask the next panel, Ms. Diane Brown, Mr. Ed Murphy, Mr. Jake Dumelle, Ms. Marie Valentine, Mr. Paul Rogers, and Mr. Allen Schaeffer. Please print your name on the cards placed in front of you. We'll start with Ms. Diane Brown.

MS. BROWN: Thank you. Thank you for the opportunity to testify today. My name is Diane Brown, and I am the executive director of the Illinois Public Interest Research Group, Illinois PIRG. Illinois PIRG is an environmentally consumer protection advocacy organization with over 20,000 members across the state. I'm here today on behalf of Illinois PIRG to urge you to adopt tough new emission standards for heavy-duty trucks and buses as soon as possible. I also have with me and I will leave to submit to the record comments, written comments, from over 30 individuals in the Chicagoland area that are also deeply concerned about this issue and they wanted to have their testimony reflected.

I know you all have heard a number of different statistics this morning. I just wanted to reiterate a couple of them that I think are of utmost concern to us and why this is an issue that we're really pleased that the EPA is working to address and then just sum up with four points that reflects our organization's basic requests to the EPA on this issue.

First, summer smog pollution in Illinois is estimated to trigger as many as 310,000

asthma attacks, causes as many as 7200 emergency room visits, and 2400 hospitalizations. We heard about the study from the local air pollution control officials that estimates that diesel soot exhaust is responsible for 125,000 cases of cancer in the United States. This, again is of utmost concern to us.

We're also concerned because heavy-duty trucks and buses currently account for 34 percent of the smog-forming nitrogen oxides and 56 percent of the particulate pollution emitted by all vehicles on the road in Illinois. Although big trucks and buses are among the biggest pollution sources, the oil industry and engine manufacturers have done very little to curb this pollution.

In order to protect public health, we must require drastic reductions in pollution from these large trucks and buses. However, because high sulfur fuel will poison the new diesel cleanup technologies, we need to ensure that all diesel fuel is fully cleaned up and readily available before the trucks are required to clean up.

Illinois PIRG urges the EPA to do four things on this issue. First is to make sure that low-sulfur diesel fuel is available nationwide. In order to achieve the necessary emission reductions, it is necessary to run the engines on cleaner fuels. We've heard a number of people testify to that effect today. We also believe that to be the case. In order to ensure that all cleaner trucks will have access to the clean fuel necessary to run them, the EPA should require diesel

sulfur fuels both for onroad and also for offroad vehicles with a cap of no more than 15 ppm sulfur nationwide by 2006.

Second, we need to clean up big trucks and buses as soon as possible. The EPA must cut smog-forming pollution by 95 percent in 2007 and soot pollution by 90 percent in 2007. We feel that waiting ten years for the people of Illinois and for the people across the country is too long to wait, and we believe that there should be no phase-in period for reductions in smog-forming pollution.

Third, we want to make sure that you all ensure that big trucks are meeting emission standards on the roads, not just during the engine test. Both in-use and on-board diagnostic equipment should be required for all heavy-duty trucks by 2007, and, fourth, we want to see that there's an increase in the use of advanced technology vehicles. The EPA should include a provision in the heavy-duty rule that would increase the use of these cleaner, efficient diesel alternatives throughout the heavy-duty fleet. We believe that these are the provisions that are necessary to protect public health, and we ask that you will work to help implement them in your final rulemaking. Thank you.

MS. OGE: Thank you. Mr. Ed Murphy, good afternoon.

MR. MURPHY: Good afternoon. Thank you very much. I'm happy to be here. My name is Edward Murphy. I'm the downstream general manager of the American Petroleum Institute,

which is a trade association representing petroleum companies in all sectors of the oil and natural gas industry.

I'm going to depart, if you will, from my written comments, which I have provided a copy of. Let me preface my remarks by saying that we are, I think you should know, very, very supportive of the efforts and of the direction and the goals of the heavy-duty emission standards.

We have some strong concerns and strong objections about aspects of that proposal, and, particularly, we think what you have proposed is more than is needed to achieve the goal, and our proposal could achieve those goals at a much lower cost. We have a number of problems with it on the technical side, whether or not you, in fact, get environmental benefits from going to such a low level as opposed to the level we proposed.

I want to focus today, if you will, on an issue that I think has been given almost no attention by the Agency, and I think it seriously needs to be considered by the Agency, and that's the ultimate affect on consumers.

We are convinced -- we are very concerned that this is going to be a fuel which is not able to be produced by all companies in the industry. We have looked at what's happened in California, for instance. We've seen the reductions in the number of refineries in California to a point now where there are no small refineries in California.

California is a very tightly constrained market. We've seen some of the initial type of

reactions, if you will, in the last couple of weeks here in Chicago. As best as we can tell, coming into the Midwest, it was probably somewhere on the order of about 200,000 a day short on supply gasoline coming into the Midwest on a roughly 2500 barrel-per-day market. I think it's something around seven percent. You saw -- and that seven percent was, I think, recognized as a shortfall, which was due to a number of factors, all of which were relatively temporary, most of which were relatively temporary.

We think and are very concerned that the result of the diesel proposal as it's now written will result in a minimum 20 percent fall of diesel supplies. So to the extent we're correct, and we are quite sure and quite confident we are, frankly, what's happened in the last couple of weeks in Chicago is going to look like it's very minor, and you're going to see much more and of much more severity than we just saw in the gasoline market in Chicago.

So we are very concerned because we don't think the proposal is realistic in terms of what it can achieve. Ultimately, I think the Agency is going to be faced with a situation of having translators and thus would be severely constrained in the inability to achieve the goals of the program.

The average rate of return we find in marketing over the last ten or 15 years is on the order of about three and a half, four percent. We know that all refineries in the country are facing major investments, if they want to continue their refineries, and facing major investments to

reduce the sulfur content in gasoline, to reduce sulfur content in diesel, and also facing major developments on toxics in a number of different areas, all of which are hitting them in pretty much the same period of time.

To expect that a -- to not expect that a substantial number of refineries, particularly smaller refineries, are going to leave the market, I think, is unrealistic. As you know, we have proposed a study to look at this, to quantify the effect of certainty. We've asked EPA to participate with us in that study, and we should be able to come up with some firm data on that in the next couple of months. We know that all refineries are not going to be able to do it.

We know that some refineries are going to choose to do it for a portion of their diesel stream, to minimize the cost, to get something like a 60 or 70 percent of the existing diesel output consistent with the very low standard, and the rest will be sold to the export market. So even on those that makes it incremental, some investment, to make the additional -- to make the low sulfur diesel, we're going to lose some volumes.

We know that some refineries are going to make major investments, major investments, to produce all their diesel to a lower sulfur. To the extent they do that, the incremental cost to them to produce -- to shift some of that production from diesel to gasoline is relatively small. So that even those refineries that choose to make the investment to try to produce all their diesel to the very low sulfur spec, ultimately what's going to happen is some of

that diesel will be converted to gasoline. So, again, we're going to lose some volume from even those refineries.

Add those together and we're looking at, at a minimum, as I said, at least a 20 percent reduction in the supply. That is going to have major impacts on the consumer, and it's going to have major impacts on the public's willingness to support this program, and it's going to have major impacts on the economy.

This is obviously a fuel that's vitally dependent, and you're hearing that, of course, from numerous different panel speakers, vitally dependent, vitally important to the business sector, the farmer sector, and disruptions of that magnitude would have a significant affect on the economy and our consumers.

From that perspective alone, aside from the technical issues of whether or not that, in fact, would -- let me focus on that one point. I'm really not talking about cost here because, frankly, there were some misleading statements made in the last several weeks by members of this administration on what the rationale was for price increases.

Price increases occurred because supply was short, not because costs were high. It's because supply was inadequate to meet the demand at the lower prices. What's going to govern the impact on the consumers, if this will rule comes about, is not the higher cost, whether that be 10 or 14 cents a gallon, it is going to be the shortfall supply bouncing up against the demand,

which includes the very substantial price increases which, frankly, would be far out of proportion to the costs that we've been talking about.

So I urge you carefully, on top of the other issues, when you look at this, to look at the supply impacts, look at the public's reaction to what's happened most recently, and ask, is this a cost that we can bear? I think the answer to that is no. I encourage you to look more deeply at it.

MS. OGE: Thank you very much for your testimony, Mr. Murphy. I will ask Mr. Jacob Dumelle to please testify. Good afternoon.

MR. DUMELLE: Good afternoon. My name is Jacob Dumelle. I'm a member of the board of directors of the American Lung Association of Metropolitan Chicago.

