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PROCEEDINGS AND DEBATES OF THE 101st CONGRESS, SECOND SESSION

SENATE—Saturday, October 27, 1990

(Legislative day of Tuesday, October 2, 1990)

The Senate met at 9 a.m., on the expiration of the recess, and was called to order by the Honorable JEFF BINGAMAN, a Senator from the State of New Mexico.

PRAYER

The Chaplain, the Reverend Richard C. Halverson, D.D., offered the following prayer:

Let us pray:

Baruch Ha'Shem! Blessed be the name of the Lord!

God of Abraham, Isaac, and Israel, on this Sabbath we celebrate Thee in all Thy glory.

God is our refuge and strength, a very present help in trouble. Therefore will not we fear, though the earth be removed, and though the mountains be carried into the midst of the sea; Though the waters thereof roar and be troubled, though the mountains shake with the swelling thereof. There is a river, the streams whereof shall make glad the city of God, the holy place of the tabernacles of the most High. God is in the midst of her; she shall not be moved: God shall help her, and that right early. The heathen raged, the kingdoms were moved: he uttered his voice, the earth melted. The Lord of hosts is with us; the God of Jacob is our refuge. Come, behold the works of the Lord, what desolations he hath made in the earth. He maketh wars to cease unto the end of the earth; he breaketh the bow, and cutteth the spear in sunder; he burneth the chariot in the fire. Be still, and know that I am God: I will be exalted among the heathen, I will be exalted in the earth. The Lord of hosts is with us; the God of Jacob is our refuge.—Psalm 46.

APPOINTMENT OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will please read a communication to the Senate from the President pro tempore [Mr. BYRD].

The legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
Washington, DC, October 27, 1990.

To the Senate:

Under the provisions of rule I, section 3, of the Standing Rules of the Senate, I hereby appoint the Honorable JEFF BINGAMAN, a Senator from the State of New Mexico, to perform the duties of the Chair.

ROBERT C. BYRD,
President pro tempore.

Mr. BINGAMAN thereupon assumed the chair as Acting President pro tempore.

RESERVATION OF LEADER TIME

The ACTING PRESIDENT pro tempore. Under the previous order, the leadership time is reserved.

CLEAN AIR ACT AMENDMENTS—CONFERENCE REPORT

The ACTING PRESIDENT pro tempore. The Senate will now resume consideration of the conference report on S. 1630, which the clerk will report.

The legislative clerk read as follows:

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 1630) to amend the Clean Air Act to provide for attainment and maintenance of health protective national ambient air quality standards, and for other purposes.

The Senate resumed consideration of the conference report.

The ACTING PRESIDENT pro tempore. The time for debate until 11:15 a.m. is controlled by the Senator from Idaho, Mr. SYMMS.

Mr. SYMMS. Mr. President, I yield myself such time as I may consume to make some opening remarks. I have

NOTICE

A final issue of the Congressional Record for the 101st Congress, second session, will be printed after the sine die adjournment of the Congress. Members may submit manuscript for printing to the Official Reporters of Debates no later than November 2, 1990.

None of the material printed in the Congressional Record after adjournment may contain subject matter, or relate to any event, which occurred after the date that Congress officially adjourned.

No provision herein shall be construed to supersede the two-page rule.

All material must be signed by the Member and delivered to the respective offices of the Official Reporters of Debates, Room HT-60 or S-220 of the Capitol. These offices are open Monday through Friday, between the hours of 10:00 a.m. and 3:00 p.m.

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By order of the Joint Committee on Printing.

WENDELL H. FORD, *Chairman.*

● This "bullet" symbol identifies statements or insertions which are not spoken by a member of the Senate on the floor.

Oregon Graduate Institute of Science and Technology:

DEAR SENATOR SYMMS: I have heard that Congress is considering spending large amounts of money to study methane production by cattle as it relates to global warming. In my opinion such money will be completely wasted since even if the emissions from cattle could be controlled, it would have no practical or perceptible effect on global warming.

Enclosed is some correspondence that provides more details about my point of view.

It is signed, "Sincerely yours," by the professor.

Mr. President, I ask unanimous consent to have printed in the RECORD this backup material.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

OREGON GRADUATE INSTITUTE
OF SCIENCE & TECHNOLOGY,
Beaverton, OR, August 28, 1990.

Senator STEVE SYMMS,
Boise, ID.

DEAR SENATOR SYMMS: I have heard that Congress is considering spending large amounts of money to study methane production by cattle as it relates to global warming. In my opinion such money will be completely wasted since even if the emissions from cattle could be controlled, it would have not practical or perceptible effect on global warming.

Enclosed is some correspondence that provides more details about my point of view. Please call me if I can be of any assistance. Sincerely yours,

M.A.K. KHALIL,
Professor, Department of Environmental
Science and Center for Atmospheric
Studies.

INSTITUTE OF
ATMOSPHERIC SCIENCES,
Beaverton, OR, March 16, 1989.
Re the Workshop on Methane Emissions
From Ruminants.

DR. MICHAEL J. GIBBS,
ICF, Inc.,
Universal City, CA.

DEAR MR. GIBBS: Thank you for inviting

Dr. Rasmussen and me to the workshop on methane emissions from ruminants. What we learned will be very useful in our work. My purpose in writing this letter is to convey an atmospheric science perspective on the role of ruminants in the global methane cycle.

(1) By all counts ruminants are 14%-23% of the present global emissions amounting to 60-120 Tg/yr (Appendix 1).

(2) The global warming expected from increasing methane can be written approximately as:

$$\Delta T(^{\circ}\text{C}) = 7.2 \times 10^{-4} \text{ }^{\circ}\text{C-yr/Tg} - \Delta S \text{ (Tg/yr)}$$

based on Lacis et al. (1981) and Wang et al. (1986) and including O_3 feedback. ΔS is the additional emissions of methane in the future in Tg/yr.

One way to look at the environmental (greenhouse effect) return on controlling methane emissions from cattle is to assume that we do nothing and let cattle populations double. The addition to global warming will be 0.04-0.08 degrees C ($\Delta S=50-100$ Tg/yr). It is important to keep in mind how small these benefits are in terms of reducing global warming.

(3) When we first published our work on the increase of methane, many of our colleagues were skeptical because they found it hard to understand what would cause such a trend. This feeling survives to this day, and it is often said that while we know methane is increasing, the causes are not well understood. The original ideas on the increase of methane were based on the atmospheric chemistry of OH. It was thought that CO would deplete OH and cause methane to increase. The observed rate of increase, however, was too difficult to explain in these terms, and so we argued from the very beginning that the causes were increasing cattle and rice production. The concentrations of methane in ice cores have lent considerable support to the importance of increasing emissions on the global trends (Khalil & Rasmussen, 1985).

In view of this history, it may appear ironic that now I am arguing that future increases of methane may not come from more and more cattle and rice production. There are two reasons:

First, limitations on resources are likely to prevent large or rapid increases in cattle and rice agriculture (see Khalil & Rasmussen, 1982; 1985). Already we see that these sources are not increasing as rapidly as in the decades before.

Second, and more important, there are potential feedbacks that are very poorly understood at present and may be triggered by global warming. The principal feedback we are working on is the release of methane from permafrost. It has been estimated that there are 2,000,000 teragrams of methane in permafrost. There are only 4000 tG in the atmosphere. Obviously a small perturbation of the huge permafrost reservoir can have a very large effect on global methane. Therefore, the methane budget in the future may be more affected by feedbacks in a warmer world than by cattle, rice fields, and other anthropogenic sources. The global warming that can trigger such changes cannot be caused by methane but would come mostly from increases of CO_2 .

I want to emphasize that the ideas on the role of feedback from permafrost are no more than speculations and hypotheses at present, and much work has to be done to understand what may happen. But my reason for going into this matter is to point out that the future concentrations of methane may depend on entirely different processes from those that explain the past concentrations so that controlling one or two small sources now may have a negligible effect on future concentrations of methane.

Because of the reasons discussed above, I believe that the effect of controlling methane emissions from cattle, even if it can be done, will provide little or no benefit from the point of view of global atmospheric chemistry and global warming.

I am sending a copy of this letter to the other participants since many of them may not be familiar with the atmospheric perspective on the role of ruminants in the global methane cycle. I thought they may be interested in what I have said here.

Sincerely yours,

M.A.K. KHALIL,
Professor.

TABLE FROM KHALIL & RASMUSSEN'S PAPER IN PREPARATION DEALING WITH AN ANALYSIS OF RECENT GLOBAL BUDGETS OF METHANE

| Simplified budgets (chronological order) | Ehalt & Schmitt (1978) | Donahue (1979) | Sheppard et al. (1982) | Crutzen (1983) | Khalil & Rasmussen (1983) | Blake (1984) | Seiler (1986) | Bingemer & Crutzen (1987) | Cirrone Oremund (1988) |
|------------------------------------------|------------------------|----------------|------------------------|----------------|---------------------------|--------------|---------------|---------------------------|------------------------|
| Ruminants..... | 160 | 160 | 90 | 60 | 120 | 115 | 85 | 79 | 80 |
| Rice paddy fields..... | 280 | 210 | 39 | 45 | 95 | 165 | 120 | 54 | 115 |
| Biomass burning..... | 0 | 0 | 60 | 70 | 25 | 68 | 78 | 65 | 55 |
| Other anthropogenic..... | 83 | 233 | 135 | 45 | 105 | 106 | 82 | 103 | 120 |
| Swamps and marshes..... | 245 | 250 | 39 | 125 | 150 | 150 | 48 | 82 | 115 |
| Other natural..... | 24 | 27 | 882 | 150 | 83 | 256 | 25 | 15 | 55 |
| Total anthropogenic..... | 523 | 603 | 324 | 220 | 345 | 454 | 364 | 301 | 370 |
| Total natural..... | 269 | 277 | 921 | 275 | 233 | 406 | 73 | 97 | 170 |
| Total..... | 791 | 880 | 1245 | 495 | 578 | 860 | 437 | 398 | 540 |

Notes: (1) The budgets have been adjusted (to 1988) for the changes in the global emissions that may have taken place since the budgets were published. If increasing anthropogenic sources are the main cause of increasing methane the anthropogenic sources should be increasing at about 5 Tg/yr. (2) All budgets are not equally successful in explaining the global space and time distributions of methane.

REFERENCES

M.A.K. Khalil and R.A. Rasmussen (1982) Secular trends of atmospheric methane, "Chemosphere 11," 877-883.

M.A.K. Khalil and R.A. Rasmussen (1985) Causes of increasing methane: depletion of hydroxyl radicals and the rise of emissions "Atmospheric Environment 19," 397-407.

A. Lacis et al. (1981) Greenhouse effect on

trace gases: 1970-1980, "Geophysical Research Letters 8," 1035-1038.

W-C. Wang et al. (1986) Trace gases and other potential perturbations to global climate "Reviews of Geophysics 24," 110-140.

Mr. SYMMS. I think it is interesting. I hope the Senators later on in their explanation of this bill will be

able to explain to the rest of the Senate how this provision got back in this bill.

My colleagues will ask, "How is it that such a disregard for science can happen?" Here we are. We are regulating, we are going to regulate very extensively for acid rain, when the ex-

perts say the sky is not falling in; there is no problem. We are going to spend millions and millions of the taxpayers' dollars which we will be asking people to be voting for today to raise the money from the working people in this country to pay to study the methane emissions from livestock when the experts say even if you could control it, it is no problem on global warming? How is it that this can happen?

Let me quote what the "Sierra Club" author, Stephen Schneider said:

This is a very important point of why legislation of this nature passes the Congress.

We need to get broad-based support to capture the public imagination. That, of course, means getting loads of media coverage, so we have to offer up scary scenarios, make simplified dramatic statements and little mention of any doubts one might have. Each of us has to decide what the right balance is between being effective and being honest.

That is quite a statement.

In other words, scare the heck out of the public. The networks are not going to check the facts; they want a big jazzy story they can put on the evening news. Go out and say 150 million Americans are breathing dirty air, even though it is not true, but you know, we can justify it and rationalize it. In other words, Mr. President, scare people, get the gullible media hooked in with you, and then pass laws on sound superstition. Do you know what that sounds like? It sounds like tribalism, to this Senator. Yet, it is going on here in America, the land of the free and the home of the brave, and the American people seem to be taking it without even a whimper.

The basis of the clean air bill is not for science, not for clean air, not for economics; it is for politics. It is pure and simple politics. That is all it is. And the goal was to be politically effective but not necessarily honest.

I have to say that both parties can share in the pride of this political endeavor, because even though I happen to think the President had a very moderate idea in mind when he talked about clean air legislation, he chided and chided and chided the Congress for not moving the clean air bill. All the time he said that, "If that bill is over \$22 billion in costs, I am going to veto it." I do not know whether they have it costed out yet, but all the studies I have seen indicate to me that this bill is going to cost somewhere between \$35 billion and \$76 billion, Mr. President, per year, annually. And it will cost a job loss of somewhere between 500,000 and 1.5 million.

I do not know what the President's intention is on vetoing the bill, but I would be quite surprised, frankly, if the bill did not get vetoed. So I would have to say that neither party can plead "not guilty," when in 3, 4 or 5 years from now they look up and find out that all their investment capital at

that time in the chemical industry, steel industry, the petrochemical industry, pharmaceutical industry, and many others, has been invested in Europe, in the Pacific Rim, in Mexico, invested in Canada, and the United States is all of a sudden finding out that people do not want to invest here any more. I hope at that time, when that happens, Senators will look back at legislation such as this.

Second, Mr. President, we have talked about the politics of it, and sound science, but now let us talk about this bill stacks up in terms of providing local flexibility, the prevention and control of air pollution at its source. I am quoting now from the existing Clean Air Act. "The prevention and control of air pollution at its source is primarily the responsibility of the State and local government."

A pollution problem, Mr. President, is Grandma Kravitz's 1956 Oldsmobile that needs a tuneup, or the family down the road that has an old wood stove with no modern catalyst on it, or good old Fred or Tom's body shop on the corner that cannot afford a new airtight paint room.

We here in Washington like to talk about national problems, but Grandma Kravitz and the family down the road and Fred and Tom with the auto body shop are not national problems. They are local people who have their own unique problems and whose solution to pollution cannot be dictated successfully from here in Washington. Mr. President, if you think it can, I only invite those colleagues of mine, who believe that we can dictate all of these mandates from Washington successfully, to look at what Mr. Gorbachev is trying to do over in the Soviet Union. They are trying to get away from making all the decisions in Moscow and spread them out to the people.

All we are doing here is passing laws to grant power to the EPA police force. But we are not going to be tuning up cars; we are not going to be fixing the little auto body shop or paint shop down the street. What we are going to do is drive the cost of everything up, so it will make it more difficult for them to do it.

This is how the Congressional Research Service described the earlier version of the bill, this bill we are discussing today:

Even where it grants EPA significant new authorities as in the acid rain and air toxics title, the current act contains authorities that could be used. The bill forces EPA decisions and actions by setting up deadlines, specifying procedures and spelling out stringent legislative standards.

This is a blueprint for a mass of regulations coming out of Washington to be imposed on our people. In fact, Mr. President, it could be argued that the entire purpose of this bill was to remove local flexibility that is built

into the existing Clean Air Act. It is true that during the committee hearings on this bill, several State and local air pollution control officers actually asked for this bill. Listen to their reason: "Without a Federal mandate, it is doubtful that the States and localities would be willing to impose upon themselves the stringent controls that are needed."

Mr. President, I could hardly believe my ears. These people would be arguing against democracy if they were in the Soviet Union today; they would be fighting Mr. Gorbachev in his efforts with perestroika. They would say that local people do not know what is good for them. We want the people in Moscow to rule us and tell us what to do.