Let me abstract from my testimony. I'm a registered professional engineer in Illinois. I've got a B.S. in mechanical engineering and an M.S. in public engineering administration from IIT here in Chicago. In 1970, I was appointed to the first Illinois Pollution Control Board by then Governor Richard Ogilvie, and then in successive years, I was reappointed and made chairman by Governor Dan Walker and continued on as chairman under Governor Thompson. I was chairman for a total of 15 years, and at the end of '91, under Governor Edgar, I retired from the board after 21 and a half years of service there, and the board, as you may know, is an all media board. It handles air, water, land, and noise, all of those things.

In 1990, I was able to have the board agree to initiate inquiry hearings into the possible

opacity standards for diesel truck exhausts, and at that time, there were, perhaps, 11 or 12 states that had such regulations and such testing, but some were not completely in force.

Then after I retired

in '92, the Illinois Board adopted the standards which came out of those hearings, a total of four hearings, two inquiry and two merit hearings, and these became the basis for the present new Illinois statute requiring annual tests of diesel trucks in the Chicago and East St. Louis Metropolitan areas.

So let me repeat for you, because I think this is very pertinent to this regulation, some of the major points of that 1990-91 testimony which, of course, if you want, I'm sure you could get from the Illinois Board or from the Lung Association, at that time, diesel exhaust was thought to be a possible carcinogen, and now everybody is saying that it is a proven carcinogen with four different chemical formulas in it. The Association of Diesel Engine Manufacturers, who are present here today I know, said in our hearings that diesel engines need not smoke. This is a terribly important point, and that much of the smoke from the engines was due to deliberate mistuning, whatever you want to call it, by either the truck driver or the mechanic to disable the time delay so they could make faster acceleration and then have to wait for the toker charger to get up to speed to pumping up air and to burn the fuel, and so the only way to catch something like that is with an off the road spot-check.

You can't do it on a scheduled check basis because everything will be fine if that is still occurring, and I'm talking from nine and ten years ago, and then you're never going to solve the problem of smoke from diesels.

So let me just summarize and say I endorse the proposal you have here, but you should speed up the timetable for existing diesels. Don't wait 20 years for them to be replaced, and you have to either require the states or set up a federal program to get on-the-spot testing to catch the disabling that at that time was going on. Now, whether it's going on today, I don't know.

So I'll just point out in testimony, I guess, you received this morning from the Diesel Technology Forum, they say when properly maintained, diesel engines do not smoke. They're saying that now. So I'll just give that for your consideration.

MS. OGE: Thank you. Ms. Marie Valentine, welcome.

MS. VALENTINE: Good afternoon. My name is Marie Valentine, and I'm here to speak on behalf of DaimlerChrysler on the subject of EPA'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 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 EPA needs to look at all pollution sources when determining a comprehensive emission reduction plan.

In our opinion, the combination of a low sulfur on-highway diesel fuel program with feasible stringent new emission standards for heavy-duty engines and vehicles will assist in improving air quality nationwide. We congratulate EPA for continuing to link vehicles and fuels as was recently done in the Tier 2 regulations. This systems approach is the only way to achieve the emission reductions envisioned.

We commend EPA's incentive to propose a 15 ppm sulfur cap for the on-highway diesel fuel. This critical first step will enable the continual 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 at least 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 low sulfur diesel fuel is critical for the future development of these devices. The lower level will permit catalyst-based control strategies to be optimized for maximum emission reduction efficiency.

Recent data indicates that sulfur-free diesel fuel is the enabling requirement for the use of NOx absorbers, continuous 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 a 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 technologies 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 will 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 vehicle -- for passengers. Diesel vehicles could have a significant role in the reduction of fuel composition by offering 40 percent fuel economy 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 hydrocarbons 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 is being done at an affordable price.

Should a phase-in of the clean on-highway diesel fuel be found necessary, we encourage EPA to have it start in 2004. The oil industry has previously challenged EPA to make all changes in one step, not two separate steps, so capital investment strategies can be optimized. Therefore, the 2007 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, EPA's proposal to reduce sulfur on highways -- EPA's proposal to reduce sulfur fuel for on-highway is a great first step. Second, clean fuel packaged with feasible emission standards is the correct path to enable further reductions 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 NPRM and expand further on our diesel fuel position. Thank you for the opportunity to speak to you.

MS. OGE: Thank you, Ms. Valentine. Our next person to testify in this panel is Mr. Paul Rogers. Good afternoon.

MR. ROGERS: Good afternoon to you. As chief operating officer for Voss Companies, I am deeply involved in our day-to-day operations of the truck stops that we operate here in the Midwest, and I've been involved in the truck stop industry for over 20 years. I'm here today on behalf of NATSO, the trade association representing America's travel plaza and truck stop industry.

We appreciate the opportunity to comment today on the Environmental Protection Agency's Notice of Proposed Rulemaking concerning the heavy-duty engine standards and control requirements of the sulfur content of highway diesel fuel.

As the primary retailer of onroad diesel fuel, the truck stop industry is a vital link in the transportation of goods and services throughout our country. If I need to call anyone's attention to it, look around. Everything you have on you or sitting in or ate today was brought to you by a truck. The vast majority of our nation's products are delivered by diesel-powered

vehicles, everything from the clothes we wear to the food we eat.

Our nation's travel plazas and truck stops are a critical link in the movement of goods providing the fuel needed to keep these trucks and our economy running smoothly.

While our industry supports efforts to improve our nation's air quality, we have serious concerns with the EPA's proposed rule and the affect it will have on the nation's energy supply, and the delivery system will be taxed even more severely. These concerns and objections center on two aspects of the EPA's proposal, the first being EPA's continued consideration of a phase-in approach to the introduction of this reduced sulfur diesel fuel; the second being the extreme level of sulfur reduction being proposed. In an effort to improve air quality, EPA has proposed sharp reductions in emissions from heavy-duty truck engines in the year 2007, through the use of advanced catalytic emission control devices, which will require a reduced sulfur diesel fuel to operate. EPA had proposed that the sulfur content of all highway diesel fuel sold to consumers be reduced from its current level of 500 parts per million to 15 parts per million beginning June 1st of 2006. This being the case, EPA's proposal continues to consider and request additional comment on various phase-in schemes that would gradually introduce the new ultra-low diesel fuel into the market over time, temporarily resulting in two separate grades of highway diesel.

Our association, NATSO, is strongly opposed to a phase-in scheme which would

result in the temporary manufacture, delivery, sale, and use of two separate grades of highway diesel and continues to urge the EPA to adopt a single-fuel approach which would switch to the new ultra-low fuel at one time, thereby maintaining a single grade of highway diesel and preserving the integrity of the nation's diesel fueling infrastructure.

The entire diesel fuel delivery system, from refinery to retail, is currently handling a single grade of highway diesel fuel. The presence of two different grades could have disastrous effects on our energy delivery system, including reduction in the supply of diesel, huge spot outages, price spikes, tremendous cost increases, and fuel cross-contamination.

Because the travel plaza and truck stop industry is configured to carry a single grade of highway diesel, the introduction of a second separate grade would force the truck stop industry to make tremendous capital investment to carry both products at retail. Moreover, the cost associated with upgrading a truck stop to provide both grades of highway diesel would prove to be an unrecoverable expense as the use of the two fuels would only be a very short temporary period of time.

A recent survey of NATSO member truck stops illustrates these points. When asked, would your truck stop's current fueling infrastructure allow you to offer an additional grade of diesel fuel in addition to your current offering at no additional expense, over 95 percent of the respondents answered, no. This same survey confirmed the costs associated with revamping a

truck stop to carry an additional grade of highway diesel would be tremendous. When asked to estimate the cost which would be required for each additional location to carry an additional grade of onroad diesel, 45 percent answered that it would cost over $100,000 per location. Additionally, over 30 percent indicated it will cost their location in excess of 50,000.

Now, this doesn't seem like much when we hear about the billions that Exxon and other manufacturers and refiners are making, but you must remember that the majority of truck stops are still privately and family-owned organizations that have required investment of everything that they can put into it and putting everything on mortgage.

These tremendous expenses would result from the need to repurchase additional -- to purchase additional storage tanks, to segregate the secondary diesel, and the need to tear up concrete for additional tank installation and the requisite, repiping, and remanifolding the tank lines; the purchase of new pumps and monitors, as well as the additional compliance expenses which result from the presence of two highway diesel fuels, not to mention the increased cost to acquire the product.