In this case, we want the people along with banks of the Potomac to try to go out along the banks of the Missouri River in Great Falls, MT, and tell people what is good for them. I will tell you, I will put my stake on those people. They have better sense on what to do for themselves than anybody along the banks of the Potomac. I have long said, give me the folks along the banks of the Snake River to take care of their environment, and they will do a better job than any bureaucrat at EPA along the banks of the Potomac. Local people do not know what is good for themselves, is basically what we are saying, that local people do not know what is good for themselves, so they want Congress to impose what is good for them.

Mr. President, that is what the democratic republic in the United States is all about. Frankly, communities where air pollution is a real concern are already accepting very stringent standards. Look what California is imposing on itself. That argument is specious in itself. California is imposing very strict standards on themselves without this legislation. The fact is, I heard Congressman DANNEMEYER, a great Congressman from the other body, make the statement that under the current Clean Air Act, by 1995, most of the areas in the United States that are out of ambient standards now would be in ambient standards, and in California they are making the change to get them in without this legislation.

I have said it before, and I will say it again, this bill is nothing but a national industrial policy. It is a centralized control over the industrial sector of our economy to the worst degree. Those countries of the world where decisions of this kind are centrally planned also have some of the worst air quality problems in the world.

I just cite an example to my colleagues. Remember when the Berlin Wall came down and the cars from East Berlin started driving into West Berlin? Guess what happened? The cars from East Berlin did not meet the

standards of West Berlin. They had to waive the clean air standards to allow their friends from East Germany to drive into West Berlin.

I say again, who cares the most about the air quality in Sandpoint, ID, if it is not the people who live and breathe it themselves. It is the people in Sandpoint, ID. They are the ones who care the most. And if we expect some bureaucrat along the banks of the Potomac to appreciate those concerns of the local people, it is foolhardy.

This conference report before us thrusts the heavy hand of the Federal Government into extremely local situations. In fact, in this respect, it is even worse than the bill which passed the Senate earlier. In the Senate bill, a "major source," that is, a business to be heavily regulated, was defined as one that emitted 100 tons per year. But the conferees, by the Senate's recession to the House, reduced that threshold to 50, 25, and even 10 tons.

Mr. President, at 10 tons it takes a source with emissions of 2.3 pounds per hour to exceed that threshold. What does this mean to Senators? What it means is that the mom and pop dry cleaners, printers, bakeries, painters, auto body shops, hospitals, and dozens of other small businesses are going to be regulated and called technically in this law a major source of emissions with all the controls, paperwork, and permitting that accompany that designation.

So, Mr. President, there is no way, in my opinion, that it can be said that this bill promotes local flexibility in dealing with pollution problems. So if you vote for this bill, and I know most Senators will, you need to fully understand that you are voting for centralized industrial policy run from Washington, DC. The history of that throughout the world is that planned economies fail and free economies survive.

So this means that, of the three main principles of America's air pollution control success, this conference report fails on at least the first two. It fails on sound science, it is legislating superstition, and fails on local flexibility.

I looked to the third principle. I went to the third principle and I thought maybe somehow we can find something here where it will give us a stronger economy. There are some people I heard, say it is going to create a whole new industry to go out here and cleanup the atmosphere.

I quote for you from the July 24 letter from Michael Boskin, the President's top economist, who wrote to Chairman DINGELL:

The President has asked CEA to coordinate administration cost over clean air legislation. Speaking on behalf of colleagues throughout the administration, let me state emphatically that we do not share the view

that a major extension of the Clean Air Act can have low, zero or even negative cost. Assertions instead to the effect that expanded clean air programs would, on balance, create jobs, increase productivity and make the U.S. economy more competitive in world markets are at best wishful thinking.

That is Michael Boskin, Mr. President; that is the President's top economist speaking.

Mr. President, it reminds me of the story of someone saying that it was good for the economy to get a lot of glass broken out of the windows because then you had to hire people to fix the windows and buy the glass and produce it. It is only good if you go down the street and break out all the windows if you happen to be the guy who has the glass to sell the people, but it is not good for the society.

That is basically what we are saying. There are no free lunches, no environmental free lunches; there are no free lunches anywhere. It may well be that people think it is worthwhile to spend this much money, but the interesting thing is we could probably clean up 98 percent of what this bill will clean up for half of what the cost of this bill is.

I think also we have to understand the connection between a strong economy and good air quality. But I want to give you a few quotes from our chief environmentalist in the United States, our EPA Administrator, Bill Reilly. He understands the concept that I have outlined very well from a recent article that he wrote. And I am quoting now from Bill Reilly.

[Little] has been said about the environmental benefits of a prosperous, growing economy. First, growth raises expectations and creates demands for environmental improvement. Within our own country, demands for better environmental protection (for example, tighter controls on land development and the creation of new parks) tend to come from [the] affluent. On the other hand, environmental issues have never ranked high on the agenda of the economically disadvantaged. As income levels rise, people can afford to pay attention to the quality of their lives and the condition of their habitat.

Mr. President, I digress for a moment to say that when I accompanied Senator CHAFFEE on a trip to the Brazilian rain forest, one of the things that we observed was the poorer the people were, the less concerned they were about whether they clearcut an acre of rain forest and destroyed forever 300 species in one acre. They were not concerned about it, because of their economic situation. They were desperately fighting to try to get enough to eat.

So I want to say again, Mr. President, a sound strong economy is the best way that we can ensure having a sound, good, clean environment in this country. We are going at it exactly backwards. We are going to raise people's taxes and then going to have centralized industrial policy; going to raise their taxes to discourage more

work and production and drain the money from the economy that needs to be spent in the private sector; feed it into the wasteful profligate habits of the Federal Government; and then we are going to turn around and have a centralized, planned economy through the Environmental Protection Agency to administer the Clean Air Act.

Mr. President, I will go ahead here.

Economic expansion contributes on the supply side as well—by generating the financial resources that make environmental improvements possible. In the United States, for example, economic prosperity has contributed to substantial progress in environmental quality. It was not good luck that substantial environmental progress occurred during a period of economic prosperity. Our healthy economy paid for our environmental gains; economic expansion created the capital to finance superior environmental performance.

Administrator Reilly goes on further to point out that a growing, thriving economy can be the cradle of the technology that will solve our environmental problems and, as he put it, and I quote:

The development of cleaner, more environmentally benign technologies clearly makes up for the central element in the transition to the sustainable patterns of growth.

Mr. President, what he is saying, and that is not STEVE SYMMS saying it, that is William Reilly, former president of the Conservation Foundation, a true, in my opinion, professional environmentalist, who devoted his life to addressing environmental problems.

To put in my words what he is saying is that the solution to pollution is design, it is better technology, it is the advancement of what mankind can see in terms of cleaner, simpler, ways to do things. The electric generator, for example, the simple electric generator and electric motor, what advancement it has made in terms of the environment. The solution to pollution is better design, simpler design, which comes from economic capital, freedom of people to be able to work and compete and achieve a better way to do things.

So I would hope that my colleagues would consider this and not dispute that economic growth in the environment and progress are tied together. You cannot damage one without damaging the other.

Unfortunately, the economics of this bill gets the biggest "F."

Let me list a few provisions which make no sense and, like I say, again I do not know what it takes to penetrate the Beltway. I say I tried hard on this bill to plead for common sense. Let me list some of the things in this bill that absolutely make no economic sense: Nonattainment provision, perhaps the most costly title of the bill, the Senate receded entirely to the House position

on this title with smog control from stationary sources.

In doing so, we have accepted far stricter provisions designed for Los Angeles-style pollution problems. For 4 days Senators worked behind the closed doors in the majority leader's office to come up with the nonattainment provisions in the bill that passed the Senate and in a heatbeat the conferees yielded to the House because they thought the House had a stricter and more restrictive provision, I assume.

Offsets. The bill forces new modified sources to obtain offsets—emission reductions in some other source—for any new construction or modification which will increase air emissions. While the Senate bill required one-for-one offsets, the House bill may require offsets up to 1½ times greater. This will force cities to consume offsets so that even minor growth or modernization quickly will deplete the cities entire pool. After a metropolitan area pool of offsets is depleted, no new growth or modernization may occur. It is just economic insanity to do this.

The combination of high offset ratios, coupled with the inclusion of more small businesses competing for those offsets, could produce severe inner-city economic collapse.

My good friend, Jay Powers of the AFL-CIO said it this way. I think it is a classic comment, but it is so true. He said this title should be called the neutron bomb title. And I said why is that, Jay? He said because the buildings will be left but there will not be any people in them. The workers will be gone. The neutron bomb to our inner cities.

In fact, Governor Deukmejian of California recently lamented that 5,000 jobs a month are leaving the Los Angeles area every month as a result of their strict clean air plans that the State imposed. We are going to impose it on the whole country.

The wood stoves. In the dash to recede to the House title, the Senate negotiators let drop completely one of the Senate provisions to create regulatory and financial incentives for modernizing homes with new clean-burning wood stoves in areas that have particulate problems.

This is an amendment that I had inserted in the bill. It had been accepted by the committee. It was an excellent amendment. It would reward people in these areas where they have nonburning days when the pollution—most particulates get high because of wood burning particularly. Now there is no incentive for people to buy a new, modern stove, because on nonburning days, the way the bill is written, you will not be able to burn your modern clean-burning wood stove.

What I wanted to do was, if people invested the money to buy a new, modern cleanburning wood stove that

then, on days that are called nonburning days in areas that come out of attainment, they would still be allowed to burn their good new, clean investment in their stoves so more people would invest in them. But no, the U.S. Senate and the House of Representatives said, we are not going to take any sound common economic sense to reward people for cleaning things. We will just burn them all. And they cannot burn them on nonburning days, so they might as well as have a dirty burning fire. And then on the days it is not out of attainment they burn their dirty fire.

What we ought to be doing is encouraging everybody to get a clean burning wood stove so that they can all burn them all the time.

The Outer Continental Shelf provision. The Senate receded completely to the House without even an effort to seek a compromise position. Under House provisions, State and local governments have unprecedented regulatory authority over Federal territory outside of their own borders, resulting in a virtual veto over OCS oil development.

I guess if that is what the Senate and House want to do, and they want to continue to be held hostage by people like Saddam Hussein, that is a decision that can be made.

Title II, tailpipe standards. Existing vehicle emissions controls remove 96 percent of the emissions at a cost of \$1,200 per vehicle. But we are getting 96 percent, 96 percent of emissions we are taking out of our vehicles today.

I said at the beginning, the best way to clean up the air for the quickest bang for the buck will be if we could all afford to pitch in and help everyone that has a car that is over 10 years old buy a new car, or a more modern car. We would do more for cleaning up the air than any other single thing we can do in America by helping those people that do not have the money to buy a new car to get a new car today.

The President proposed to ratchet control to 98 percent. Ninety-eight percent, 2-percent improvement, which is a lot. In other words, it would cut out 50 percent of what cars are now emitting. It would cost \$150 more. I thought that was reasonable. I was willing to support that. The House proposal would have raise the level to 98.4 percent, an added cost of \$350.

Now, Mr. President, I think it is important to note here that most of the people who live in rural areas will receive absolutely no benefit from that for the return of this cost. But the conference mandates such controls and then imposes a tier II standard which, if it ever is kicked in, will go up to 98.7 percent at a further cost of \$500 per car. At the present time—even though it is in the bill and it may not happen because some of the studies that are in the bill—it is contingent

upon whether the cities are in or out of containment and we will have to wait and see how that comes out.

If we have the kind of recession that I think the Congress is pushing on the American people by raising their taxes and excessively regulating them, many of the people will not buy new cars. They are going to drive their old cars that are polluting more and it will take longer to clean up the air than it would have been.

How I wish and how I pray Congress would just adjourn today before they pass these two pieces of legislation so the country would have an opportunity to survive economically without these additional burdens. But I know that will not happen.

Now, if the tier 2 does kick in, it is going to cost a total of \$2,200 per car, another \$1,000 added to the \$1,200 we now pay.

Another little point people have not thought about, precious metals availability. The current catalyst configuration uses 0.006 ounces of rhodium per catalyst. Tier II standards, if technologically possible, would require at least a doubling of that amount to 0.0126 ounces per catalyst. Ninety-six percent of all the rhodium in the world comes from South Africa. The metal is currently undergoing extreme demand pressures and prices have now reached up to \$4,400 an ounce, up 400 percent from where they were a year ago today.

Mandated sales. This is a real doozy, Mr. President. This is one that is amazing. I wonder what our friends in Eastern Europe, who are trying to pattern their economies after the United States, would think of this one when we talk of all of this free enterprise business. This bill mandates sales of a certain number of low emission vehicles with no consideration of what customer acceptance will be. In California, even if they have to manufacture and sell these automobiles at a loss, there is a mandated provision in the bill—I think it is 300,000 vehicles that must be sold, even if they lose money.

So what that means is that the distinguished Senator from New Mexico, who is the occupant of the Chair, and some of the people who live in the high clean skies of New Mexico, they will get to pay a higher price for the car that they buy because General Motors will be required to sell cars at a loss in Los Angeles to make it go. People in Idaho will do the same thing. People in Rexburg, ID, and Boise, ID, and other places will end up paying for this because we are forcing and mandating sales. It is a very unheard of concept in the United States to mandate sales even with no regard to cost.

Recall costs. Over 15 million vehicles have been recalled over the past 5 years because of inability to meet the

current standards. The conference report is vastly going to expand the likelihood of more recalls which means more inconvenience, and a very, very costly exercise for the American economy.

(Mr. AKAKA assumed the chair.)

Mr. SYMMS. Title III, Mr. President, air toxics. This is the part where we have the theology.

If we inject these rats full of chemicals and if the chemical we inject into the rat is not poisonous, then the rat does not die. If you jam enough of them in there and you get the rat to get a cancer, then you can go out and make these theoretical studies of what the most exposed individual will be and technically you can have all kinds of problems related to jobs, to the workplace, and you can actually close businesses down. It is what I call the theology. It is not based on facts. It is just based on the rats. It must be kept in mind it is theoretical risks, other than accidental release injuries. Routine emissions of most substances under this title are not proven to have caused serious health effects in the United States.

The technology mandate section. The conference provision requires sources to adopt the maximum achievable control technology, known as MACT, defined as at least 90 percent control of emissions. The President's bill imposed this MACT standard on only the top 50 percent of such sources. The conference report imposes it on all: 100 percent, meaning that very small and very insignificant emitters will be burdened with the same technology mandates as major corporations.

So, for example, the corporation spends millions of dollars because they do hundreds and hundreds of cars, say, at Ford or Chrysler or Chevrolet. They are going to impose the same standards on Joe's Auto Body Shop. It is going to be very costly, I think, for Joe's Auto Body Shop and we may find the cost of having a car painted is going to go up enormously or we may not be able to get it done.

Unfortunately, if my opinion is correct about how this is going to work out, what will happen is that people are going to want to paint their old cars because they are going to be too poor to buy a new car. And we will slow down the rate at which we are reaching attainment now.

The conference bill also imposes MACT requirements, regardless of whether the hypothetical risk is large, small, or negligible.

Early reductions. The Senate bill exempted from MACT sources who early on reduced toxics emissions by 90 percent even before technology standards were imposed by EPA. The conference deleted the provision. This means that currently clean plants will be penal-

ized and earlier reductions on the part of other sources are less likely.

What I am talking about is, let us say you have a plant in your State, Mr. President, and they spent \$10 million on a cleanup program to reach the MACT standards. Now what happens is that they will have 6 years to amortize that out. If other technology comes along—even though they have spent all this money—they are going to have to do it all over again.

What are they going to do? Sound investors are going to take a look at the United States and say we do not think the United States really wants our business any more. We will go offshore and invest our money offshore to manufacture chemicals, to manufacture fertilizer, to do these other kinds of things. We are going to make it so difficult on people they will not want to do it.

Senator DOLE offered some amendments that dealt with agriculture pesticides. The Republican leader of the Senate—they threw his amendments out, too. The Congress deleted the important provision in the Senate bill to clarify the new regulatory regime in this title would not overlap farm chemical use that is already regulated under FIFRA. Without that protection, farmers would be deemed sources of toxic air emissions.

So if we have farmers in our States who use pesticides, aerial applications, ground applications, they may be found by EPA to be major source emitters and may have to go in and get all kinds of permits and go through a permit process. They are really going to love it. They are really going to love it, Mr. President. I hope they remember who gave it to them.

Residual controls. The House standard for risk remaining after imposition of MACT are tied to the EPA's interpretation of vinyl chloride court decision by Judge Bork. While Bork's decision was reasonable, the Agency has interpreted it in an unreasonable way. Their EPA regulatory interpretation could prove as costly as the original Senate "bright line" shutdown standards, the only difference being that EPA has a slightly greater discretion when the science is questionable and where risks are "close to the bright line"—which is their current procedure. That sometimes is called "the bright band."

Under the bright band, it is possible for a standard to be developed that shuts down an entire industry and, to a certain extent, the economic consequences of the standard cannot be considered.

So it is true, and the proponents of this will say "the bright line is out," but the bright band is still in there. They could rule closer than 1 to the 10,000 or a little further away, maybe 1 to the 20,000 or something so you would have a little more flexibility.

But you would still have the situation that exists in the bill that EPA has the power to go in, and if that most exposed individual who theoretically stands at the gate of the property for 70 years, naked, and based on all these chemicals they have shoved in these rats, they can extrapolate out that he might or might not have a chance of 1 in 10,000 of getting one more cancer in 70 years, which would be 1 in 700,000, they can close the plant down. That is what is in this bill. This is here in the United States. That is the kind of legislation we are passing here at the last hour of the 101st Congress.

I wish Harry Truman was around to run the 101st Congress as he did against the 80th, because I think the Americans would be quite upset.

Acid rain. As far as the economy goes, this is probably the least scientifically supportable area of the bill. It is very costly. The sulfur dioxide allowance trading system, the title's central mechanism, may be completely unworkable. Nearly 200,000 additional allowances were thrown in the pot in conference. EPA's modeler, ICF, has not ascertained whether or not the allowance values will be seriously degraded by this addition.

This is the part that I mentioned earlier in my remarks where Senator GLENN so carefully outlined earlier this year on the Senate floor how, instead of spending \$8 billion a year, which this title will cost in the bill alone, that we could spend \$500,000 a year to lime the lakes of New England and we get instant results to improve the environment. But that is not the choice Congress has made.

The WEPCo fix. The conferees, in spite of letters from 27 Senators, refused to correct the antimodernization dilemma—known as WEPCo policy—which threatens to impose a tighter standard on utilities attempting to adopt tighter technology than on utilities that make no such effort.

If you spend enough money to improve your production plant, you may have to go clear back through and start over and get a new permit process even though you have made it cleaner. In other words, what this does is penalize people for cleaning things up. I think it will have a negative impact.

Allowances not property. This is another serious problem. One of the reasons many people have liked the bill is because it injects some private property mechanism in the bill with respect to trading allowances so there is a value to these allowances and they can be bought and sold. That is a good concept.

But the conference agreement contains a clause defining "allowances" as not "private property" so EPA can "take" allowances without paying util-

ities or the ratepayers who financed such allowances any compensation.

What makes the Congress think if they are not going to allow the allowances to be privately owned and have the respect of private property, what makes us think people are going to want to invest and buy and sell them? It is not unusual for Congress to have an antiprivate property mentality, but it really is harmful, I think, to one of the parts of the bill that was based on some market solutions that Administrator Reilly had originally pushed when he introduced the President's original bill.

Title V: Permitting. Between 50,000 and 150,000 new businesses will be required to get Federal permits in addition to the State permits they already get. The average cost of these permits has been estimated at around \$100,000, meaning that this provision alone could add at least \$5 billion to the cost of this bill, costs that are not included in any of the estimates.

Now, \$5 billion may not sound like a lot of money to the Senate, in view of the fact of how easy it seems to be for Congress to raise taxes on the people. As the late Everett Dirksen said, a billion here, a billion there, after a while it adds up to real money. I think he would be saying this morning, \$5 billion here and \$5 billion there and the cost of regulation adds up to tons of money.

Lack of flexibility: The conference agreement prohibits EPA from tailoring or phasing in new operating permit programs to areas and sources which need it most. Every area and source is subject to the entire program whether it is needed or not.

Enforcement: This conference bill imposes sanctions for paperwork errors; criminal sanctions, Mr. President, criminal sanctions for paperwork errors, recordkeeping errors, and other omissions.

I can tell my colleagues that the people who are going to be impacted by this bill are going to be outraged when they find out that we are imposing criminal penalties if they do not do all of the paperwork exactly right in the operation of their mom and pop dry cleaners, their little paint shop, some small business that may require a permit.

The title of self-audit programs omits the language protecting companies from being penalized if they discover their own noncompliance situations and correct them in good faith.

Mr. President, I do not know how far off the base we have gone, but, in other words, if you have a business that may be out of compliance and you discover yourself or try to bring yourself into compliance, EPA will still have the power to find and penalize you for it even if you are trying to fix it up yourself.

Mr. President, does this sound like an economically viable bill? I do not think so. All through the deliberations on this bill, the Congress has ignored the voices of warning against a bill that is so costly that probably it will do more damage to the economy than the good that it may do for the air.

Here is what Paul Portney, the vice president of Resources for the Future, cautioned:

The U.S. may be spending \$29 billion to \$30 billion more each year on air pollution control than it is today. Annual benefits of the proposed changes range from \$6 billion to \$25 billion. I would speculate that the most likely estimate is about \$14 billion or so. If these estimates are even close to correct, Congress and the President are about to shake hands on a landmark piece of environmental law for which costs may exceed benefits by a considerable margin.

Mr. President, I would like to read a letter to my colleagues to the President dated October 12:

DEAR MR. PRESIDENT: Few Americans are opposed to the concept of clean air. We laud your efforts, and those of members of Congress, to ensure that health standards in this country remain high. But we believe that the clean air bill presently being considered in Congress is an unwise, ill-advised patchwork of legislation that should not be enacted.

The cost of the bill will be very high: a report to the Business Roundtable places the cost at more than \$50 billion a year, while a vice president at Resources for the Future estimates each American household could spend an additional \$300 to \$400 annually. Yet, there is little evidence that these new regulations would actually improve the quality of air.

Moreover, there is widespread agreement that our economy is currently in a fragile and vulnerable condition. This, added to the crisis in the Middle East, raises the prospects that Americans could face some very difficult economic times ahead. The Clean Air Act's unduly stringent and extremely costly provisions could seriously threaten this nation's economic expansion.

Mr. President, now is not the time to enact legislation with questionable benefits but certain and serious economic costs. We urge you to prevent enactment of the Clean Air Act of 1990.

Mr. President, that is quite a letter. You would think somebody who was opposed to the bill in the Chamber might have written it. This is not the case. This is a letter signed by James Buchanan, Nobel Laureate, George Mason University; Robert Crandall, senior fellow, economic studies, The Brookings Institution; Milton Friedman, Hoover Institution, Nobel Laureate; Manuel H. Johnson, former Vice Chairman of the Federal Reserve Board; James C. Miller, former Director of the OMB; William Niskanen, former Chairman of the Council of Economic Advisers; and George Stigler, University of Chicago, Nobel Laureate, economics.

Mr. President, I do not know what we have to do, how do we penetrate the impermeable wall for sanity and common sense so that we can have a

moderate move toward cleaner air without throwing the baby out with the bathwater, without killing the goose that lays the golden egg.

But in summary, Mr. President, the conference report fails all three tests for what have been proven successful in the past. It is not based on sound science. It does not provide local flexibility, and it will not contribute to a strong economy. These three things have come together over the past decade to deliver improving air quality to most areas of the Nation. That is what is happening now under the current Clean Air Act. We have basis for sound science. We have local flexibility and we have a sound economy. This bill runs right into the face of all three of those basic principles. I fear that by leaving those principles by the wayside, the net result will be worse, not better, and America will not be as good a place to live as it should be.

In some parts of the country, we may even see a deterioration of air quality because if people cannot afford to buy new automobiles and they continue to drive the old clunkers, we are going to have a longer, slower period of getting these cities into compliance.

I, for one, Mr. President, cannot stop this bill from passing. I am only one Senator. And there may be very few votes against this report because all Senators want to be recorded as being for clean air.

Let us warn my colleagues who vote for this bill: If you want a nationalized industrial policy, go ahead and vote for it; if you really believe Americans do not value their freedoms, go ahead and vote for it; if you believe Washington, DC should end up telling every small business and local government how to operate, go ahead and vote for the bill; if you want to drive the country further into recession that looms in front of us, vote for the bill, by all means; and if you want to vote for what is politically expedient, I would say definitely vote for it because, as I said, who wants to be the candidate for dirty air?

But do not vote for the bill if you are under the guise of reality that you think somehow this bill really is going to give America cleaner air. It does everything but guarantee cleaner air for the American people.

Mr. President, I have another article that I would like to print in the RECORD. I would like to make a summary of I think some very good and important quotes to remember concerning the clean air conference report.

"This bill is the most sweeping environmental law in more than a decade." That is our distinguished majority leader who said that.

"The cost will be very large. I hope the bill will be cost beneficial." That is

JOHN DINGELL, the distinguished chairman on the House side.

"The most likely [annual benefits of the Clean Air Act amendments are] about \$14 billion . . . if these estimates are even close to correct"—and I have already said this once but I will repeat it—"Congress and the President are about to shake hands on a landmark piece of environmental law for which costs may exceed benefits by a considerable margin." Paul Portney, vice president, Resources for the Future.

"The air toxic title will directly affect 1.6 to 2.21 million workers. An estimated 2.8 to 5.51 million workers throughout the United States are expected to be indirectly impacted."

"The acid rain title will impact 1,719 plants in energy-intensive industries employing 232,000 workers whose jobs may be affected by those proposed amendments." This is CONSAD Research Corp.

"The permitting title is expected to directly and substantially impact 143,000 small facilities with over 2,019,000 employees. For well over 150 counties in the United States, the number of jobs affected will exceed 8 percent of the total employment in this country." This is another quote from CONSAD Research Corp.

"We find that environmental regulation has been an important contributor to the growth slowdown. We also find that pollution abatement has emerged as a major claimant on the resources of the U.S. economy." Dale W. Jorgenson and Peter J. Wilcoxon, Environmental Regulation and U.S. Economic Growth, the Harvard Institute of Economic Research.

Mr. President, I ask unanimous consent that these quotes be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

QUOTES TO REMEMBER CONCERNING THE CLEAN AIR CONFERENCE REPORT

This bill is the most sweeping environmental law in more than a decade. (Majority Leader George Mitchell, press conference, Oct. 22, 1990).

The cost will be very large. I hope the bill will be cost beneficial. (House Commerce Committee Chairman, John Dingell, press conference, Oct. 22, 1990).

The most likely [annual benefits of the proposed Clean Air Act Amendments are] about \$14 billion . . . If these estimates are even close to correct, Congress and the President are about to shake hands on a landmark piece of environmental law for which costs may exceed benefits by a considerable margin. (Paul R. Portney, vice president, Resources for the Future, Economics and the Clean Air Act).

[The Air Toxics Title] will directly affect 1.66 to 2.21 million workers. An estimated 2.80 to 5.51 million workers throughout the United States are expected to be indirectly impacted. (Analysis of the Air Toxics Provisions Contained in the Proposed Clean Air Act Amendments, CONSAD Research Corp., Sept., 1990).

[The Acid Rain Title] will impact 1,719 plants in energy-intensive industries; employing 232 thousand workers whose jobs may be affected by these proposed amendments. (Analysis of Jobs-at-Risk and Job Losses Resulting from the Proposed Clean Air Act Amendments, CONSAD Research Corp., Feb., 1990).

[The Permitting Title] is expected to directly and substantially impact 143,200 small facilities with 2,019,000 employees. For well over 150 counties in the United States, the number of jobs affected will exceed eight percent of the total employment in the county. (Analysis of Small Facility Job Impacts Resulting from the Permitting Provisions Contained in the Proposed Clean Air Act Amendments, CONSAD Research Corp., July, 1990).

We find that environmental regulation has been an important contributor to the growth slowdown. We also find that pollution abatement has emerged as a major claimant on the resources of the U.S. economy. (Dale W. Jorgenson and Peter J. Wilcoxon, Environmental Regulation and U.S. Economic Growth, Harvard Institute of Economic Research, 1990).

Mr. SYMMS. Mr. President, I would like to read the clean air politics editorial of October 19 from the Wall Street Journal. I think it is very appropriate to our colleagues today. It is entitled "Clean Air Politics."

Many of President Bush's aides concede the Clean Air Act delivers only trace benefits in return for enormous costs but claim it would be political suicide to veto it. There is evidence that the kind of near zero risk environmental limit the Clean Air Act represents is losing support as recession threatens.

This week's California poll shows that State's antipesticide Big Green initiative in a dead heat and slipping. In New York, a \$2 billion environmental bond issue is in danger of losing. How loud does the roar from the country have to get before it penetrates the beltway cocoon?

Working with cotton stuffed in their ears, House and Senate conference committee members are close to an agreement on the Clean Air Act—

And they have made it since this editorial was written—

which will force as many as 150,000 American businesses to get specific EPA permits for any one of 191 pollutants. This loaded legislation needs only President Bush's signature before it is thrown onto the back of an already stumbling economy.

This week a group of noted economists, including Nobel Prize winners George Stigler, Milton Friedman, and James Buchanan, made an unusual appeal to President Bush to veto the act. They point out that Paul Portney, a vice president for the environmental group Resources for the Future, has estimated the act could cost each American household \$300 to \$400 a year. "The Clean Air Act's unduly stringent and extremely costly provisions could seriously threaten this Nation's economic expansion," the economists wrote.

Republican backers of the Clean Air Act argue that President Bush has to sign the current legislative hash, or he will face an even worse bill next year.

That is it, a worse bill next year.

But why? given the public's growing concerns about jobs and economic growth, we'd be willing to bet that the political and intel-

lectual climate will shift strongly in favor of a more balanced approach. Industrial policy was discredited during the 1980's. It has dressed itself up as environmentalism in the 1990's and will soon be knocking on Mr. Bush's door for a contribution.

Mr. President, one last article that I think is worthy of note—I ask unanimous consent that it be printed in the RECORD, "Costs of the Clean Air Act," by a columnist who has done, in my view, the Nation a great service by writing a series of articles throughout this year on the subject of clean air. He has gone through a lot of what has been said here this morning.

This article is by Warren Brookes, "Forthcoming Clean Air Depression?"

There being no objection, the article was ordered to be printed in the RECORD, as follows:

[From the Washington Times]

FORTHCOMING CLEAN AIR DEPRESSION?

(By Warren Brookes)

For the past two weeks, the American economy has been in a race for its very life against the insanity of Washington politics and a leadership vacuum in the White House over the two most dangerous issues, higher taxes and the Clean Air Act.

Fortunately for the nation, not to mention President Bush, Michigan Rep. John Dingell, Democratic chairman of the House Energy and Commerce Committee, has apparently decided that protecting the economy is more important than destroying Republicans. But even his "damage control" on Clean Air is much too little and far too late, as the White House has not signaled its willingness to sign an outrageously expensive bill.