These costs will be extremely prohibitive, unrecoverable due to the temporary use of two fuels in the market, and would need to be borne by an industry which largely consists of small independent owner/operators who are still recovering financially from the 1998 underground storage tank upgrades. The introduction of a second grade of highway diesel could

therefore force many truck stop operators out of business and have the additional effect of further reducing diesel fuel supply.

It is important to note that the entire distribution chain for diesel would face increased costs and expenses under a phase-in, further exacerbating our industry's ability to easily acquire and sell diesel fuel at the retail level. Refineries, pipelines, bulk plants, distributors, and marketers, the entire diesel fuel distribution chain, have all stated their concerns with, and opposition to, phase-ins, which would result in two grades of highway diesel.

Make no mistake about it, the introduction of a second grade of onroad diesel under a phase-in would seriously call into question the very success and viability of the entire proposal, thereby resulting in no gain for air quality or the environment.

Let me explain. The distillate market is very tight with little or no additional supply available. Adding an additional grade of highway diesel would further stretch the supply to very dangerous levels and could result in the overall supply shortage of diesel fuel. Likewise, the increased costs associated with reducing distributing and selling two grades of fuel may cause some to stop distributing or carrying diesel altogether, further reducing the supply and availability. Furthermore, two grades of highway diesel also lead to a much higher price for the new ultra-low sulfur fuel than if that fuel was the only highway diesel in the market, as would be the case if the entire diesel fuel pool was switched at one time with no phase-in allowed.

As a result of those serious market-oriented questions concerning supply and the price of ultra-low sulfur diesel under a phase-in approach, it is quite likely that many fleets and the independent drivers would decline to purchase more expensive 2007 model year vehicles with the emission control devices. These vehicles would also require much more expensive fuel under a phase-in approach. Thus, the fleet operators and independent drivers would prefer to make their purchase earlier, such as buying more vehicles in the 2005 and 2006 model year and/or rebuilding current vehicle engines in an effort to wait and avoid entering what would be a very uncertain market supply.

Accordingly, under a phase-in and the market uncertainty which you will produce, even if some ultra-low sulfur supply is somehow guaranteed, there is no guarantee that a sufficient demand will exist in either the 2007 model year vehicles or the ultra-low sulfur fuel needed to power them. This fact calls into serious question the ability of this proposed rule to succeed under a phase-in and consequently whether or not any significant environmental benefit would be achieved.

Compounding these serious issues surrounding the EPA's consideration of the phase-in for the introduction of the ultra-low sulfur fuel are the extreme cuts the EPA has proposed in the level of sulfur in highway diesel. EPA has proposed a 97 percent reduction in the sulfur content of onroad diesel fuel. The travel plaza and truck stop industry has serious

concerns that this deep cut will have the effect of reducing the overall supply of diesel and lead to spot outages and severe, severe price hikes.

Furthermore, it does not appear that it provides any compelling technical justification to cut this.

In conclusion, I would like to reiterate the travel plaza and truck stop industry's support of the efforts to improve air quality without placing our nation's energy supply and delivery systems in jeopardy. In order for this proposed rulemaking to achieve those important goals, it must not damage our nation's diesel fuel supply. The travel plaza industry and the truck stop industry, a critical link in the movement of goods and services of our nation, will be hurt tremendously by these phase-in schemes, and urges the EPA to reject further considerations in favor of a single fuel approach.

On behalf of the entire travel plaza industry and truck stop industry, I thank you for your opportunity to comment today on the EPA's Notice of Proposed Rulemaking.

MS. OGE: Thank you for your testimony. Mr. Allen Schaeffer, good afternoon.

MR. SCHAEFFER: Good afternoon. My name is Allen Schaeffer, and I'm here on behalf of the Diesel Technology Forum, and I've been involved in diesel and air quality issues for over 15 years. The forum is a new group working to enhance public dialogue with a wide range of stakeholders, including EPA, other government agencies, and interest parties to explore a wide

range of opportunities to reduce emissions from both existing and new diesel engines while recognizing the inherent benefits of diesel technology.

Diesel power systems, that is, engines, fuels and aftertreatment systems, that are the subject of today's hearing, power our economy, from package delivery trucks 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 also much more. In 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, doing more work, moving more goods, and helping more businesses and people than ever before.

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

We support the direction of EPA's proposed rule that will result in lower diesel emissions and cleaner fuel in 2007. We're especially pleased, like others here today, for the first time EPA has used a systems approach in setting future fuel and engine standards, indeed

recognizing that engines and fuel are both parts of an integrated diesel power system.

Whatever the outcome of the debate over how much sulfur should be allowed in diesel fuel or when it is required, everyone agrees that lowering sulfur coupled with advances in diesel engine technology will help improve air quality, and while this hearing is focused on future reductions in air pollution, we should not lose sight of the tremendous progress that has been made in the past in Illinois and the entire Midwest and, in fact the, nation.

For example, Illinois has had significant improvements in air quality. Statewide, total emissions of criteria pollutants declined by 52 percent during the 26-year period from 1970 to 1996. In fact, just last summer that had 22 days with temperatures of 90 degrees and higher, the city never exceeded the federal ozone standard. Just nine years ago in 1991, Chicago had 30 days of 90-degree temperatures and exceeded the ozone standard on seven days. This incredible progress in improving Illinois air quality occurred while the state's economy grew by 60 percent from 1970 to 1996.

What is most encouraging is that on a national basis, overall criteria of pollutant emissions have declined by 34 percent from 1970 to 1997. This reduction has occurred at the same time that the population has increased by 31 percent and the economy has more than doubled in size. The gross domestic product will increase by 114 percent in the same period.

How has pollution declined at the same time 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, and as it becomes cleaner still, it will continue to do more work powering more trucks to deliver more goods than ever before. We can, in fact, have cleaner air quality, a growing economy, and increased use of diesel technology.

Diesel-power systems are an essential part of the quality of life we 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, whatever the need, but make no mistake about it, this proposal represents a significant technological challenge for the engine manufacturers, exhaust aftertreatment suppliers, and fuel refiners that are the members of the diesel technology forum. However, we are confident that together we can build on our past progress to produce the cleanest, most economical, reliable diesel-power system ever.

While this proposal addresses new technology going forward, there are many opportunities to address some important issues of the existing fleet. We congratulate the state of Illinois for their recent adoption of a new smoke program to require -- a new program to require

smoke testing. A previous panelist, Mr. Dumelle, and I had the opportunity to meet back in the early '90s during the development of this program. When properly maintained, diesel engines do not smoke, and, frankly, the Diesel Technology Forum wonders why only 13 states have these kind of programs today. We challenge other states to consider the adoption of the smoke testing programs, and we have the tools and resources to assist in that effort.

This March, EPA issued a challenge to retrofit 10,000 engines -- diesel engines in the next two years. The Forum is pleased to be working alongside the EPA in that effort. We are putting together the resources to identify engines of all types in a wide variety of applications from naval vessels to school buses to determine the feasibility of lowering emissions by adding exhaust aftertreatment systems, modifying engine emission controls, and/or using cleaner diesel fuel. We are encouraged by the possibilities for the success of this program, which will include engines in a broad range of applications.

In conclusion, members of the Diesel Technology Forum, while not taking a position on specific fuel sulfur levels or other issues under debate today, support EPA's decision to take a systems approach to reducing diesel emissions. However the specifics of the 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 technology and innovation, members of the Forum are committed to

working with EPA, state governments, and other interested parties to continue the improvement in diesel emissions and to take meaningful steps now to address concerns in the existing fleet. It may be a gloomy day outside today, but it's a bright future for diesel technology. Thank you very much.

MS. OGE: Thank you for coming forward to testify. I will go ahead and call the names and see if the 2:45 panel is here. Brian Smith, Ellen Shapiro, Ed Kahn, John Duerr, and Sid Bild.

Great. Please come forward. Print your name on the cards placed in front of you, and we will start with the 2:45 panel. We'll start from the left with Mr. John Duerr. Good afternoon.

MR. DUERR: Good afternoon. My name is John Duerr, and I'm here 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 rule. Detroit Diesel is also a member of the Engine Manufacturers Association and the Diesel Technology Forum and supports the comments of both of those organizations that were made 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 emission 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 ten percent of the current standards.

For the most part, these impressive emission reductions have been achieved through improvements 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 systems.

Efficient and durable exhaust aftertreatment depends on the availability of very low sulfur diesel fuel. Thus Detroit Diesel not only supports EPA's approach in considering diesel fuel quality and engine emission standards together in this rulemaking, but we believe this is the only viable path for achieving future emission reductions of significant magnitude.