Even as Mr. Bush prepared to sign off on a "deficit reduction" plan that allows \$100 billion in higher spending for fiscal 1991 in return for \$35 billion a year in higher taxes, congressional environmental extremists like Rep. Henry Waxman, California Democrat, and Sen. Dave Durenberger, Minnesota Republican, tried to send him the most costly possible Clean Air bill to embarrass him with the "greens."

White House sources admitted to this columnist last week that if the president is forced to deal with this bill before the election, he will sign it—just to protect Republican Sen. Pete Wilson, who is running for governor of California where as many as 14 Republican seats could be gained. On the other hand I was told, "If he gets it too late for the election he might veto it." Already that threat is vanishing.

The only good news is that Mr. Dingell managed to get the conference to agree to cut at least \$12 billion to \$16 billion of the costs of this madness by backing away from "bright line" standards on air toxics in both House and Senate versions.

Those standards calling for reducing the residual risks on all air (189 compounds) to 1 in 1 million risk to the most exposed individuals (MEI) would have forced the closure of at least 14 major steel plants and all coking ovens and have cost up to \$40 billion, by themselves. The impact of these "bright lines" on the Michigan auto economy would have been incalculably high, with total costs of at least \$800 million to \$1.6 billion.

Instead, under Mr. Dingell's guidance, both House and Senate versions of those "bright lines" were killed in favor of return-

ing to the original Environmental Protection Agency-administered "ample margin of safety" standard, changing "bright lines" into "bright bands".

Unfortunately, this essentially modest concession has apparently convinced the president to sign a bill that is still at least \$15 billion more costly than his supposed veto line of \$2 billion.

As three Nobel economist James Buchanan, Milton Friedman and George Stigler warned Mr. Bush in a letter last week, "The Clean Air Act's unduly stringent and extremely costly provisions could seriously threaten this nation's economic expansion."

Thus, as important as Mr. Dingell's achievement on air toxics was, there are still massive economic costs in the remaining sections.

ACID RAIN

The \$5 billion to \$8 billion cost per year will involve electricity rate increases of from 15 percent to 30 percent in approximately 11 Central states, with a likely lost-job impact (direct and indirect) of between 40,000 and 50,000 jobs, to achieve a 10 million ton reduction in sulfur dioxides (SO₂) by 1999. That same SO₂ reduction could be achieved by 2010 for no job loss or rate increase.

This program might recover 75 lakes from acidity over 50 years, with an average area of 10 acres each, or 750 acres in all. Linear costs are more than \$300 million per acre recovered. The 50-year cost of liming these lakes (as recommended by scientists of the National Acid Precipitation Assessment Project [NAPAP]) is \$1,250 per acre. While Michigan's costs are slight, the auto industry will be severely affected.

OZONE NON-ATTAINMENT

This \$19 billion to \$48 billion section requires \$600 per automobile in more advanced tailpipe designs and the reformulation of gasoline and the marketing of alternative fuels. It also requires the installation of point-source controls on all stationary sources of volatile organic compounds and of nitrogen oxides, from local dry cleaners up to factories.

The benefits are unquantifiable since higher-cost new cars will slow retirement of the heaviest ozone-contributing old cars, and because of the weakness of the link between VOCs and ozone non-attainment, especially in the Eastern half of the United States. The health benefits are estimated at from negligible to thousands of lives. Most real epidemiology suggests under 200 lives per year.

PERMITTING

One of the sleepers in this bill will require at least 143,000 small businesses (up to 6,000 in Michigan) for the first time to go through federal point-source pollution-permitting processes. A study by CONRAD Economics says annual costs per small plant will be \$8,000 to \$22,000, or \$1 billion to \$3 billion per year. That's \$40 million to \$120 million to the struggling Michigan economy, alone.

In his letter to Mr. Dingell last July, White House Economic Adviser Michael Boskin admitted that because of this bill, "productivity growth will be reduced. Growth in worker's average real income and in productivity will thus both slow. Domestic industries that are required to spend intensively on pollution controls will definitely become less competitive in world markets, and some jobs will move offshore as a consequence."

Worse, the bill will increase U.S. energy consumption of natural gas by 6 percent to 19 percent, oil by 2 percent and total electricity by 1.5 percent, all during a Middle East Crisis.

To put it bluntly, despite Mr. Dingell's best efforts, the House/Senate Clean Air bill is a wasteful, costly, assault on an economy already plunging out of favor with world investors.

The fact that the president will apparently now sign the bill even though it breaks every parameter that he originally set forth reveals an administration without direction or vision.

Mr. SYMMS. Mr. President, I see that my distinguished colleague from Wyoming is here. I will be happy to yield him 10 minutes.

The PRESIDING OFFICER (Mr. Ford). The Senator from Wyoming is now recognized for 10 minutes.

Mr. WALLOP. Mr. President, I thank the Senator from Idaho. I thank him for much of what he has pointed out to us here this morning.

I would say that when he said the bill before us was not based on sound science, it is reasonably obvious why, and that is because sound science confronts it. We purposely did not pay attention to the \$600 million national acid precipitation assessment project. We passed the first versions of this bill before that report was even out because it was known from early drafts precisely how badly it would confront the prevailing political wisdom.

So sound science was a direct confrontation to sound politics.

I think it is also true, Mr. President, that we ought to be aware in this country, even as we stand on the threshold of passing this bill, that the United States spends more on environmental protection per capita or by any measure that you would like to cite than any other industrial nation in the world.

I would also say to my friend from Idaho, as he has pointed out, the 101st Congress will have apparently avoided Armageddon. All the things we have done this year to avoid something worse next year would simply not have been tolerable for a modern political democracy.

But, Mr. President, the Senate will soon vote on the reauthorization of the Clean Air Act. As others have stated, the legislation has been 13 years in the drafting. There are several reasons for this lengthy gap between reauthorization bills. One major factor has been the pact with the devil made between environmentalists and Midwest politicians back in 1977. This was their agreement to protect polluters while penalizing the Western States for having clean air.

Back in 1977, I served on the Environment and Public Works Committee. That year the committee drafted its first reauthorization of the 1970 Clean Air Act. I eventually opposed that legislation because it was not a good bill for the environment. The

mistakes we made back then are the cause for the current extended debate on clean air.

The flaw legislated back in 1977 was the provision which grandfathered all the dirty coal-fired plants in the Midwest. None of these plants had to comply with the clean air standards in the act. Instead, the amendments required the newer and cleaner western powerplants to meet much stricter control standards for the new source pollutants. We were subjected to tough engineering—that is, technical—standards regardless of the quality of the air in which the activity was taking place.

Robert Crandall of the Brookings Institution has written that clean air legislation was shaped by "an unusual coalition of defenders of declining industries, high-sulfur coal producers, and environmentalists."

The 1977 reauthorization was the blatant attempt to punish high-growth Western States. The bill amended section 111 to require that all new sources of sulfur dioxide must install scrubbers regardless of whether they burned clean or dirty coal, and regardless of the standard to which the rest of the country may have been put.

In other words, it did not seek to meet a pollution requirement. It sought to meet a regional economic requirement. The result is that today many Midwestern powerplants have sulfur dioxide emission levels that are 4 to 5 times the allowable levels for a new western plant of the same size. For this reason, I voted against that antienvironmental legislation. It was also the source of my skepticism about the current reauthorization bill.

Three events have propelled the drafting of a clean air reauthorization this year. The first has been the emotional debate over the threat of acid rain. The National Acid Precipitation Assessment Project literally laid down the nature of that threat, and it is virtually nonexistent.

What threat exists is not a consequence of the production of sulfur dioxides from powerplant emission. One of the areas of greatest acid deposition in America in the form of rain is in Florida, which has no powerplant deposition to add to it.

So the debate has been emotional and there has been questionable scientific basis behind the issues. Nonetheless public passion has been aroused. The press will ignore the science generally that has been produced to the contrary because the West had already cleaned their utilities. The focus has been on the dirty powerplants in the Midwest. But once again an effort has been made to protect both the coal and the power interests in the Midwest.

ACRONYMS—Continued

| | |
|--------|--------------------------------------------------|
| CMA | Chemical Manufacturers Association. |
| CTG | Control Technique Guidelines. |
| EEA | Energy and Environmental Affairs, Inc. |
| EGR | Exhaust gas recirculation. |
| EPA | Environmental Protection Agency. |
| FIP | Federal Implementation Plan. |
| GNP | Gross National Product. |
| HC | Hydrocarbons. |
| HCTC | Hydrochlorofluorocarbons. |
| HFC | Hydrofluorocarbons. |
| I/M | Inspection and maintenance. |
| LAER | Lowest achievable emission rate. |
| LDV | Light duty vehicles. |
| MACT | Maximum achievable control technology. |
| MECA | Manufacturer's of Emission Controls Association. |
| MVMA | Motor Vehicle Manufacturers Association. |
| NAAQMS | National Ambient Air Quality Standards. |
| NSPS | New Source Performance Standards. |
| OTA | Office of Technology Assessment. |
| RACT | Reasonably achievable control technology. |
| ROAD | Research, development, and demonstration. |
| RVP | Reid vapor pressure. |
| VOC | Volatile organic compounds. |

Mr. BAUCUS. Mr. President, I further would like to insert in the RECORD at this point an explanation of this legislation, an explanation that is much more detailed than the statutory language.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

CLEAN AIR CONFERENCE REPORT
NONATTAINMENT

Designation and Classification

One of the more unique aspects of the new legislation is the classification of nonattainment areas and specifications of control strategies based upon the severity of the air pollution problem. In order to assure timely implementation of control measures, it is important that the Environmental Protection Agency classify nonattainment areas in a timely and accurate manner. It is our intent that states work with EPA in using designations in effect at the time of enactment, and classifications as are appropriate using air quality data from 1987, 1988 and 1989.

The provision also allows for an adjustment in the classification for areas whose design value is within five percent of a higher or lower classification. We intend this adjustment to be primarily one of "upward" classification for those areas, particularly Marginal, that may have a low design value but experience a large number of exceedances. Adjustment of area classifications "downward" should be a rare occurrence reserved only for areas which demonstrate to the Administrator that the control measures called for in the initial classification are clearly not necessary for the attainment and maintenance of the standards.

Expanded Geographic Coverage

Title I expands the geographic coverage of the control program to include the Metropolitan Statistical Area (MSA) or the Consolidated Metropolitan Statistical Area (CMSA). This was done in recognition of the significant role that transported air pollution and community patterns play in the formation of ozone and other pollutants. If we are serious about ameliorating the air pollution problems plaguing our nations' cities, then we must begin regulating sources located outside of the control region whose emissions are also contributing to this problem. Both stationary sources that have escaped controls in the past and motor vehicles that have not been subjected to Inspection and Maintenance programs must be included in the program. Although the legislation allows areas to petition to ex-

clude a portion of their CMSA, it is our intent that this test be a difficult one to pass.

Regulation of Smaller Sources

The legislation also lowers the size threshold defining which sources are subject to the control requirements. In particular, the threshold is lowered to 50 tons for Serious areas, 25 tons for Severe areas, and 10 tons for Extreme areas. This action was necessary in light of the substantial emissions that are produced from sources below 100 tons. In fact, many states have already recognized the contribution from these smaller sources and are regulating sources emitting as few as three tons per year. This provision clearly provides states and localities with the ability to continue regulating sources smaller than the federal minimum levels specified in the legislation.

Percent Reduction Requirements

This legislation recognizes past problems associated with measuring reasonable further progress toward attainment of the standards by specifying that future progress be based upon actual reductions in VOC emissions. The Act requires that a 15 percent reduction in emissions be achieved within six years of enactment. In addition, it calls for a base inventory within two years of enactment and updates every three years thereafter. Since inventories would be required at both the five-year (2+3) and six-year (15% reductions due) time frame, we encourage the Administrator to use discretion and focus primarily on the six-year inventory. The accuracy of this inventory is extremely critical. Emissions reductions from the inventory must be real, permanent and either enforceable or "demonstrably stable" (i.e., a state could show that plant shutdowns would have to undergo new source review before resuming operations).

Technology Guidance

Many of the control measures prescribed in the bill will be issued by EPA in the form of Control Technique Guidelines, or CTGs. These guidelines define the level of control—Reasonable Available Control Technology—that existing sources must adopt. We have been extremely discouraged by EPA's track record over the past 10 years in publishing these documents. None has been published since 1983, and many before that were watered down by Office of Management and Budget review. Since states and localities will be depending upon these documents in preparing their State Implementation Plans, it is essential that EPA publish these CTGs as quickly as possible. This is particularly important in areas exceeding the small particulate standard where SIPs are required to be submitted within the first year of enactment.

Control of Nitrogen Oxides

The legislation recognizes for the first time the important role that nitrogen oxides play in ozone formation and establishes a stringent set of control requirements for new and existing sources. While the bill allows areas to impose less stringent NO_x measures where they would result in excess emissions reductions, we would look askance at any "gaming" of these provisions, that is, where overly optimistic assumptions are factored into the mathematical models to avoid important NO_x controls. This is particularly important in areas where biogenic emissions of reactive organic compounds contribute significantly to the formation of ozone.

Long Range Transport

The legislation establishes regional transport commissions to assess oxidant transport from within and outside ozone transport corridors and implement appropriate measures needed to attain the ozone standard in the region. In particular, Congress established a transport commission for the northeast corridor where transport of ozone and its precursors has been clearly demonstrated.

We believe that the transport commissions can play a vital role in abating interstate air pollution control problems. Thus, we encourage other areas, such as the upper mid-western states, to pursue authority similar to that provided the northeast.

With respect to the northeast region, we encourage the members of the Commission to petition EPA to expand, where appropriate, the coverage of the program to other areas, including the remaining portions of Virginia. Emissions from Virginia flow from its urban and rural areas toward Washington, D.C. and other mid-Atlantic states. The urbanized part of the state includes substantial industrial activity as well as vehicle travel consistent with other areas in the transport corridor. In addition, rural areas in Virginia are also exceeding the air quality standards, affecting areas both within and outside the state.

The Commission members must realize that their primary responsibilities are to evaluate oxidant transport into and throughout the transport region, implement the requirements of the Clean Air Act, assess all potential emission control strategies that may be applicable throughout the transport region or in a portion of the region, and establish control recommendations for consideration by the Administrator. The Commission should also encourage member states to use consistent techniques, assess and plan for the development of State Implementation Plans and then review all SIPs for the program stipulated in the Clean Air Act and additional requirements agreed to by the Commission. To effectively carry out these responsibilities, commissions must be allocated sufficient resources to support full time executive and scientific staff.

We believe that regional commissions must be capable of obtaining expert scientific guidance, independent of U.S. EPA and member states, on the transport of photochemical oxidants into and throughout their region. This scientific guidance should include recommendations on the level of oxidant controls needed for both hydrocarbons and nitrogen oxides to attain and maintain the ozone National Ambient Air Quality Standard and on the most effective allocation of control measures within the transport region to achieve these goals. Commissions will need to play a leadership role, in conjunction with the U.S. EPA and member states, in utilization of state-of-the-art photochemical transport models based upon obtaining accurate information—such as speciated emissions data and sufficient ambient monitoring data—and using reasonable growth projections. The Commission will be in the best position to consider a variety of regional control measures which are often difficult for individual states to consider because of their effect on product distribution markets. These innovative measures include, but are not limited to, regional controls on a variety of consumer products, expanded use of reformulated gasoline, alternatively fueled fleet programs, and vari-

ous other motor vehicle emission control strategies, including transportation control measures, that encourage reductions in vehicle use.