While Detroit Diesel believes that reductions in diesel fuel sulfur are key to achieving the next level of emission standards, we are not certain if the NOx standards that EPA 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 and effectiveness over the full 435,000 useful life period. We're continuing to review and analyze available data and will provide more detailed information regarding the feasibility of the proposed NOx standard and the adequacy of the 15 ppm sulfur content -- 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 package, will apply to the 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 asses their impact or comment meaningfully on how these provisions impact the technical feasibility of the proposed 2007 standards. Because of the extreme importance and complexity of these provisions, EPA must provide assurance that there will be adequate time in this rulemaking for public review and comment on the supplemental provisions after the 2004

rule has been finalized.

Detroit Diesel appreciates EPA's intent to provide flexibility by proposing an optional phase-in for the proposed NOx, NMHC, and formaldehyde standards. While this approach has been successful in managing the transition to new standards for light-duty vehicles, we believe this program will be unworkable for heavy-duty engines because of customer preferences, cost factors, competition between engine manufacturers, and issues related to truck design that will make it impossible for engine manufacturers to manage sales to meet the proposed phase-in schedules.

As an alternative, we suggest two-step implementation for the substantial reduction in the NOx plus hydrocarbon standards applicable to all heavy-duty diesel engines in 2007 and a second large reduction in 2010. We believe a two-step implementation will avoid the problems associated with having to manage engine sales is more aligned with technology readiness and can achieve emission reductions that are equivalent to the EPA'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 the manufacturers are required to use in certifying and auditing engines are currently codified in the Code of Federal Regulations. These procedures were developed in the early 1980s and were first applied when the NOx and particulate standards were 10.7 and .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 EPA and industry show that the emission measurement variability using these procedures was 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 improved 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. We believe this is a major undertaking and one that calls for immediate initiation of a large-scale cooperative effort between the Agency and the industry.

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. OGE: Thank you. Thank you very much. Ms. Shapiro, good afternoon. Welcome.

MS. SHAPIRO: Good afternoon. Thank you very much for allowing the opportunity to speak here today. My name is Ellen Shapiro, and I'm the director of automotive fuels at the

Alliance of Automobile Manufacturers, which is a coalition of car and light-truck manufacturers. We sell more than 90 percent of the light-duty vehicles in this country. The Alliance's main interest in this rulemaking is to preserve diesel as an option for the light-duty market because, as EPA recognizes, they have inherent advantages in terms of fuel economy, reduced greenhouse gas emissions, and lower evaporative emissions, and I would also point out some commentors have noted possible impacts on supply, some concerns about the impact on the supply of fuel, and if we are able to introduce better fuel economy vehicles into the market, that will also have an impact on the demand side of the equation, and I would suggest we also need to look at that part of the picture.

We heard DaimlerChrysler mention a potential 40 percent improvement in fuel economy. Well, that can translate into a pretty good impact on the demand down the road. Our members are working hard to advance the state-of-the-art in diesel technology so it will meet the Tier 2 standards adopted last year, but the most critical factor in this endeavor is the quality of the fuel, especially sulfur. That is why we applaud EPA for taking this crucial first step toward enabling the next generation of diesel technology. EPA has done several things right with this proposed rulemaking. First, we treated the vehicle and fuel as an integral system, both for the existing and future diesel fleet. Second, EPA proposed a dramatically reduced sulfur to enable the new aftertreatment technology. Numerous research programs are showing just how clean

diesel can be. Recent bus demonstration programs have diesel buses with aftertreatment controls and clean diesel fuel proving that they can be as clean or cleaner than buses running on compressed natural gas. There was a demonstration outside today which shows a very clean diesel bus. This is nothing short of remarkable.

Third, EPA has proposed to introduce the 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 contaminating the sensitive new aftertreatment systems that will be used, and it will help ensure that 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, and to the extent that the new cap also leads to early introduction of near zero sulfur fuel, automakers are still developing their Tier 2 technologies. It will encourage the continued development in the light-duty market.

Does this proposal go far enough for Tier 2 diesel vehicles? Not quite. More needs to be done. As much of a stretch as the Tier 2 standards will be for gasoline vehicles, it will be even more so for diesel engines. The fundamental problem, as EPA has recognized, is getting the vehicle to meet both NOx and PM standards at the same time. Sulfur-free is the level that will allow all diesel vehicles to operate at their cleanest throughout their useful life. That is why automakers from around the world, as well as EMA, have endorsed this level in a recently

updated World-Wide Fuel Chart, which we are submitting for the record, and it's also available on our web site for those who would like to look for it there.

The Charter defines sulfur-free as between five and ten parts per million to be defined further as more data becomes available. In this country, the stringent emission standards justify adopting the lower limit. Emerging data from DOE's DECSE program supports this view.

The Manufacturers of Emission Controls Association also recommends five parts per million in support of 15 parts per million notwithstanding. We note that MECA and EPA assumes that a 15 ppm cap will lead to an average of about seven ppm, implying that most of the fuel will be under ten parts per million. This is due to the expected compliance margin that will accompany implementation.

We are less certain of this outcome, however, and we expect that refiners will learn how to shrink this compliance margin so that there will be more fuel at the higher end of the range. This sulfur level closer to 15 is definitely too high to enable the new aftertreatment devices. In addition to sulfur, EPA should also adjust other fuel properties as recommended in the chart, especially cetane aromatics and distillation. We will discuss this further in our written comments.

Is our position realistic? Are we asking too much? We think a five part per million cap is doable. After all, refiners are making this fuel today in Sweden and other countries as we

heard earlier. Other countries are moving quickly to ultra-low sulfur levels. Just last year, Germany adopted a tax incentive program to encourage fuels with less than ten parts per million by 2003. The EU announced its intent to pursue this course for all of Europe. The key point is that refiners know how to make clean diesel fuel. Proper incentives and market demand will bring this fuel to market even faster than public estimates predict. We urge EPA to focus on its incentive package and encourage the marketplace to make the new cleaner fuel available, widely available, as soon as possible.

We understand the concern about supply, but we believe that fuel supply will be driven by profitability and demand, as I mentioned, not simply cost. To the extent that maintaining low sulfur levels throughout the distribution system becomes a challenge, we believe in the collective problem solving capability of the free market system.

So where does that leave us? We've come a long way in the debate over sulfur. Just two years ago, automakers petitioned EPA to reduce sulfur in gasoline to California levels or lower, and today everyone accepts the important role that sulfur plays in our national environmental policy. The issue is no longer whether to reduce sulfur, it is not even that near zero sulfur fuels eventually will be needed, rather it is when will they be available to enable the new technology.

For our part, Alliance members want to bring advanced technologies such as the

turbocharged direct injection engine and hybrid electric diesel vehicles to the point where they can operate cleanly and meet consumer needs. The proposed 15 part per million cap on diesel fuel sulfur is a very strong step toward providing incentives to continue investing in this clean diesel technology. With diesel fuel quality on a par with the World-Wide Fuel Charter, however, will actually make this technology one of our keep options for the future. Thank you.

MS. OGE: Thank you, Ellen.

Mr. Bryan Smith, welcome. Thank you.

MR. SMITH: Good morning. I thank you for the opportunity to speak to you today about a very important and necessary proposal to adopt new tough emission standards for heavy-duty buses and trucks.

My name is Bryan Smith, and I am the environmental health educator for the Oak Park Department of Public Health. The village of Oak Park is a community of approximately 53,000 individuals just west of Chicago about seven miles from the Loop. This proposal really affects the Oak Park community because the Eisenhower Expressway, a major expressway in the Chicagoland area, cuts right through our community. The USEPA's proposal is very important to our community for several reasons.

Foremost, Oak Park is ranked number six on a list of 12 suburbs in the metropolitan Chicago area as a dirty diesel hot spot. I'm going to just define for you what a dirty diesel hot

spot is if you're not familiar with it. Hot spots are in areas within one half mile of highways, streets, intermodal transfer stations, and tollbooths with the most traffic in metropolitan Chicago. This includes expressways that carry more than 15,000 heavy-duty diesel vehicles per day or arterial routes that carry over 2,000 heavy-duty diesel vehicles per day.

Heavy-duty diesel vehicles release thick black diesel smoke that can cause airway inflammation and asthma attacks, decrease lung performance, and increase susceptibility to infection. Diesel exhaust is also a probable cancer-causing agent. It is estimated that 17,709, about one-third of the population of Oak Park, lives in a dirty diesel hot spot. That doesn't include the tens of thousands of people throughout the Northwest Indiana and the Chicago metropolitan area that also live along dirty diesel hot spots. It is estimated in our community alone that almost a thousand people with asthma live within a dirty diesel hot spot.

Asthma has become a great concern for our health department over the past several years. School and public health nurses in our community have noted an increase in the prevalence of asthma, particularly in schools that are within the dirty diesel hot spot. We're talking rates of over ten percent in some schools, and we all know that asthma is an underreported disease as it is.

Asthma is a very serious lung diseases that causes about 5,000 deaths nationwide each year. Asthma costs Americans up to an estimated $11.3 billion annually with over $5 billion of

the total cost for direct medical costs alone. Asthma is not the only health problem that can be attributed to diesel exhaust.

A study by Harvard researchers has indicated that people living in areas with high particulate matter survive an average of one to two years less than those that live in cleaner areas. The USEPA in 1998 indicated that exposure to even low levels of diesel exhaust is likely to pose a risk of lung cancer and respiratory impairment. Finally, the Illinois Pollution Control Board fund -- excuse me.

The Illinois Pollution Control Board found in 1991 that diesel exhaust was responsible for numerous acute and chronic health effects, changes in neurological behavior, and vital organ changes as well, gene mutations, and it may also be linked to reproductive or developmental effects.

We cannot undermine the health of our community and others like it simply because some members of the oil industry, trucking industry, and engine manufacturers do not want to spend the time or money to curb pollution. In order to protect the public's health, we must require drastic reductions in pollution from these large trucks and buses. Cleaning up diesel fuel by 97 percent will allow the EPA to cut smog-forming pollution by 95 percent and soot pollution by 90 percent in 2007, and there's also been some talk about a proposal waiting until 2010 to fully clean up smog-forming pollution on these vehicles, but this proposal will mean Americans

will have to wait ten years before all new trucks are cleaned up.

Do we really want to wait this long and expose our families and friends to contaminants that have a drastic effect on our health? There should be no phase-in period for reductions in smog-forming pollution. The EPA must take measures to ensure that these trucks are meeting the emission standards on roads and not just during the emissions testing.

Finally, the EPA should include a provision in the heavy-duty vehicle rule -- heavy-duty diesel vehicle rule that will provide incentives to introduce more of these cleaner, efficient diesel alternatives into the heavy-duty fleet that have been talked about earlier today.

Therefore, I respectfully ask this committee to seriously consider the testimony that you have heard here today on behalf of the Oak Park Department of Public Health. These provisions are necessary to protect public health, and we ask you to include them in your final rulemaking. Thank you.

MS. OGE: Thank you, Mr. Smith. Dr. Sid Bild, good afternoon and welcome.

DR. BILD: Thank you, Madam Chairman. I appreciate this rare opportunity to be on a panel with two people who represent major polluters to our environment as well as the representative from the Oak Park Department of Public Health whose words I greatly appreciated.

My name is Sidney Bild. I'm the chairman of the health committee of Metro Seniors in

Action. Our organization represents over 15,000 seniors in Chicago and over 130 clubs throughout the area. I'm a retired physician with a low tolerance for those who threaten our public health with their desire for financial gain or just plain ignorance. Metro Seniors in Action believes that the state of the nation's public health is synonymous with national security. As a nation, we are, however, full of contradictions. We have the world's highest per capita health care expenditures of each, 5800 per year, and at the same time, after spending that money, we have over 45 million Americans without health insurance, and the number is growing.

The costs of air pollution must be included in the stupendous sum of $1.6 trillion, which will be spent on health care in the year 2000. Air pollution is a major factor in health and lung disease, according to the Centers for Disease Control, and it cites these conditions as two of the four leading causes of death in its December 17th Morbidity and Mortality Weekly Report. A major victory in the efforts to control air pollution from all types of internal combustion vehicles in addition to restricting the use of diesel fuel would be to successfully fund the purchase of newer and less polluting buses by the CTA, the Chicago Transit Authority, and to increase service to both the central city and suburbs.

That would significantly cut into the use of personal cars now deemed necessary by many citizens. Mass transit has been shoulder to side in recent times by aggressive attempts to privatize our transportation system. Metro Seniors in Action vigorously opposes the

privatization of the CTA and has joined with the Capital Budget Group in Chicago to form the Campaign for Better Transit, known as CBT, to organize and energize the city of Chicago to make the Chicago Transit Authority a world class mass transit system like New York City.

A major part of the work of the CBT is to work for a cleaner environment. I want to thank you for this opportunity to contribute to this very worthy fight.

MS. OGE: Thank you. I'd like to thank all the panelists for coming forward and offering your testimony. Thank you very much. Is Mr. Ed Kahn here? Okay. Excuse me. If you just could take your seats one second. One of the EPA
panelist members has a question for you.

MR. HOROWITZ: This is for John Duerr. You raised some questions about the technical procedures.

I just want to find out will you be elaborating in your written comments about solutions, possible suggestions of how to deal with the problems you raised?

MR. DUERR: I'm not sure how far we will be able to go with solutions. I think we've identified the problem. I think the steps to solutions are things that we're going to have to work on together. I'm sure we'll have some ideas, but it is going to be a cooperative effort.

MS. OGE: Thank you. I would like to proceed with the next panel.

Mr. Mike Roach, Lila Drebushenko, James Cavallo.

MR. SILVERMAN: Can I make a very short statement? I'm just delighted to see so many people from the fuel and engine industries testifying in favor of these new rules. I was quite surprised and definitely pleased.

MS. OGE: Mr. Cavallo, we're ready when you're ready. Good afternoon. We're ending about an hour early. This is unusual.

MR. CAVALLO: Well, then I should talk slow?

MS. OGE: No, no.

MR. CAVALLO: I'm very pleased to testify. Today, I'm speaking as a concerned citizen in support of the American Lung Association's position on reducing pollution from diesel exhaust. I feel that requiring cleaner diesel fuel vehicles is an urgent environmental task and that it's a feasible and a manageable task. The proposed regulations will significantly lower heavy vehicle pollution and will remove a major impediment to extending the use of more energy efficient diesel engines.

Also, air pollution is a worldwide concern, and by stimulating production and use of cleaner diesel vehicles in the U.S., I feel the proposed regulations will result in cleaner vehicles being used in other parts of the world as well.

My interest in a swift movement to cleaner engines doesn't stem solely from a general wish for a cleaner environment. Actually, two people very close to me suffer from asthma,

which is aggravated by the coarse and fine particulate matter found in diesel exhaust, and they are my sister and my mother-in-law, who both have asthma. My sister has suffered from asthma for more than five years. She lives here in Chicago. Her home is less than 100 yards from a major truck route, and she lives within a mile of an expressway with a lot of diesel truck traffic. Her asthma episodes occasionally cause her to miss work. It's painful for us in the family to see her leave a birthday party or other holiday celebration and know that she needs to lay down and rest to recover her strength.

My mother-in-law has had asthma for as long as I've known her, 22 years. She is now unable to leave her home because she can't catch her breath after walking just short distances. She has lived in the same house for 50 years. She lives on the outskirts of Detroit, and her house is about 200 yards from a major truck route, and she lives within a mile of a major expressway.

In addition to these two very close family members, my daughters have two close friends who are asthmatic, both are 11 years old and require medication regularly. When either visits our house for an afternoon of play or a sleepover, their parents bring their inhalants and other medication and give my wife and myself instructions on how to administer it, and their parents are never quite able to be at ease when they're away from the kids, and so they're frequently checking in.

I want to say that I'm disappointed that we have to wait until 2007 for the proposed

particulate matter reductions to be imposed, and the regulations -- I'm also disappointed that the regulations will only affect new heavy-duty vehicles. According to EPA's own estimates, the additional hardware and life-cycle operating cost will be modest with respect to the cost of heavy-duty vehicles. Between now and 2007, particulate matter pollution from diesel engines will continue to aggravate and debilitate children, working-aged adults, and older Americans. It would seem reasonable to me to push forward the timing of the implementation of these regulations and to require that retrofit -- requiring retrofits of existing heavy-duty vehicles as part of normal maintenance.

I'd also like to offer a thought relating to the benefits of the proposed rule. In reading through material, I didn't notice, and perhaps it's my oversight, but I didn't notice a mention of benefits accruing to the position of these rules occurring for worldwide air pollution. Improved air quality is a worldwide concern and pollution that comes from the tailpipes of one part of the world impacts the environment to some extent on all other parts of the world. Though particulate matter doesn't travel far from the source, greenhouse gas emissions do.

Diesel engines are a dominant supplier of public transportation and trucking throughout the world, though fuel consumption of diesel engines in developing nations have reduced -- have been reduced by 15 percent over the past 20 years, and emissions have been reduced by 90 percent, further improvements are needed, and this regulation will help. By

creating a higher standard in this country for clean diesel, the trucks and buses in other parts of the world will be improved as they purchase U.S. vehicles from U.S. manufacturers. That's my statement. Thank you very much.