In accordance with the House language, each member state will have two voting representatives on a Commission, an air quality control official and a designee of the governor. The importance of a Commission's activities and its recommendations will be enhanced with the participation of senior advisors to Governors. The Governor's representatives will be extremely valuable to the Commission in providing direct input from the highest levels of state government, obtaining state legislative authority or the approval of regulations as necessary, and assuring effective implementation of control measures agreed to by the Commission.

Under the bill, the Administrator has the final authority to disapprove additional measures recommended by the Commission. However, EPA bears a heavy burden of demonstrating that the additional control measure(s) is not necessary to bring any area of the region into attainment by the dates provided and to recommend equal or more effective actions that could be taken by the Commission to conform the disapproved portion of the recommendations. Any recommendations by EPA under this section designed to replace the recommendations of the Commission shall not place an unfair burden on any state which is the victim of the transported air pollution. Equal or more effective actions recommended by the EPA shall mean actions which achieve equivalent progress towards attainment of the standard, given full consideration of the impact of transported air pollution.

Inspection and Maintenance

The legislation acknowledges that mobile sources represent the dominant source of smog-producing emissions and carbon monoxide; these sources must be well controlled if air quality standards are to be attained. Vehicle inspection and maintenance programs will play a significant role in ensuring that vehicles are properly designed and maintained so that they meet their emission standards during their full life. This is especially important in light of the long lead-time associated with phasing in new motor vehicle standards.

All nonattainment areas are required to adopt and implement I/M programs, except Marginal areas that were not required to do so in the past. States are required immediately upon enactment to submit schedules for implementing I/M programs. The Administrator should require these schedules to be submitted within 30 days, legislation to be adopted within one year and the program to be implemented within two years. We urge areas to act expeditiously with these programs. While enhanced I/M programs are required for areas classified as Serious and above, we strongly urge all areas implementing I/M programs to develop enhanced programs.

Various population thresholds for I/M programs are specified in the Act, based on the use of the 1980 census. We encourage the Administrator to use the 1990 census as it represents the most recent population data available.

Finally, the legislation makes reference to the measurement of NO_x emissions and the inclusion of on-road testing devices. We encourage the Administrator to accept a tampering check to satisfy the NO_x emission check, and to be discretionary with its pro-

gram to use on-road testing until such time as these devices are certified by EPA.

General Savings Clause

The savings clause in the new legislation is intended to ensure that no backsliding occurs from implementation of adopted, currently feasible measures that EPA has approved as part of a SIP in the past, or currently feasible measures that EPA has added to state plans on its own initiative or pursuant to a court order or settlement, including a Federal Implementation Plan. We do not intend that this savings clause requires EPA to finalize the Federal Implementation Plan in California and preempt the states and regional air quality planning that is ongoing in the Los Angeles area and will otherwise be required under this legislation. If EPA were to promulgate complete new plans based on requirements of the old Act, the areas subject to those federal plans would be deprived of the opportunity to use the significantly revised and clearly more workable requirements of the new legislation. We agree that this would be unreasonable, particularly since the proposed FIP fails to recognize the critical role that local governments play in reducing transportation-related emissions.

The savings clause provides EPA with significant discretion with respect to FIPs in California. EPA has the obligation to adopt control measures for sources which it exclusively controls when those controls are necessary to help attain national standards or meet other requirements of the Act. But, beyond that, EPA should complete ongoing FIP processes only for the purposes of ensuring that the standards are met by the statutory deadlines.

New Source Review

The legislation requires that in Extreme areas net emission increases of VOCs from the installation or modification of stationary sources be offset by emission reductions at a ratio of at least 1.5:1, unless the Best Available Control Technology is required for all major sources in the area, in which case the ratio must be at least 1.2:1. The section also imposes an internal offset ratio of 1.3:1 for increases resulting from the modification of equipment within a facility.

During the Conference, the South Coast Air Quality Management District adopted a new source review rule (SCAQMD) that appears to meet these ratios on an area-wide basis. It is our intention that the State Implementation Plan for an Extreme area may provide alternative methods of meeting the specified offset ratios as long as, in the aggregate, the overall emission reductions are achieved. The SCAQMD rule provides such reductions by requiring net emission increases for any new or modified stationary source, not just major sources, to be offset; by requiring all new and modified sources to comply with LAER; and by giving credit for emissions reductions resulting from equipment shutdown or curtailment at a level no greater than if the equipment had complied with LAER. Although the SCAQMD rule exempts certain categories (e.g., air pollution control equipment) from the offset requirement, it does not exempt such sources from compliance with LAER.

We believe that the legislation allows the Administrator to approve such an approach provided the aggregate emission reductions achieved by such a rule equal or exceed the level of emissions reductions that would be achieved on a source-specific basis. Furthermore, in determining whether the internal offset ratio was satisfied for purposes of

measuring the equivalency of the rule, the state or the Administrator may give credit for any emission reductions achieved if the modified source installs BACT or LAER.

Federal Facilities

The federal facilities language of the new legislation is identical to the Senate passed bill. As was stated in the Senate report: "Military installations in California's South Air Quality Management District have filed suit challenging the District's authority to require payment of fees, including permit fees. Similar suits have been filed in Federal District Court in New York and there have been other challenges to the authority of State or local agencies to impose fees on Federal facilities. The bill clarifies existing law to make explicit what section 118 already requires: Federal facilities are subject to the same fee requirements that are applicable to nongovernmental entities."

Section 118 of the existing Act should have been sufficient to ensure federal compliance with all state and local requirements, including fees or charges to defray the cost of air pollution programs, notwithstanding any immunity under any law or rule of law. Nevertheless, federal agencies in California and elsewhere have argued that the doctrine of sovereign immunity shields them from the obligation to pay these fees or charges, and have asserted that argument in litigation against air pollution control agencies.

The new language is intended to refute that argument and reaffirm the obligation of federal agencies to comply with all requirements, including such fees or charges.

Control Techniques Guidelines for TSDFs

The bill also requires the Environmental Protection Agency to issue control techniques guidelines (CTG) for additional categories of sources emitting volatile organic compounds. It directs the Agency to give priority to those categories it considers to make the most significant contribution to ozone levels in nonattainment areas, including hazardous waste treatment, storage and disposal facilities. This specific reference to TSDFs is intended to underscore the importance of the Agency's ongoing work to set air emission standards under section 3004(n) of the Resource Conservation and Recovery Act for these facilities. The Hazardous and Solid Waste Amendments of 1984 directed EPA to promulgate standards for the control of air emissions from TSDFs "as may be necessary to protect human health and the environment."

This directive to EPA is not intended to disrupt these ongoing efforts, be duplicative of them or to suggest that a lesser level of control is appropriate in any area of the country. To the extent that the criteria for CTG's under the Clean Air Act could result in a less stringent level of control than will be proposed under RCRA, the RCRA standards must govern, to reflect the standard of protection of human health and environment by which the adequacy of the RCRA regulations will be measured.

General Transportation Control Measures

The experience of the last 20 years makes clear that we cannot solve the air pollution crisis in major polluted areas like the Northeast, Chicago, or Los Angeles only by controlling industrial sources or making new cars cleaner. The existing vehicles on the road account for half or more of the ozone precursors that contribute to health hazards for nearly half of all Americans in more than 100 cities and 75 percent or more

of the carbon monoxide that causes ambient violations in another 50 cities. In addition, we have learned that the growth in vehicle use, nearly three percent per year nationwide, was a major factor in preventing the attainment of the ambient standards by the 1987 deadline.

It is clear that the goals of this bill—a healthy and safe air supply for every American—will not be achieved without implementing strategies that effectively limit the growth in vehicle use in the major urban centers where pollution levels are the worst. The transportation control and planning provisions of the bill are intended to achieve the emission reductions from the use of mobile sources needed to achieve the objectives of the bill.

The transportation control provisions of the bill are designed to correct 20 years of failed efforts to control transportation sources of pollution. The sponsors hope we have learned from the mistakes of the past and have designed a better approach to achieving these objectives.

Transportation control measures are not a new part of the law. Let me take this opportunity to remind my colleagues of the expectations we had for the 1970 Clean Air Act. Senator Muskie explained the 1970 bill to his colleagues as follows:

"We still have existing a mass of used automobiles to deal with. The bill before us deals with that problem by the requirement of national ambient air quality standards geared to help.

"Those standards, realistically applied, will require that urban areas do something about their transportation systems, the movement of used cars, the development of public transportation systems, and the modification and change of housing patterns, employment patterns, and transportation patterns generally. All of that is implicit in the concept of implementation plans for national ambient air quality standards and what they mean for the used cars in our country."

Today we continue to recognize the need to make the kind of changes that the Senator from Maine described in 1970, but we also have learned that such changes are long in coming and not so easily achieved as we once thought. We also have learned that these kinds of community decisions are not likely to be made based simply on what seems implicit in the development of implementation plans. More specific planning directives are needed to focus the resources and creativity of communities.

In 1977, Congress added a requirement (Section 172(b)(2)) that each state plan contain all reasonably available control measures to reduce transportation emissions. The Environment and Public Works Committee Report in 1977 (pp. 38-40) explained that EPA was required to analyze various strategies that were then required to be reviewed by the states to determine if they could be included as part of the State Implementation Plan given the local circumstances. This provision was implemented by EPA guidance in 1979 (44 Fed. Reg. 201, 375 (April 4, 1979)), but EPA was not consistent in its application of the guidance, and many areas did not give careful consideration to the various control measures that EPA identified.

The sponsors believe that EPA's initial (1979) guidance for the application of the 1977 Law's requirement to adopt "all reasonably available control measures" in each area was sound. The Ninth Circuit recently reviewed and correctly applied EPA's guid-

ance. The bill (sections 108(f), 172(c)(1)) retains the general planning approach of the 1977 law and ratifies EPA's guidance as recently construed by the Ninth Circuit in the case involving the Arizona State Implementation Plan. *Delaney v. EPA*, 898 F. 2d. 687 (1990).

The Senate Committee bill, S. 1630, modified the requirements for the adoption of transportation control measures in State Implementation Plans (SIPs). The Committee bill required that identified transportation control measures be incorporated into each implementation plan for severe and extreme ozone, in serious ozone non-attainment areas under certain circumstances, and in serious carbon monoxide non-attainment area unless the state could demonstrate that a measure would not contribute any additional progress toward attainment in the area.

During Senate floor debate, these provisions were modified to require that each listed measure be considered by the state, but the mandatory obligation to incorporate each measure in the absence of a negative determination was removed. The emphasis in the amendment, therefore, was on a state selecting and implementing those measures "necessary to demonstrate attainment with national ambient air quality standards," including, of course, interim reduction requirements. The sponsors' intention in accepting this amendment was to retain current law with regard to the consideration of transportation control measures.

The Committee language in S. 1630 would have eliminated the option of the states to adopt less than all reasonably available control measures even in the circumstances where the states could make the demonstrations allowed by EPA's guidance. In agreeing to the amendment, the sponsors determined that the rigid application of control measures in the Committee bill was too restrictive. The bill (sections 182(c)(5), 182(d)(1) and 182(e)), which adopts the final Senate provisions with respect to transportation control measures for ozone SIPs in addition to the general planning requirements for reasonably available control measures in section 172(c)(1). Taken together, these provisions require the EPA's traditional guidance continues to govern the review of transportation control measures in state plans.

The sponsors believe that if the EPA consistently applies this guidance in the development of SIP revisions required by the bill, significant progress toward the control of mobile source emissions will be achieved. Of course, this bill adds statutory criteria defining "reasonable further progress" in terms of specified emissions reductions. The need for transportation control measures and the appropriateness of various measures should be evaluated with regard to these new interim increments of progress in the bill.

The sponsors intend that EPA expand its list of reasonably available transportation control measures to incorporate all the measures in Section 108(f)(1). In addition, EPA should evaluate and determine whether additional transportation control measures should be added to those identified in the bill.

The "notice" and "comment" provision of section 108(e) is in no way intended to create an APA-type review procedure for EPA; the "guidances" listed in Section 108(f)(1) remain exactly that, not rules subject to review. However, EPA will be expected, as we understand it does now, to publish

its final guidances and to continue to solicit views, ideas, and comments from state and local officials and other interests as these guidances are being prepared. The bill clarifies that these practices are to continue.

Concerning the "adequate access" provision in section 179 and sections 182(c)(5), 182(d)(1) and 182(e), the inclusion of the term "adequate" is intended to make clear that appropriate transportation air quality control measures may be undertaken even if they have an access effect; the term makes clear that complete access by a particular transportation mode such as an automobile is not required as long as basic and adequate access remains available. The sponsors recognize that there are many ways to provide access and that even if vehicular access is affected, adequate access can be assured by availability of other transportation modes or means to affected areas.

Trip Reduction Ordinances

The conferees adopted the Senate provisions on employee vehicle occupancy programs for severe and extreme ozone areas and serious carbon monoxide areas with one exception: the provision in the Senate bill allowing employers to satisfy the requirements by expenditures of money equal to or greater than the cost of providing employees with parking spaces at the location of the workplace has been eliminated. This means that, if employers do not meet the requirements of this provision, they are subject to the penalties of the Act.

The bill requires that, in affected areas, major employers—those with more than 100 employees—achieve a reduction of 25 percent improvement in commuting vehicle occupancy above a baseline in the affected area for ridership on all such trips.

Affected employers will have complete flexibility in the types of incentive programs, services and facilities to encourage employees to share commuting trips. Some examples which have been successful at California companies where these programs have been instituted include: ride-matching services, vehicles provided for use during the day for employees who ride-share, rides home in the event of an emergency, ride-matching services, parking assistance for carpoolers, preferential parking for carpoolers, passes for transit users, and local shuttle services.

Another important way to comply with the requirement will be to encourage greater use of mass transit (which counts as an increase in the occupancy of the transit vehicle), thereby decreasing the number of cars on the road. One of the incentives which employers may choose to use to encourage employees not to drive to work is to provide mass transit passes as alternatives to parking spaces.

Conformity

The experience of the last 13 years has shown that it is necessary to do more than simply consider applicable control measures. They need to be implemented, as well. This is an area in which the law has failed to achieve the expected progress. The amendments added by this bill should go a long way to overcoming these deficiencies in carrying out current law.

The most important of these changes are included in the amendments to the "conformity" requirements of Section 176. In 1977, Congress added a requirement that any activity approved by a federal agency "conform" to the applicable implementation plan. We offered little guidance regarding the application of this requirement and, un-

fortunately, it has largely been ignored by the agencies required to apply it.

One of the potentially most important applications of this provision is with regard to the review and approval of regional transportation plans by the Secretary of Transportation. Regional transportation plans are required under both the Federal-Aid Highway Act (Title 23, U.S. Code) and the Urban Mass Transportation Act (Title 49, U.S. Code). Beginning in 1970, the Highway Act required "consistency" between transportation projects developed for a region and requirements in applicable implementation plans under the Clean Air Act. This provision was implemented by guidance adopted jointly by EPA and the Federal Highway Administration (FHWA) in 1975. That guidance required that regional transportation plans and projects be measured against ambient air standards. If emissions from mobile sources in an urban area would contribute to violations of ambient standards, or delay attainment of standards, the regional plan and transportation projects were not to be approved.

The intent of the "conformity" provision added to the Clean Air Act in 1977 was to give clear legislative authority for the application of air quality criteria to the review and approval of transportation plans as well as projects in accordance with the DOT/EPA joint 1975 guidance. But no transportation plan has ever been disapproved under this provision, even in cities where mobile source emission growth is a major factor in preventing attainment of the NAAQS.

In 1980, EPA and FHWA supplemented their earlier guidance with more detailed requirements regarding the implementation of specific projects in state implementation plans. This supplemental guidance was partly in response to the requirement for priority funding for transportation projects enacted in Subsection (d) of Section 176. This provision has also been largely ignored.

The amendments to Section 176 are intended to provide more specific criteria for the review and approval of transportation plans, programs and projects authorized under Title 23. The long-range transportation planning process established by section 134, Title 23, the "3-C process," must become part of an effective framework for making basic choices about how to control mobile source emissions. The amendment to the conformity section will require transportation planning agencies to view their task as the development of a transportation system that meets multiple needs, including both mobility needs and air quality objectives. Traditionally, regional transportation plans have been developed to handle expected vehicle volumes without regard to the limit on how many vehicle emission sources can be accommodated in an urban air shed and still meet air quality standards. This legislation makes clear that it is time to develop transportation plans and programs that also serve as part of the pollution control strategy for the metropolitan area.

Los Angeles, the most severely polluted urban area in the United States, is demonstrating how this can be done in areas with the worst problems. The South Coast Air Quality Management District has adopted as part of the air quality plan for the area of "mobility plan" developed by the Southern California Association of Governments. This plan is designed to reduce VMT growth in the South Coast Air Basin by 60 percent over the next 20 years compared to what it would be if current vehicle miles traveled (VMT) growth rates continue. This reduc-

tion in vehicle use is an essential element of achieving air quality standards in southern California.

The sponsors do not intend that the federal government make the control choices for a community or strike the balance between the amount of emission reduction to be required from mobile sources compared to stationary sources. This is the choice that each community must make, unless the state or metropolitan area fails to act. But we do intend that when the state designs a plan for a non-attainment area, the amount of emission of each non-attainment pollutant allocated to mobile sources must be specified for each of the milestone periods considered in demonstrating reasonable further progress and for the attainment year. Mobile sources are to be treated like stationary sources in that emissions from mobile sources in a metropolitan area or relevant sub-region are to be expressed as total allowable emissions and not simply an unspecified remainder.

The purpose of the new "conformity" requirement is to ensure that the transportation system choices made by the community and incorporated into the regional transportation plan required by Title 23, U.S. Code, and by the Urban Mass Transportation Act, Title 49, are consistent with achieving the allowable emission targets for each pollutant assigned to mobile sources in the SIP. No transportation plan or program may be accepted by the Secretary of Transportation under Title 23 unless the metropolitan planning organization for the non-attainment area can demonstrate a "fit" between emissions expected to result from implementation of the transportation plan and the mobile source emission allocation in the SIP for the milestone year, the attainment year, and the maintenance period.

To implement this requirement of the Act, a number of specific provisions have been added to the Act. For ozone nonattainment areas, the bill requires that the same values be used by the air quality planning agency and the transportation planning agency. For the purpose of determining emissions from mobile sources, the assumptions regarding VMT, congestion levels, and other parameters used to develop the implementation plan or the most recent update of such data must be used. Thus the initial inventory required by Section 182 must be based on measured VMT and congestion, to the extent such data are available.

If the attainment demonstration requires reductions in mobile source emissions compared to those that would be expected to result from implementation of the existing transportation plan, then the transportation plan must be modified to achieve the emission targets for mobile sources in the SIP. For ozone, this will probably require future reductions in the growth of daily VMT, unless other measures can be shown to achieve the required emission reductions.

Until such time as an implementation plan is approved or promulgated that establishes the ceilings on mobile source emissions in the non-attainment area, interim requirements apply under section 176(c)(3). The sponsors recognize that implementation plans adopting emission ceilings for mobile sources are not required under the bill for three years. During the interim, three criteria will govern the adoption of transportation plans and programs by the MPOs and the review of such plans and programs by the Secretary of Transportation.

First, the conformity review for transportation plans and programs must be based on

the use of the most current estimates of emissions for mobile sources. EPA has recently issued a revision of its MOBILE model based on the emission performance of recent model year vehicles, but this model may need to be reviewed based on the tighter emission requirements added by the bill. EPA will identify the emission factors to be used in the review of plans and programs as part of the regulations required by this section.

Second, transportation plans and programs must provide for the expeditious implementation of transportation control measures. Many implementation plans adopted under the 1977 Amendments to the Act included transportation control measures that have yet to be implemented. All measures were required to be implemented by 1987 in order to meet the statutory attainment deadline. Transportation plans and programs may not be approved after the date of enactment unless they provide for expeditious implementation of such measures. "Expeditious" means as soon as practicable, but in no event longer than the project or program would have taken to implement under the original SIP schedule from commencement of the project to completion. If the control measure can be implemented more quickly than originally scheduled, the plan or program should so provide.

Third, plans and programs adopted for areas that are nonattainment for ozone or carbon monoxide during the interim period shall contribute to annual emission reductions consistent with the emission reduction schedules adopted in the bill for such areas. Section 182(b)(1) requires a percentage reduction in regional emissions during the first five years after enactment as a requirement for the implementation plan in each moderate, serious, severe, and extreme ozone non-attainment area. Until an implementation plan is adopted, however, there is no basis for determining the amount of the percentage reduction that will be allocated to mobile source emissions. Rather than wait for the final adoption of an implementation plan, the sponsors intend that the mobile source contribution to overall emissions in the non-attainment areas by reduced annually at the same percentage rate that would apply for the development of a SIP. Thus, during the period when the implementation plan is being adopted, emission reductions from mobile sources will be achieved. Without such a requirement, mobile source emissions could increase before an implementation plan takes effect thus undermining the objective of making reasonable progress toward attainment. Section 187(a)(7) requires that annual emission reductions be determined for carbon monoxide non-attainment areas. Since these reductions are based on the difference between the NAAQS and the design value for an area (with the Administrator determining the design value for an area in order to determine its non-attainment status), the annual percentage reduction required for carbon monoxide non-attainment areas should be available for the review of transportation plans and programs.

During the interim period, transportation projects may be found in conformity only if they are included in a transportation plan and program that has been reviewed and been found to conform to the criteria in 176(c)(3)(A) and reduce or eliminate the number NAAQS violations in carbon monoxide non-attainment areas. Of course, under the savings clause, such projects must also comply with any conformity require-

ments in implementation plans that were in effect prior to enactment of these amendments and existing court decisions in interpreting the SIPs. States are also free under section 116 to continue to apply any more stringent project review criteria in effect under state or local law. The criteria in section 176(c)(3) are merely the additional federal criteria that must be met to qualify for federal approval or funding of transportation projects, programs, and plans prior to the date when a revised implementation plan takes effect under these amendments.

The conferees recognize that a short period of time will be required for MPOs, DOT, and EPA to obtain the data and perform the analyses needed to carry out these interim requirements. Except in the sanction situation, to allow time for these efforts to be completed, the bill allows projects to proceed to construction if they have already been approved as part of a transportation improvement program that was found to conform to requirements in effect during the three years prior to enactment. These projects must also meet the requirements for carbon monoxide non-attainment areas in 176(c)(3)(B)(ii).

Once an applicable implementation plan is in effect under these Amendments, all the criteria for conformity review will apply to the development by MPOs, and the review by the Secretary of Transportation, of regional transportation plans developed under section 134, Title 23, U.S. Code, and the Urban Mass Transportation Act, Title 49, U.S. Code, transportation improvement programs under section 105, Title 23, U.S. Code, and transportation projects requiring federal approvals or funding. The general criteria for conformity review of any activity requiring federal action, approval, or funding in section 176(c)(1)(A) and (B) apply to transportation plans, programs, and projects as well. But in addition, the criteria required by paragraph 176(c)(2) and such further criteria as are adopted by the Administrator and the State under paragraph 176(c)(4) also apply.

For transportation plans and transportation improvement programs, section 176(c)(2)(A) requires a determination that emissions expected from the implementation of such plans and programs will be consistent with estimates of emissions from motor vehicles and necessary emission reductions contained in the applicable implementation plans. Estimates for emissions shall be made based on the Administrator's guidance regarding emission factors for various types of vehicles operating under traffic conditions found in the non-attainment area. These estimates should, of course, take into account the effectiveness of any inspection/maintenance program in effect in the area, the extent to which vehicles may be using alternative fuels to reduce emissions, and other factors that may affect vehicle emissions such as transportation control measures required under the applicable implementation plan. Using these factors to estimate emissions, the plan must demonstrate that it will achieve the levels of vehicle use in the metropolitan area necessary to achieve the emission reductions for mobile sources contained in the applicable implementation plan. Section 176(c)(1)(B)(iii) requires that the comparison should be with the emission reductions required for each interim period established as a milestone for demonstrating reasonable further progress, as well as with the reductions required by the attainment deadline. To the extent that the transportation plan

includes a period that extends beyond the attainment deadline for any area, section 176(c)(1)(B)(i) also requires that mobile sources not cause violations of a NAAQS during the maintenance period.

Traditionally, regional transportation plans have been limited to identifying the projects that will make up the regional transportation network, including highways, fixed guideway systems, and restricted access facilities such as busways or high occupancy vehicle lanes. Since 1978, section 134 of the Federal-Aid Highway Act has directed that "the planning process shall include an analysis of alternative transportation system management and investment strategies to make more efficient use of existing transportation facilities. The process shall consider all modes of transportation and shall be continuing, cooperative, and comprehensive . . ." This mandate requires more than simply identifying the comprehensive transportation system for a metropolitan area; it also directs that MPOs consider strategies and options that extend beyond the limited identification of transportation projects. Programs designed to reduce vehicle use or increase the passenger-carrying capacity of highways, such as pricing strategies, time-of-day access limitations, parking management programs, van and car pool programs, employer incentive programs, off-highway bicycle paths, and trip reduction programs are all within the options and alternatives available to MPOs that can "make more efficient use of existing transportation facilities," and also achieve the emission reduction requirements of an implementation plan. MPOs and the Secretary of DOT are expected to undertake a more comprehensive consideration of alternatives and perform a much more careful analysis of options that can contribute toward achieving the air quality objectives of the Clean Air Act.

To the extent the MPO adopts policies or programs other than traditional transportation projects that are designed to reduce emissions by reducing vehicle use, the MPO may rely upon such measures for determining conformity of the transportation plan if they are included in the applicable implementation plan as enforceable control measures.

Transportation plans are normally adopted for 20-year periods, or even longer. However, this does not mean that a metropolitan area can rely on its existing plan if it fails to conform to the mobile source emission allocation in the new SIP. The procedure for obtaining federal funding of transportation projects in an open area requires that a transportation improvement program, including the annual funding element, be submitted to the Federal Highway Administration for approval each year (or in some areas, semiannually). Section 176(c)(2)(C) prohibits the approval of any project for funding unless it comes from a conforming plan and program, unless it qualifies for an exception from this general requirement under 176(c)(2)(D).

Section 176(c)(2)(A) requires that the transportation improvement program as well as the regional plan be found to be in conformity with the emission reductions required by the SIP. Thus, this comparison of the plan and program with the SIP will be required during the first funding cycle after adoption of the SIP to ensure continued conformity.

The requirement to compare the expected emission effects of implementing the regional transportation plan with the emission

targets in the SIP will also be closely tied to the triennial review of the SIP to determine whether emission reduction targets have been met. Section 182(c)(5) requires that measured VMT, congestion levels and other parameters be measured against the SIP. If VMT, congestion or other parameters do not conform to the projections used in the SIP, then both the transportation control measures in the SIP and the transportation plan and program will have to be revised to make up shortfalls in the emission reduction schedule for the area.

To ensure that the transportation plan remains coordinated with the applicable implementation plan, the Administrator is directed to require the review of transportation plans at least every three years. Section 176(c)(4)(B)(ii). Mobile source emissions are required to be reviewed every three years under section 182(c)(5) to determine if the emission reductions planned for the preceding three year period have actually been achieved. If emission reductions as scheduled in the implementation plan are not achieved, a SIP revision is required within 18 months. Once the implementation plan has been shown to be inadequate, it can no longer serve as an adequate basis for determining whether the transportation plan for the region is adequate to contribute to attainment of NAAQS. The three year review of conformity for a transportation plans and programs will guarantee that, if the implementation plan is required to be revised, the transportation plan will also be revised if necessary to carry out the mobile source emission reductions required under a revised implementation plan.

To the extent the SIP requires the implementation of transportation control measures to meet mobile source emission targets in the SIP, such measures must meet the requirements of Section 110(a)(2)(E)(i), including the requirement that the state demonstrate adequate funding to carry out such measures. The failure to show how such measures will be funded, or to include commitments from the authorized funding sources, will preclude approval of the state's plan. EPA is not authorized to approve plans containing measures that are speculative because of the lack of funding commitments.

Thus, where a state relies on the construction of highway projects to avoid congestion and thereby prevent carbon monoxide "hot spots", the state will have to provide assurances that such funds will be available on schedule to complete the highway projects within the time needed to prevent the congestion levels that can cause carbon monoxide levels to exceed the NAAQS.

Projects identified in the SIP that qualify for federal funding under Titles 23 or 49 are to be given priority, including priority funding, by the metropolitan planning organization or other recipient of federal funds, such as a state or county transportation department or transit district when preparing transportation improvement programs (Section 176(c)(2)(B)). Any project not contained in the SIP may not be funded until projects contained in the SIP are funded in accordance with the schedule for completion of such projects. In addition, the transportation improvement program shall provide for timely implementation of other transportation control measures contained in the applicable implementation plan.

Projects may be adopted or approved as part of a plan or program by a metropolitan planning organization or any recipient of funds designated under Title 23 or the

Urban Mass Transportation Act or be found in conformity by a metropolitan planning organization or approved, accepted or funded by the Department of Transportation only if certain criteria are met. The criteria in paragraph 176(c)(2)(C) include requirements that the project comes from a conforming plan or program, that the design concept and scope of such project have not changed since the conformity finding regarding the plan and program from which the project derived, and that the design concept and scope were adequate for the purpose of determining emissions. These criteria are intended to ensure that projects included in a regional plan at the time a conformity determination is made are characterized with sufficient specificity to allow emissions from the projects and the regional plan to be quantified. This means that the general corridor of a project be identified, and that the characteristics of a project which affect emissions such as whether it is limited access, grade separated, the number of lanes, location of interchanges, whether lanes are to be restricted to high occupancy vehicles, and other factors affecting vehicle carrying capacity be described. If a project is significantly modified after its inclusion in a regional transportation plan, it shall not be found in conformity, approved or funded unless the plan is revised to take account of the revisions to the project or the project qualifies under paragraphs 176(c)(2)(D).

Paragraph 176(c)(2)(D) allows a project which does not come from a conforming plan or program to be found in conformity if it is demonstrated that the projected emissions from the project, when considered together with emissions projected for the conforming transportation plans and programs within the nonattainment area, do not cause the plans and programs for the area to exceed the emission reduction projections and schedules assigned to such plans and programs in the applicable implementation plan. A project may qualify for this exception only if the regional plans and programs are in conformity at the time the project is reviewed, the emissions from the project are adequately characterized, and the project emissions are considered together with all emissions expected in the region from the conforming plans and programs. The cumulative impact of the project, taken together with the approved plans and programs, may not cause the emissions to exceed the emission ceilings set for the years after the project will begin service. Any project found to conform under this provision that was not included in a plan at the time of such determination would have to be incorporated into the plan at the time of the next periodic review of the plan required under 176(c)(4)(A)(ii).

To resolve the conflicting interpretation of the conformity provision in the 1977 law that has stalemated effective transportation and environmental planning coordination, the bill specifically assigns to EPA the authority to issue regulations establishing conformity criteria and procedures with the concurrence of the Secretary of Transportation. Such regulations will provide guidance to the states for the adoption of conformity requirements in each SIP and will govern the conformity decisions of federal agencies and MPOs required to make conformity decisions. Federal agencies will also have to comply with applicable provisions of the SIP if stronger than the underlying basic federal regulations.