MS. OGE: Thank you very much. Thank you for coming forward and taking time from your schedule today to testify. Thank you.

I'd like to call Rebecca Stanfield and Ms. Susan Schaub to please come forward.

MS. STANFIELD: Thank you again for the opportunity to comment on a rule that's going to definitely have very important and very far-reaching implications for our air quality. My name is Rebecca Stanfield. I am a clean air advocate of U.S. Public Interest Research Group, which is the national lobby office for the state PIRGs, and state PIRGs are consumer and environmental groups that are active in 28 states.

On behalf of our half a million members around the country, I would like to express our strong support for EPA's proposal to clean up heavy-duty diesel vehicles. We know that a daily reality for most of our members and most Americans living in urban and suburban areas to be faced with thick black clouds of noxious diesel pollution and to suffer the foul smell and taste, itchy eyes, sneezing, coughing, wheezing, and the long-term health effects that are a direct result from breathing this pollution.

In the time that I've been with the PIRGs, we've talked to more than four million

people at their doors about air pollution, and the question we get back time and time again is how are we going to get these diesel buses and trucks cleaned up. So it's common sense that cutting the pollution from diesel buses and trucks are going to have enormous and long-lasting benefits to public health and to the quality of our lives in our cities and suburbs. This common-sense notion was recently supported by 87 percent of people polled in a recent poll by the American Lung Association, and the common sense of cleaning up diesel pollution is also borne out time and time again in health studies that show that our exposure to diesel pollution can lead to a range of symptoms all the way from asthma attacks, premature dealt, and to lung cancer.

There are 30 epidemiological studies that show that diesel exposure can increase the risk of lung cancer by as much as 89 percent. Earlier this spring, the Association of State Air Regulators estimated that 125,000 cases of cancer in the United States are a result of breathing diesel pollution. Add to these cases of lung cancer the following health impacts; thousands of American lives cut short annually; thousands of hospitalizations and emergency room visits annually; and millions of days of restricted activities for kids like Kyle who spoke earlier. So it's really to prevent these health impacts that we are working to support the rulemaking.

We think that there are three key pieces that are a cornerstone in the rulemaking and that need to be preserved. The first is the 15 parts per million cap on diesel fuel sulfur content effective by 2006. That was the first. The second is the .01 grams brake horsepower-hour

particulate standard effective in 2007, and the third is the .2 grams per brake horsepower-hour standard for NOx and hydrocarbons. I want to emphasize that clean diesel fuel is an essential part of the rulemaking, and that the 15 parts per million cap effective in 2006 is, in our opinion, absolutely necessary to meeting the goals of the program. Other observers have suggested alternative caps and averaging systems. We urge you to reject these systems. The 50 -- in particular, the 50 parts per million cap suggested by API would result in increased incidence of particulate filter failure, deterioration of engine performance, and poisoning of the NOx catalyst, and this, of course, for the public means more pollution, more asthma attacks, more illnesses, hospitalizations, premature mortality, and cancer.

Similarly, we do not support alternative proposals that would allow refiners to continue producing at levels of 500 parts per million for a fraction of the total highway diesel fuel volume. This approach or any other scenario that would allow two or more grades of diesel fuel to remain in the market is very impractical as we heard earlier. So to the extent that these alternative proposals are designed to provide flexibility to small refiners, we believe that additional flexibility is unwarranted given the extremely long lead time of six years and that they severely compromise the environmental benefits of the proposal placing the burden on the breathing public.

I'd like to add to what was said earlier by a gentleman regarding the phase-in of the

NOx standards. We think that the NOx standards should be applicable to 100 percent of the fleet in 2007, as is the case with the PM standards, and that's based on a high degree of confidence by the Manufacturers of the Emissions Control said that the technology is going to be there, and, again, contingent on the availability of the clean fuel. We believe that the technolgoy review that has been -- that you're requesting comment on is unnecessary and would be counterproductive.

First of all, again, there's a high degree of confidence that the technology will be available. Secondly, we believe that the technology review could be a disincentive for developing the technologies on schedule. Again, giving the industry an opportunity to escape new standards contingent on their own lack of future progress in developing NOx controls technologies is a lot like the fox guarding the hen house.

Finally, to the extent that you do find a technology review is warranted, I guess it goes without saying that the technology review should be designed to allow equally for a tightening of the standards as a weakening of the standards if there are -- if in that time frame there are advanced technologies available, and that leads to my last point, which is that there are advanced heavy-duty engine technologies that are nondiesel technologies being commercialized today that have additional very important public health and environmental impacts, including the curbing of global warming, and so we would hope that you'd use this rulemaking to create incentives to further commercialize those vehicles and commercialize them faster, and these would include

fuel cells, hybrids, and electric propulsion systems.

So we support the inclusion of the Blue Sky Program as a first step, and we look forward to working with you to figure out exactly how to define what would be eligible for incentive programs, subsequent incentive programs at the local, state, or federal level under that program. Thank you very much.

MS. OGE: Thank you. I would suggest a ten-minute break, and then we'll come back and see if we can pick up some of the people that were going to testify at 2:45 and were not here and then at 3:45, and then we will move to the 4:00 o'clock panel. So a ten-minute break, especially for the reporter.

(Break taken.)

MS. OGE: Let's see if Mr. Kahn is here, Mike Roach, Lila Drebushenko, John Moore, John Skorburg, Lionel Trepanier. Somebody is supposed to be here representing the American Lung Association of Michigan and Mr. Kurt McIntosh.

If you can print your name on the cards placed in front of you.

Mr. Skorburg, we'll start with you.

MR. SKORBURG: Thank you very much. I know that it's been a long probably two days for the committee, and luckily the comments I have are fairly short. My name is John Skorburg. I'm a senior economist with the American Farm Bureau Federation, and for those of

you who don't know the American Farm Bureau, we're the nation's largest general farm organization, and we have members in all 50 states and Puerto Rico, and actually we're the largest farm organization in the world.

The first thing I'd like to say is that our members support clean air accomplishments, and the biggest concern they have is not really on the reduction in the particulate matters or the reduction in the pollutants, it's in fuel concerns and how those fuel concerns are going to impact on rural America.

The specific concerns that are members have told us about would be, number one, the threat of supply disruptions, particularly in rural America, with the reformulated fuels; the potential for more costly fuel for farm and other off-highway uses; and also the economic viability of farmer-owned refineries, and at a time when reformulated gasoline prices have already skyrocketed, especially here in the Chicago area, above even what was economically expected, our members do not want to see this type of pattern duplicated concerning diesel fuel.

Therefore, the suggestions that our members have made is to set the onroad diesel fuel sulfur cap at 50 parts per million, which would be a 90 percent reduction from the current level, and then also to maintain this higher level for the off-highway diesel fuel standard in order to minimize the cost to farmers and provide refiners with maximum flexibility to produce diesel fuel, and at the same time, our association looks forward to working with the Agency to achieve

a final rule that is compatible with continued economic viability in American agriculture and environmental progress.

Just as our members need and want cleaner air, they also require reliable and affordable fuel supplies. So the challenge that we have is to keep air clean and to get those clean air benefits, but also to balance those more with the diesel costs. Thank you.

MS. OGE: Thank you.

Mr. Moore.

MR. MOORE: Thanks. I'd like to flick on the overhead.

Thanks for allowing us the opportunity to testify today. I'd like to thank both the EPA and the American Lung Association for organizing this event. The Environmental Law and Policy Center of the Midwest, or the ELPC, is the Midwest's leading environmental advocacy and eco business innovation organization. One of our basic premises is that environmental progress in economic development can go hand-in-hand.

Today's diesel truck and fuel proposal is consistent with that premise because, among other things, it will dramatically improve public health, clean up our communities, and foster competition in the truck, fuel, and engine industries to produce cleaner, more efficient products. Therefore, in principle, we strongly support EPA's rule.

I want to briefly address three points today. First, the diesel trucks and buses are

rolling smokestacks. They are a serious health problem, and they need to be cleaned up quickly. Second, that the proposed sulfur standard for diesel fuel is both achievable and essential. Third, we believe that EPA must take additional steps to promote cleaner alternatives to diesel vehicles. Although, we've made much progress cleaning up the air in the last 30 years, tens of millions of Americans continue to breathe unhealthful levels of pollution. Diesel fuel vehicles are major sources of pollution, especially in urban areas.