The regulations to be promulgated by the Administrator will constitute an important

part of the implementation of these Amendments and must be adopted in a timely fashion to ensure that the criteria to be applied by the MPOs are clearly defined by the time the conformity determinations are required under applicable implementation plans. In the absence of such regulations, the MPOs and the DOT will still be required to make conformity determinations. To ensure the application of uniform criteria and procedures nationwide under this section, the sponsors urge the Administrator and Secretary to act expeditiously to issue timely regulations.

The sponsors intend that the Secretary's decision on whether or not to concur with the Administrator's regulations shall be based on the provisions and requirements of this Act and the corresponding intention of the sponsors.

If the regulations required by this provision are not issued within the deadline established by the Act, both the Administrator and the Secretary shall be subject to the jurisdiction of any court reviewing the failure to perform the duty to promulgate regulations. The court will determine whether the cause for agency delay is justified and fashion a remedy designed to cure the failure of agency action.

If the Administrator has proposed rules and obtained the concurrence of the Secretary, but fails to take final agency action, the court will be faced with a case of agency delay. If the Administrator, however, issues proposed regulations in a timely fashion but received no response from the Secretary within the time allowed for comments, the court should infer that the Secretary's silence constitutes concurrence because no objections have been made, and thereby require final action by the Administrator.

If the Administrator has proposed rules within a timely fashion and the Secretary submits objections to EPA and refuses to concur within the time allowed for comments, the court shall decide any legal issues in dispute and issue an order setting forth a schedule for final agency action to ensure timely implementation of the regulations.

Transportation Sanctions

The bill also makes a major change in the transportation sanction requirement that applies when a state fails to submit an adequate plan, fails to submit a required plan revision or fails to implement its plan. Under the 1977 law, the Administrator was required to withhold highway funding from a state if it failed to comply with the Act or implement its SIP. The bill modifies this authority by allowing funding under Title 23 to be allocated to projects that reduce vehicle use.

The bill would treat federal transportation funding as a pollution control strategy rather than simply as a penalty. If a state fails to timely submit a plan that meets the requirements of the Act, a required plan revision or implement its plan, as detailed in section 179 (a), the bill provides that federal transportation funding is still available to the state, but only for projects that either reduce vehicle use or reduce emissions from vehicles on the highway as defined in section 179(b)(1)(B). As defined in the provision, it may not be used for projects that promote single occupancy vehicle use. To the extent that transportation projects are contained in the SIP, the SIP establishes a priority for funding of projects when the sanction is applied. If no SIP has been approved, or projects are not prioritized in the SIP, then the Administrator and the Secre-

tary of Transportation in cooperation with the affected state would have discretion to determine which projects would receive priority.

The provision in subsection 179 (b)(1)(A) precluding Secretarial "approval . . . of any projects" is intended to include Secretarial approvals at all stages of project development, including approval of a project EIS, a project location approval, and approval of a project's plans, specifications and estimates. The provision is intended to reach capital and design project approvals, not the ongoing planning process.

The sponsors intend that the maximum flexibility be afforded state and local officials in the use of funds authorized under Title 23 for the purposes listed and specified under 179(b)(1)(B). The Secretary of Transportation is directed to develop expedited procedures for considering revisions to transportation plans and programs for the purpose of advancing such pollution-reducing projects in non-attainment areas. In order that non-attainment areas and states move toward compliance and do not lose substantial transportation funds, the sponsors intend that the Secretary, promptly after passage of this Act, undertake a review, in full cooperation with states and areas facing compliance problems, of pollution reducing projects that could be adopted in such areas and for which Title 23 funds could be made available. It is the intent that careful planning and consideration be undertaken by the Secretary beginning shortly after enactment, with states and localities, on using transportation funds as flexibly as possible to implement pollution-reducing projects so that areas can utilize this provision to get out ahead of their problems. Unless DOT and the localities make such use of the new flexibility this provision intends, transportation funding will remain part of the problem, not part of the solution.

Aside from the types of projects listed in 179(b)(1)(B), there is a narrowly-drawn exemption for certain highway safety projects in 179(b)(1)(A). Such projects must have as their *primary* and principal purpose a safety improvement to resolve a demonstrated safety problem based on a specific finding by the Secretary from an accident or related data. The Secretary must also find, based on such data, that the safety improvement likely will lead to "a significant reduction in, or avoidance of accidents." The aim of this new provision is to close a possible loophole in earlier law where highway improvement projects, including new roads or highway renovations, which could also bring safety benefits, could be allowed to proceed. The safety exemption is strictly narrowed by this bill so that projects that would expand capacity or improve flow would be reached by the sanction provisions regardless of whether they might have a safety benefit. The types of safety projects that would be exempt under this bill would include such projects as rail-highway grade crossing improvements, improved safety signing, safety signalization, impact attenuation, or straightening a dangerous curve. While, these types of projects could have beneficial and important secondary effects, such as improved traffic flow, their primary and principal benefit, if demonstrated by the required accident data, would be safety and, therefore, would be exempt. Concerning deteriorated bridges, the Senate receded from the position in its bill allowing this second exemption.

To the extent the Administrator is exercising discretion in choosing among sanctions, EPA should choose the sanction best suited to the circumstances. The sponsors expect, for example, that when the state fails to submit a SIP for a pollutant emitted by mobile sources and for which transportation control measures are appropriate, or fails to implement transportation control measures in a SIP, EPA will implement the transportation funding provisions of Section 179(b)(1) as one of the sanctions applied. To the extent the Administrator has discretion, the Administrator's choice of sanction must be rationally related to implementing the purposes of the Act and, of course, will be subject to judicial review.

We believe that these provisions build on the experience of the past and provide clear direction to EPA, the Secretary of Transportation and the states regarding the need to integrate transportation plans into the implementation planning process. In this bill we are creating a dynamic, iterative process, with increments of progress to be checked in each milestone year. We have learned that plans cannot be perfect from the outset. Air plans are not likely to anticipate all the changes that will occur over the course of decades. Thus we set both long-term attainment deadlines, but also interim targets that require emission reductions each year.

Transportation plans will be checked against the SIP targets annually (or semi-annually in some areas) as each Transportation Improvement Plan (TIP) is submitted, and revised as necessary to ensure continuing conformity between the SIP and regional transportation programs. Conformity will be based on both emissions expected from mobile sources, and the criteria for estimating emissions, i.e., VMT, congestion levels and other parameters selected by the Administrator. These amendments should establish a direct link between the need to reduce emissions and the transportation investment decisions reflected in the transportation plan. Once made, those decisions will be plans and the approval of TIPs in accordance with a plan. They will also be enforceable by EPA with the application of sanctions, and by EPA or the public as any requirement of a plan would be enforced. The failure of the Secretary of Transportation to require full compliance with these requirements in his review and approval of plans, programs and projects will be subject to review under the Administrative Procedure Act. Actions of the MPOs also will be reviewable to the extent they fail to carry out their duties under federal law.

The lesson of the past is clear: If we continue to fail to achieve effective integration between air quality goals and the transportation systems we build, American cities will continue to fail to attain clean air. If faithfully administered by EPA, we believe these amendments offer the potential for reforming the deficiencies of the 1970 and 1977 amendments. In turn, these amendments offer the potential for achieving the healthy air quality that has eluded American cities for 20 years.

MOBILE SOURCES

Technology-Forcing Standards

The legislation establishes Tier I and Tier II standards for light-duty vehicles. These standards will ensure steady progress in the development, optimization, and application of engine improvements, refined or new technologies, and better fuels. Even the automakers have conceded that the Tier I standards, with modest technological im-

provements, are achievable. The Tier II standards offer a greater engineering challenge, but, based on testimony presented before Congress, and the technological advances being reported in California, we are very confident that the industry will meet these challenges as well.

Some have characterized the Tier II standards as a "paper tiger" that will never take effect. Such a view ignores the specific statutory language and the underlying purpose of the provision.

The Tier II standards are written into the Act and take effect unless EPA proposes modifications. The EPA review process is an "escape valve" to be used *only* if the standards prove unnecessary, or if they are not technologically feasible or cost effective.

While all of us hope that further control of motor vehicles beyond Tier I will prove unnecessary to meet this nation's air quality objectives, many inside and outside of Congress, including the states themselves, doubt that this will be the case. In evaluating the technological feasibility and cost effectiveness of the Tier II standards EPA will have the benefit of, and we expect the Agency will avail itself of, California's experience with its new low emission vehicle standards. In that regard, it is worth noting that California identified technologies which showed promise for meeting emission levels at, or well below, the Tier II standards. On the issue of cost effectiveness, a CARB staff analysis found that tighter NMHC and NO_x standards were projected to be far more cost effective than many stationary source controls which have been, or likely will be, implemented in the 1970's.

The new law will also phase in a CO emission standard of 10 grams per mile at 20 degrees F if six or more cities remain above healthy levels through mid 1996.

In addition to codifying standards for trucks and buses which EPA has already found to be technologically feasible, the conferees have added a heavy truck NO_x standard of 4.0 grams per brake horsepower hour, to be introduced in 1998. This provision was added because of the significant contribution that these vehicles continue to make to overall NO_x emissions and the significant role of NO_x in ozone nonattainment and acid rain formation. These standards are intended to force the development of technology to address these problems and, in considering any waiver to this limit, EPA should carefully consider whether manufacturers have made serious efforts to achieve it.

Urban Buses

The urban bus provision is designed to afford greater protection from pollution from a category of vehicles that operate almost exclusively in heavily populated areas. The provision represents a compromise between those who wished to ban diesel-powered buses outright and those who felt diesel technology should be an available option. Under this provision, diesels, in addition to all other fuel/technologies, may participate in the urban bus market provided they certify to and continue to meet in-use applicable emission standards.

The provision establishes a particulate emission standard for urban buses 50 percent more stringent than the 0.1 g/BHP-hr particulate standard applicable in 1993. If EPA determines that such level is not technologically achievable, the Administrator may relax the standard to not more than 30% reduction from the 0.1 level.

A key element of this program is the in-use testing requirements. If diesel engines cannot achieve the required control in actual operations, EPA is required to mandate alternative fuels.

While Congress has left EPA considerable discretion in fashioning this in-use evaluation program, it clearly expects that the bus engines evaluated be representative of engines in regular revenue service receiving normal levels of maintenance.

Averaging

Both the House and the Senate rejected legislative language proposed by the President to allow averaging, trading and banking in determining compliance with applicable emission standards. Members of Congress recognized that such concepts, if permitted, would significantly alter the fundamental structure of the mobile source program, undermine its effectiveness, and ultimately lead to less pollution control than would otherwise be realized. In this legislation Congress has mandated specific emission standards for light-duty vehicles, light-duty trucks, and heavy-duty vehicles—Congress expects, as has always been its intent, that *every* vehicle, and not just some of them, meets the specific statutory standards applicable to it.

In the past, EPA has argued that since the Clean Air Act of 1977 gave the agency administrative flexibility regarding the level of standards for heavy-duty engines, the agency could allow engine family averaging, trading and banking. Many, including myself, seriously question this flawed logic. But, in any event, the Clean Air Act of 1990 puts this issue to rest by removing EPA's discretion to choose the level, or levels, of controls; Congress has mandated in the Act the specific emission standards for each class or category of vehicle—and it expects every vehicle to meet the applicable statutory standards.

Bus Retrofit Requirements

Within a year, EPA is required to adopt regulations establishing requirements for retrofit controls and maintenance practices for engines rebuilt after 1994. Testimony presented before the Senate Environment and Public Works Committee indicated that there are retrofit controls for diesel-powered engines being developed or used, which offer considerable promise for cost effectively reducing harmful pollutants from existing engines.

Off-Highway Regulations

As the members know, it was with great reluctance that the Senate conferees agreed to the partial preemption of state authority to control emissions from some new nonroad engines and vehicles. We did so only after the preemption was strictly limited to that it applied only to new engines in three distinct categories, locomotives, new farm equipment with engines smaller than 176 horsepower and new construction equipment with engines smaller than 176 horsepower. The preemption is limited only to these categories of nonroad vehicles; states retain all of their existing authority to fully regulate all other types of new nonroad equipment.

States also fully retain existing authority to regulate emissions from all types of existing or in-use nonroad engines or vehicles by specifying fuel quality specifications, operational modes or characteristics or measures that limit the use of nonroad engines or equipment.

Finally, the conferees were also concerned that the EPA might not follow through on its responsibility to regulate nonroad engines or vehicles. Accordingly the compromise includes a clear mandate to the EPA to regulate these sources in both a timely and effective manner. Where these sources contribute to air quality problems—and as strict controls are introduced for other vehicle categories, it is anticipated that the contribution from off road vehicles will increase—the legislation requires EPA to act by a certain date. Furthermore, the revised language requires EPA to adopt the most effective regulations feasible, ones that should be equal in stringency to the controls established on similar engines used in motor vehicles. We expect EPA to carry out this mandate in a fashion which assures that states which are preempted will not suffer any additional omissions beyond what they would have themselves allowed. We intend to carefully monitor EPA's performance in implementing this provision.

Section 177 Protection of State Authority

I am very pleased that the Conference chose to maintain the State's existing authority under Section 177 of the Clean Air Act to adopt and enforce motor vehicle standards that are identical to those adopted by the State of California. The new language placed in Section 177 by the Conference neither adds to nor detracts from the present authority of states under Section 177 to adopt, administer and enforce motor vehicle standards that are identical to those adopted by the state of California. The new language simply codifies, in effect, Congress' understanding of the authority originally to states by Section 177 as expressed in the legislative history of Section 177 when it was adopted in 1977.

Section 177 provides that opt-in states must use the California certification test procedure to govern their own determination of eligibility to sell motor vehicles. It is our intent to assure that states adopting the California program do not restrict and indeed, it is not in their interest to restrict the sale of new vehicles that comply with certification requirements in California. The authority enacted in 1977 prevents opt-in states from imposing different emission requirements on new vehicles and engines that would place an undue burden on manufacturers by requiring them to produce materially different new vehicles for sale in such areas. To the extent that a manufacturer could demonstrate that each vehicle leaving the assembly line performs at levels to which it was certified, that manufacturer could claim "undue burden" if a state that adopted the California standard applied enforcement procedures that would require materials changes in the manufacture of such vehicles, i.e., production of a third car.

It is vital to note that this "undue burden" standard—which was established by the legislative history in 1977 and which we reaffirm in this Act—for determining what is and is not a "third vehicle" does not require physical identity of vehicles. Enforcement actions taken against vehicles that fail to comply with their certified California emission limits in actual use do not impose an undue burden on manufacturers or require the production of a "third vehicle." The contrary is true: compliance with certified emission limits by vehicles in use is an integral part of the obligation manufacturers undertook in obtaining emissions certificates for their vehicles. In fact, recall assures that third vehicles do not result, de facto, from lack of compliance with certi-

cated emission limits during the useful life period. Recall and associated enforcement authority simply assure that vehicles that were built under a California certification meet those standards throughout their applicable useful life.

I understand that the requirement to make small modifications in vehicles in use to assure their continuing compliance with their certified emission limits is entirely consistent with the automakers' present manufacturing practice. So-called "running changes" are made in the emissions equipment placed on vehicles in production without any changes being made in the vehicles' existing emissions certificate. The running changes are made to assure that those vehicles comply with their certificates. Thus, physical differences in emissions equipment under a single certificate are even now being made by the auto manufacturers without anyone having contended that this creates a "third vehicle."

Moreover, in interpreting the limits on an opt-in state's enforcement activity under Section 177, the U.S. Environmental Protection Agency has written that such a state's enforcement of the California standards need not meet the requirement of identity that governs the state's adoption of the California standards. Rather, EPA found that an opt-in state's enforcement actions must not be conducted so as to create an "undue burden" on manufacturers—again, the same standard which was established by the legislative history in 1977 and which we reaffirm in this Act. Had we intended to prevent states from initiating recalls pursuant to their appropriate test findings, we would have removed their authority to enforce the California standards under Section 177.