Each year, trucks and buses emit millions of pounds of soot, carbon monoxide, sulfur dioxide, nitrogen oxides, and other pollutants. Their emissions are disproportionately large compared to their numbers on the roads. Incredibly, diesel trucks emit three times as much pollution as coal-fired tar plants per energy units consumed. That's according to the Union of Concerned Scientists. Diesel truck pollution is especially bad in the Midwest, which is the crossroads of the nation's freight transportation system.

I might also add personally that this diesel pollution does not necessarily have to occur in urban areas. My mother, who lives in Pittsburgh, lives right at the intersection of a bus line on the outskirts of town, and because it's on an uphill, intersection, all the buses must stop and then accelerate, and so her house is constantly filled with diesel soot, despite our best efforts to clean it up, and, of course, it affects her respiratory system and makes it very difficult for her to breathe and sometimes even to talk to me on the telephone.

Others at this hearing have spoken more directly and compellingly than I about the toxic effects of diesel exhaust. I think my mother could testify to that as well. I simply note the following major health impacts. As we've already heard several times, STAPPO has estimated that diesel fuel exhaust is responsible for at least 125,000 cases of cancer, including more than 13,000 cases in the major metropolitan areas of the Midwest. According to recent medical studies, even moderate levels of diesel exhaust and other particulate may trigger heart attacks and arrhythmias in susceptible persons. To quote a top EPA scientist reacting to these studies, and this was in the L.A. Times, for air pollution to have such a substantial impact on public health and have it show up so consistently is remarkable, and as you also know, diesel exhaust contains dioxin, which just last week EPA formally determined is both a carcinogen and is more harmful to human health than previously believed.

Diesel exhaust is a major problem, even in areas classified as attainment by EPA for particulate matter and other pollutants. The tiniest particles of diesel soot are the most dangerous and the current PM10 standard largely failed to control these small particles. Thus, the fact that nearly all of the Midwest is an attainment for PM10 is little comfort, indeed, to those of us who live or work near truck yards, railways, and other sources of diesel exhaust.

EPA's proposal will also help to close the enormous emissions gap between diesel trucks and cars. The disparity is dramatic as we've already heard, and I will not repeat all of the

statistics.

The point is that even after the year 2004 emission standards are in place, diesel trucks will still emit nearly 400 times as much soot as passenger cars and 31 times as much smog-forming compounds. Let me turn to the diesel fuel sulfur standard. We support, at a minimum, the proposed 15 ppm fuel level sulfur for several reasons.

First, it is a fact that low sulfur fuels substantially lowers particulate emissions even without using PM filters, and several studies support this. Second, as you can see on the charts, sulfur poisons and incapacitates particulate matter and NOx controls. For example, according to one study in the DEXI evaluation of the effects of sulfur on PM and NOx controls, PM filters are more than 90 percent efficient at three ppm, 70 percent efficient at 30 ppm, and virtually useless at 150 ppm. Sulfur is a similarly damaging NOx catalyst.

In other words, the 50 ppm level backed by the American Petroleum Institute simply is not enough and could increase emissions by 25 percent or more compared even to the 15 ppm standard. We support a sulfur fuel level no greater than 15 and even lower sulfur fuel that will maximize pollution control, and I think there's very little doubt of that as the engine -- as most of the engine companies and the Emission Control Association folks will tell us.

I also note that low sulfur fuel is superior because it improves fuel economy, reduces engine wear, and lowers maintenance costs. These savings will at least partially offset the higher

cost, if any, of low sulfur fuel. As you know, some of the oil companies are fighting the proposed sulfur standard. They claim they won't have enough time to comply with the rules and that a low sulfur requirement will drive the fuel prices to unacceptable levels. We believe that the reality suggests otherwise. First, as we know, BP Amoco already is offering 15 ppm fuel in California to urban bus fleets, and that, I understand, is at a cost of four to five cents more than the standard diesel fuel price. Second, BP Amoco is selling gasoline with an average content of 30 ppm in several U.S. cities four years ahead of the EPA deadline. TOSCO Corporation, the largest independent refiner marketer of oil products in the U.S., strongly supports the 15 ppm standard, and we're happy to see that.

The auto manufacturing industry, both here and abroad, is clamoring for ultra-low sulfur fuels. As more truck and bus fleets retrofit their existing vehicles with aftermarket treatment, the demand for low sulfur fuel will grow even more. I think that's a very important point.

As we've already heard, worldwide the situation is better in Sweden, Germany, and other countries in Europe, and zero or low sulfur fuel is also available in Japan. The technology already exists to remove sulfur from diesel fuel by and large. So relatively little additional research and development technology investment is necessary. We don't think that the current issue with ethanol and TBE in reformulated gasoline in the Chicago area is directly applicable to

this situation. The technology to clean sulfur from the gas and the diesel fuel is already there. Although, the new standard may require oil refineries to invest in some additional equipment, those costs can be passed on -- and those may be passed on to the consumer at the pump, the increases will be insignificant compared to the fluctuations in fuel prices caused by other factors, and, as we've already heard, oil companies will not be able to plead poverty as a defense to compliance with these regulations because the 11 large oil companies reported 12 million in profits for the first quarter of 2000, which has tripled or more some projections of the total course, reducing the sulfur levels of diesel fuel over the next six and a half years.

Finally, we think EPA can take additional measures. While EPA's role is a major step in the right direction towards cleaner air, I've identified at least three different -- three additional measures. First, most directly, new trucks subject to the rule should be required to meet tighter limits on NOx no later than 2007 rather than 2010 as proposed. Second, we support a low sulfur standard for all diesel fuels. Sulfur limits currently range up to 5,000 ppm for nonroad engine applications. Since low sulfur fuel produces much less toxic soot than high sulfur fuel, the uniformly low standard will improve air quality at a relatively low added cost, and I might add many of these nonroad applications occur in urban areas such as construction activities, trains for urban and mass transit, and diesel-power generator sets. Third, more needs to be done to clean up trucks already on the road. Old trucks, obviously, are much dirtier than new trucks. Low

sulfur fuel will help, but it is not enough. We'd recommend the following measures to clean up dirty trucks: First, expand the urban bus NOx and PM retrofit program to include truck fleets. Second, targeted enforcement initiatives to improve industry compliance with existing laws. Third, better monitoring of smog particulate matter in urban areas and truck corridors. Fourth, lobby for tax incentives to scrap dirty trucks and invest in clean fuel vehicles, such as hybrid electrics and fuel cell.

In conclusion, we believe that EPA's regulations are a good step in the right direction. You have amassed overwhelming evidence that diesel exhaust is toxic and that diesel trucks and buses emit far too much pollution. Immediate action, therefore, is necessary to improve our nation's air quality and reduce the disease and death caused by diesel exhaust. EPA, therefore, should adopt strong final regulations without delay. Thank you very much.

MS. OGE: Thank you. I'd like to thank both of you for coming forward and testifying today. Is Mr. Ed Kahn here? Also, for the 3:45 panel, I have Mike Roach and Lila Drebushenko. They're not here. Lionel Trepanier, Kurt McIntosh, Diane Bailey, Peter Oris, Susan Schaub, Ross Firestone, Dick Stone, Jack Derrin, and

Jane -- oh, she already testified. Jane Clougherty already testified,.

Is anyone here planning to testify today that I haven't called your name? Why don't you come forward? Please state your name and your affiliation and have a seat. There is a card

in front of you. Please print your name.

MR. BARNETT: My name is Daniel Barnett, and I'm here with the Little Village Environmental Justice Organization. Can you hear me? Great.

Again, my name is Daniel Barnett, and I'm here with the Little Village Environmental Justice Organization. I live here in Chicago. I'd like to thank you for giving me the time to speak. This will be very brief. I'd like to give my support for clean air. I'm here as -- everyone has really noted that smog is plaguing Chicago, responsible for over 7200 citizens going to the emergency rooms and may be possible for 310,000 asthma attacks here in Illinois. To make matters worse, 30 health studies link diesel pollution to lung cancer. I work as a community health educator in Little Village, and I work with the Little Village Environmental Justice Organization. The organization was founded in 1995 as a nonprofit community-based organization of people to protect residents of Little Village, which is also known as South Lawndale in Chicago, from air pollution and associated lung disease.

Statistics from a 1998 school screening by Cook County Hospital Health Center suggests a prevalence of pediatric asthma up to 15 percent, and this is in Little Village. In addition to this, Little Village's environment is affected by airborne particulates, involved organic compounds emitted by industries which dominate the local economy.

In 1995, more than 30 million pounds of criteria air pollutants were released at 30

industrial sites in Little Village. In addition to this, Little Village is titled as a dirty diesel hot spot by the American Lung Association due to traffic emissions on the major highways through the area as well as major trucking routes to these industrial sites. As a personal note, I've been working this whole spring with the class -- with two classes of seventh and eighth graders, and I've noted a pediatric asthma prevalence. Each one of these kids could speak to the prevalence of asthma in Little Village and each child knew an asthmatic. When we start talking to children about what might be aggravating their asthma attacks, they spoke very strongly to the buses and trucks that literally ran right past Little Village Academy on 26th Street or on 26th and Lawndale, and so clearly this is only anecdotal evidence, but the diesel emissions from buses and trucks are a source of concern not only for myself and the health educators, but also the children of Little Village. So big trucks and buses are a big pollution source, and they must be cleaned up to protect the public health.

Therefore, I would urge EPA to reduce diesel sulfur levels to at least 15 part per million nationwide for both onroad and offroad diesels, clean up big trucks and buses by at least 90 percent by 2007, and this is at the latest, ensure big trucks are meeting the emission standards on the roads and not just during emission tests. Again, thank you for your time.

MS. OGE: Thank you. Thank you for coming. Anyone else in the audience that either has signed to testify or wishes to testify? If not, the panel here will step outside and we will

bring in people as they come in to testify, but I congratulate all of you for just staying around this afternoon. Thanks for keeping us company.

(Break taken.)

MR. FRANCE: Diane Bailey and Ross Firestone, if you could come up to the table, please. If you could write your names and affiliations on the cards in front of you, please.

Diane Bailey, why don't the you beginning.

MS. BAILEY: Hi. My name is Diane Bailey. I'm with Citizens for a Better Environment. I'll try and make this quick. I just have one page of comments that I want to go through.

Just about everyone is familiar with the black plumes of smoke coming out of exhaust pipes on buses and trucks, construction equipment, trains, or really any diesel engine that's out there, and these dirty plumes are all over the place, but that doesn't mean that they're safe. The exhaust from diesel engines is anything about safe.

USEPA has listed 40 separate substances in diesel exhaust as hazardous air pollutants, as you probably all know, and 15 of these are also listed by the International Agency for Research on Cancer, or IARC, either as carcinogens or as probable or possible human carcinogens. It's no surprise then that the California Air Resources Board recently identified soot or the particulate emission portion from diesel-fueled engines as a toxic air contaminant. The toxics in diesel

exhaust tend to stick to the soot particles. So that finding is particularly relevant.

These toxics include carcinogens like acetaldehyde, benzene, beryllium, DHP, which is used as a plasticizer, dioxins, which are infamous, formaldehyde, nickel, polycyclic hydrocarbons, like benzopyrenes, and styrene. There are other toxics as well like lead and mercury.

This year, diesel exhaust particulates were listed for the first time as substances that are reasonably anticipated to be human carcinogens. This was in the ninth report on carcinogens, which is published by the U.S. Department of Health and Human Services. A causal link between lung cancer and occupational diesel exhaust exposure has been shown in more than 30 epidemiological studies. On average, the risk of lung cancer increases from long-term occupational exposure by about 40 percent, which is significant. Even though diesel exhaust is in that range as a known carcinogen, its cancer potency factor is estimated to be roughly ten times higher than that for benzene. Diesel fuel and the exhaust that it creates should be regulated to the same extent as regular gasoline. The burning of diesel creates up to 200 times more soot than gasoline. Most of these soot particles are of the size range easily inhaled and trapped in the lungs bringing with them the many toxic substances also found in diesel exhaust. A recent study shows that diesel exhaust from newer or cleaner fuel has the same toxic air contaminant in older, dirtier fuel. So cleaning the diesel fuel alone is not enough.

Clean diesel, namely lowering sulfur, however, is necessary for more sophisticated pollution control equipment to work on the diesel engines. Because of this, it is important that the proposed regulation on diesel require both cleaner diesel fuel and stricter emission standards at the same time. CBE believes that the extra 1,000 to $1600 cost for new diesel vehicles and the four cent increase in the diesel fuel are well worth the enormous health benefit that EPA's proposed diesel rules will bring. Not only will the proposed emission reductions of 90 percent or more greatly improve public health, they will also reduce smog formation helping ozone nonattainment areas to reach compliance with federal air quality standards.

A recent study also shows that children living near high-traffic streets have a higher risk of developing childhood cancer. There's little doubt that the exhaust from diesel trucks plays a crucial role in this problem.

We believe that the health of sensitive groups, especially children, will improve as a result of EPA's proposed diesel regulations. Citizens for a Better Environment strongly supports these new rules, and we also hope to see similar rules in the near future for offroad diesel equipment as well. Thank you.

MR. FRANCE: Thank you. Ross Firestone.

MR. FIRESTONE: Yes. I'm here as a concerned citizen. I was asked to come here from the American Lung Association, but I have nothing at all whatsoever to do with the Little Village

Environmental Justice Organization, which I'm listed as being a representative of on this list. I'm going to keep my remarks personal and short, as I see you've had a busy day.

I'm almost 70 years old, and about four years ago, I took up bicycling as an exercise. One day when I was out riding, I happened to be by a diesel truck just as it was starting up. I was covered with black smoke, I coughed, sneezed, my eyes turned red, I retched. It was a very unpleasant and, I believe, unhealthy experience.

I didn't realize that I was that sensitive to diesel emission because when I had my automobile, I got behind one of these coal burners, and I would just turn the recycling on, and I'd forget no more about it, but now as a bicyclist, I bicycle every day, and I keep an eye out for these, and if I see them, I avoid them because it's just a very unpleasant experience.

Now, I know from previous experience -- and you may have noticed that I have a Ph.D., and that's in material science, I used to work at IIT Research Institute. In the 1960s, with the Department of Energy backing, I had a number of projects for cleaning up diesel emissions, and at that time, it was technically feasible to do so. For various reasons, it wasn't introduced, but that was 30 years ago, and certainly now it must be even more feasible to do it. So I can't believe it can't be cleaned up if there's a will and a political movement to clean it up.

I think it's very unfair that the automobiles have been taxed between one and $2,000, I understand, for air pollution requirements, for over 30 years while the trucks have got away

Scot-free, and so the cost that's been estimated of the same magnitude, 1,000, $2,000 to clean up diesel, I think it's only fair that the trucks should also bear the burden.

Also, in the same period when I was working on these exhaust cleanups, we lived in the city, and we could tell, my wife and I, when the rush-hour started because we'd get very strong diesel odors filtering into our apartment. We lived on a bus line, and the buses would come every ten, 15 minutes. The buses, of course, are particularly hazardous because they run in the inner city. They run through canyons of buildings, and so the exhaust collects and doesn't dissipate easily, and I was surprised to see that you're planning less strict requirements for bus exhaust rather than for trucks. Perhaps, I'm wrong, but I think they should be the same or better.

Finally, at one time, I lived in Pittsburgh, and, again, we had problems with trucks, especially climbing the hills. You get a tremendous cloud of diesel soot coming out, and this would just fill the valleys up, and it would be very unpleasant. There's enough sulfur in it that things would be packed by acid, and this was after the steel mills had been closed down and after the automobiles had their converters on them. So that's probably the only thing it was.

So I urge you to pass regulations and clean up this diesel fuel and the sooner the better. I don't really want to wait until 2010. I'm nearly 70 years old, and, you know, I may not last that long. I'm breathing the stuff every day if I'm out bicycling, if I'm unlucky, and I should hope that you should be able to move more rapidly. Thank you.

MR. FRANCE: Thank you. Just one comment, our proposal does treat buses and trucks the same.

MR. FIRESTONE: Oh, they do. Thank you. Glad to hear that.

MR. FRANCE: Thanks for coming out. Is there anybody else in the audience that wants to testify?

We're on another break.

(Break taken.)

MR. FRANCE: The record is closed.

(Whereupon, the proceedings were adjourned at 6:30 p.m.)

STATE OF ILLINOIS)

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COUNTY OF C O O K)

I, GEANNA M. IAQUINTA, CSR, do hereby state that I am a court reporter doing business in the City of Chicago, County of Cook, and State of Illinois; that I reported by means of machine shorthand the proceedings held in the foregoing cause, and that the foregoing is a true and correct transcript of my shorthand notes so taken as aforesaid.

_____
Geanna M. Iaquinta, CSR Notary Public, Cook County, IL
Illinois License No. 084-004096

SUBSCRIBED AND SWORN TO
before me this_____day
of_____, A.D., 2000.

_____
Notary Public