In this regard, it is vital to note that the Conferees from the other body proposed to the Conference that opt-in states be barred from enforcing the California standards, and that instead, EPA would enforce them. I ask that the original House proposal to strike the states' enforcement authority be placed in the RECORD at this point. Comparing this proposal, which was wisely rejected by the Conference, with the language on Section 177 adopted by the Conference makes indisputable the authority of states that adopt California emissions standards to enforce those standards through recall and other methods.

Indeed, the House proposal evoked vehement objections from a number of states, from Governors of both parties. I ask that several letters from Governors and state environmental officials that were sent to Senate Conferees protesting the House's proposal also be inserted in the RECORD at this point. I want to commend these Governors, the states and especially the Conferees for maintaining this important state authority.

The sum, it is our intention to make clear that, as reinforced by manufacturers' established practice and EPA interpretation, physical identity is not the test of whether a state enforcement action is barred for creating a third vehicle. Rather, remedial action which a manufacturer is required to take to bring its vehicle in use into compliance with certified emission limits may encompass physical changes in the certified emissions equipment so long as those changes do not impose an "undue burden" on the manufacturer and are demonstrated as necessary to assure that those vehicles meet the California standards in actual use. If those tests are met, it is clear that states that adopt the

California standards can continue to have the full authority to enforce, through recall and otherwise, adherence to those standards for vehicles sold in their states throughout the useful life of the vehicles. Only in such manner can we move towards clean air.

Reformulated Gasoline

The reformulated gasoline and oxygenated fuels provisions contained in this bill will require the oil companies to modify their fuels in such a manner as to reduce their contributions to ozone and CO nonattainment problems, to reduce the personal exposure of people to toxic emissions from vehicles; in short to require fuels manufacturers to push the state of science on the composition of gasoline and its components in the same manner that vehicle manufacturers will be required to under this legislation.

First, let me say that I believe these provisions can provide one of the biggest steps available to the states and EPA in reducing nonattainment problems of ozone and CO. It is imperative that EPA issue the required regulations for this section within the one year timetable specified in the bill.

Other portions of this provision that EPA must keep in mind as they develop these regulations and implement and enforce the provision include:

The anti-dumping provisions clearly intend that pooling of fuels meet a baseline standard at a minimum within nonattainment and attainment areas. EPA should ensure that VOCs are not pooled in a manner that, for example, allows more harmful aromatics to be treated for less harmful straight-chain hydrocarbons. Further, EPA should restrict the compliance period for pooling emissions to as short a period as achievable by any refiner, blender or importer;

Waivers from the year-round cap in NO_x emissions should be implemented by EPA in very limited circumstances. The Conferees do not intend to allow increases in NO_x emissions in return to reducing VOC emissions;

Any adjustment to the 25 percent reduction requirements for toxics and hydrocarbons required by the year 2000 should be carefully restricted by EPA. Further, in assessing technical feasibility, consideration should be given to assessing other measures which might, or might not, be available to areas which will be affected by any such adjustment and how these areas will be able to make up for the shortfall that will occur. This should include considering the costs of those reductions in VOC and toxics from other measures;

Any waiver of the oxygen requirements by petition must be the exception rather than the rule. All cities above a 9.5 ppm design value must demonstrate that they are trying to comply with this provision within their capabilities. EPA should also interpret the wording on distribution to include studying the feasibility of obtaining additional foreign supplies of gasoline components as a temporary measure while additional domestic supplies are being developed; and

The language of the provision clearly allows any nonattainment area which wants to opt-in to the reformulated gasoline programs to do so. They should be afforded every opportunity, and at the earliest possible date, to opt-in to the program subject to approval by EPA. The Administrator must approve any state's request to opt in to the program wherever possible. The Administrator must not allow the "domestic capacity"

provision to impede those states seeking such authority.

Test Procedure Modifications

One of the most critical elements of the motor vehicle program must be the assurance that vehicle emission controls are designed to operate under "real world" conditions. In modifying the certification test procedures to assure that they account for real world conditions, EPA is expected to consider actual fuels, ambient conditions and driving modes that are reflective of actual circumstances, covering as wide a range of such conditions as are reasonable.

Compliance Fees

In reaching agreement on compliance fees, the Conferees intend that EPA have sufficient resources, provided by vehicle manufacturers, to conduct surveillance testing of the vast majority of all engine families and certainly any families which it has reason to suspect may be nonconforming in use. This suspicion can be based on certification data, defect or warranty data, I/M data or any other information which comes to the Agency's attention. Further, in setting fees, EPA should be sure to consider not just passenger cars, but urban buses and light and heavy trucks, which have received less recall surveillance than necessary in the past. Further, in assessing the fees, EPA should consider the extra expense associated with procuring and testing vehicles in use after high mileage has been accumulated, in recognition of the expanded useful life requirements contained in the new law.

Recent EPA surveillance efforts in the Committee's judgment have not been sufficient and the Committee therefore expects the agency to assess fees which provide for a much greater amount of testing in the future.

Tier II Standards

We believe that based upon information available today, reductions in motor vehicle tailpipe emissions beyond those required under Tier I are likely to be necessary, technically achievable, and cost-effective. Thus, the new legislation requires that a second phase of more stringent emission standards for passenger cars and light duty trucks take effect nationwide beginning in model year 2003, unless the Administrator demonstrates to Congress that these standards are not necessary for attainment, are not technically feasible and are not cost-effective.

While the Act allows the Administrator to adopt less stringent standards than prescribed in Table 3 of this section (if he makes this demonstration), it also provides the agency with discretion to adopt even tougher standards than the ones specified. The Administrator is instructed, with the participation of OTA, to submit a study to Congress by June 1, 1997 evaluating the efficacy of the standards set forth in Table 3 on the basis of need, technology, and cost effectiveness.

Need for Additional Emissions Reductions

Today, almost every major metropolitan area in the country exceeds the federal health-based standards for ozone and/or carbon monoxide. The health effects of these emissions have been widely documented, and none of the over 130 million people living in non-attainment areas appear to be totally immune.

According to the Environmental Protection Agency, healthy individuals who are exercising while ozone levels are at or slightly above the standard can experience "reduced functioning of the lungs, which can lead to

chest pain, coughing, wheezing, pulmonary and nasal congestion, labored breathing, sore throat, nausea and faster respiratory rate."

The effects of carbon monoxide are equally disturbing. Carbon monoxide, when inhaled, enters the bloodstream and disrupts the delivery of oxygen to the blood's tissues. Those most affected, according to the EPA, include the estimated nine million people with cardiovascular disease, particularly those with angina. In addition, low levels of carbon monoxide affects "aerobic capacity, visual perception, manual dexterity and learning ability," and can also harm fetuses.

Although we have achieved substantial reductions in motor vehicle emissions over the past 20 years, motor vehicles still remain the largest single generator of hydrocarbon, nitrogen oxide and carbon monoxide emissions in the nation. In fact, motor vehicle emissions are expected to increase later this decade as a result of increased vehicle travel and congestion, offsetting the air quality gains from cleaner, new vehicles.

At the current rate of growth in vehicle miles travelled, it is projected that the reductions from Tier I will be overwhelmed by emissions resulting from increased vehicle use by year 2003. Thus, without additional standards, it is likely that many areas will continue to exceed the air quality standards for ozone and carbon monoxide.

At least two additional reasons are likely to make a second tier of motor vehicle emission standards necessary.

The first relates to the interstate nature of the pollution problem. Many areas of the country cannot achieve compliance with the ozone NAAQS without substantial emission reductions from upwind states. In the Northeast, for example, EPA models (e.g., ROMNET) have concluded that the entire region will need to reduce emissions by up to 90 percent, a far greater task than contemplated in this Act. Reductions of that magnitude will be impossible without a second set of more stringent motor vehicle standards. Other urban and rural areas throughout the country will face equal difficulty.

Second, there are few provisions in the new legislation which require additional reductions in carbon monoxide emissions. None of these provisions apply to all CO non-attainment areas. Thus, it is essential that we implement CO standards more stringent than the current ones. This will not occur unless EPA determines that additional controls are needed in 2003.

Technological Feasibility of Tier II Standards

Today, a large number of gasoline-powered domestic and foreign passenger vehicles already certify at emissions levels below the Tier II standards. Many new technologies to gain still greater reductions have been demonstrated. For example, the use of electrically-heated catalysts on current technology gasoline vehicles has reduced HC emissions to one third of the Tier II HC standard. The reformulated gasoline required by this Act should permit additional emission reductions.

California is contemplating the use of other emission control technologies that promise yet further reductions. The California Air Resources Board recently adopted a Low Emission Vehicle (LEV) program—with emission standards that are far more stringent than the Tier II standards—which takes effect in model year 1994. For these standards to take effect the Administrator must grant California a waiver under Sec-

tion 209(b) of the Act, the criteria for which are found under Section 202(a). The Administrator must conclude that the LEV standards are technologically feasible and that the cost of compliance with such standards is reasonable within the time frame required by California. Since California's LEV standards and timetable are both more stringent than the Tier II requirements, the Administrator's approval of California would represent a conclusive determination regarding the technical feasibility of the Tier II standards.

Cost Effectiveness of Tier II Standards

The Clean Air Act establishes standards necessary to protect the public health. Clean, breathable air is a fundamental right of the American people. The 1970 Act clearly states that attainment of these standards must be accomplished regardless of cost. Nothing in the 1990 revisions seeks to alter or undermine this nation's fundamental commitment to achieve healthful air. Thus, while the assessment of cost-effectiveness should guide the identification and implementation of the most efficient means of attainment, cost considerations may not be used to avoid the implementation of efficient pollution control technologies whose use is necessary to achieve attainment of the NAAQS.

The California Air Resources Board—which has more experience and expertise in planning and assessing Tier II level emission controls than even the federal EPA—has testified before this Congress that compliance with the Tier II standards will cost between \$110-\$120 per vehicle. As CARB's analysis is based on the use of currently available technology to meet the Tier II standards, its cost estimate clearly represents the outer bound of compliance costs and does not assume the commercialization of future advances which are likely to reduce these costs significantly.

According to CARB's estimate, the anticipated maximum cost of Tier II reduction is approximately \$2000 per ton of HC. Nonattainment areas are now being forced to impose controls on stationary and area pollution sources costing \$6000 to \$8000 per ton and more, and are projecting that controls costing up to \$15,000 per ton of HC may be necessary before the end of the decade. Particularly given the interstate nature of many ozone non-attainment problems, the Administrator should consider the adoption of Tier II standards cost-effective if, at the time of EPA's Tier II assessment, a significant number of non-attainment areas are imposing stationary or area source controls costing at least a comparable amount per ton of HC removed.

Finally, there is another dimension to cost-effectiveness beyond the efficiency of the control technologies themselves. It is imperative also to consider the cost of not achieving clean air. A 1987 University of California study, which was prominently relied upon by the American Lung Association's recent survey of health cost studies of air pollution, estimated that mobile source pollution costs the nation between \$4 billion and \$93 billion annually. The ALA's best estimate of health costs is in the \$45 billion to \$50 billion annual range.

The ALA is the nation's foremost public health organization involved in environmental issues, and it has identified additional control of motor vehicle emissions as an essential component of any serious national strategy to ensure healthful air for all Americans. The ALA's documentation of

the necessity for more stringent control of motor vehicle emission emphasizes the reality addressed by the 1990 Amendments to the Clean Air Act. We cannot afford to forego any achievable and efficient means of reducing air pollution from motor vehicles. And if we are to improve the quality of the air our citizens breathe rather than simply keep pace with the burgeoning number of pollution sources, we must demand still further advances in control technology. That is the aim of this Act in general and their Tier II program in particular.

AIR TOXICS

Mr. President, Title III covers toxic air pollutants. These pollutants are one of today's most serious health and environmental problems. Billions of pounds of toxic pollutants are released into the environment every year, routinely and in accidents from many sources. Chemical plants, oil refineries, sewage treatment plants incinerators and hundreds of different sources release hazardous pollutants into the air.

It is true that many pollutants are released in trace amounts. However, even at low concentrations, toxic pollutants may have serious acute and chronic effects.

Literally hundreds of air toxics of concern are emitted each year. Some examples are mercury, arsenic, asbestos, benzene, radionuclides, trichloroethylene (a solvent) perchloroethylene (dry cleaning fluid) (ethylene oxide (hospital sterilant), toluene (constituent of gasoline) ammonia, ethylene and propylene (building blocks in plastics) methylisocyanate (the chemical released in the Bhopal accident) and dioxin (a product of combustion whenever there is chlorine in the fuel).

In April 1989, EPA issued the first Toxic Release Inventory compiled from reports by the Emergency Planning and Community Right to Know Act of 1987. Based on this inventory, EPA reported that in 1987, 2.7 billion pounds of toxic pollutants were released into the air—just from major manufacturing sources. Actual emissions from all sources are likely to be two to five times higher.

These billions of pounds of reported releases of toxic air pollutants aren't just idle statistics. Once released they can be inhaled or injected causing cancers, liver and kidney damage, bronchial irritation, nerve damage, and skin or eye irritation.

In a 1989 study, EPA estimated a national annual cancer incidence of 2,700 cases as the result of exposure to some 15 to 40 toxic air pollutants. This means that 190,000 of the Americans now alive might be expected to contract cancer from exposure to air toxics.

Cancer incidence for the general public is only one part of the problem. There is also an equity concern. Those living near large industrial facilities or in highly developed urban corridors are at very high risk. EPA estimates that cancer risks for these individuals may be greater than 1 in 10,000.

Beyond health risks, these air toxics are causing widespread environmental degradation. Up to 80 of the toxics in Lake Superior are deposited from the air rather than from surface runoff. Lakes all across the northern tier of states are now posted with warnings for pregnant women and children because of high mercury levels in fish from air borne pollutants.

Mr. President, it's true that the existing Clean Air Act—current law—includes provisions for controlling toxic air pollutants. Section 112 of the Act adopted in 1970 requires EPA to list each hazardous air pollut-

ant which is likely to cause an increase in death or serious illness.

However, in the 18 years of administering section 21, EPA has listed only eight substances for regulation—mercury, beryllium, asbestos, vinyl chloride, benzene, radionuclides, inorganic arsenic and coke oven emissions.

It is true that EPA has screened some 900 pollutants. And it is true that in 1983 William Ruckelshaus, former EPA Administrator committed to regulate 25 toxic air pollutants that had been under review since 1977. But the bottom line is that in 18 years EPA has only regulated eight substances.

Several states have made better progress. States like California and New Jersey—with active air toxics programs—have developed on their own standards for 708 substances.

Current law has worked poorly—to some extent—because of the standard of protection required under current law. That standard requires EPA to list each hazardous air pollutant which is likely to cause death or serious illness. Within one year after listing, EPA is to establish emissions standards.

These standards would apply to sources of the listed pollutant—providing an ample margin of safety to protect public health without considering the cost. While this standard may work for threshold pollutants where there is a safe level of exposure, for carcinogens no exposure is safe.

Current law—when literally interpreted—could require standards that would be potentially very costly. As a result, EPA has been reluctant to write standards this stringent.

There is therefore, broad consensus that the program to regulate hazardous air pollutants under section 112 should be restructured. There is broad consensus that current law doesn't work.

In light of this, the bill would entirely restructure the existing law, so that EPA would have authority to regulate industrial and area source categories of air pollution rather than individual pollutants. Moreover, the bill provides new authority allowing cost to be considered in applying controls.

This new approach towards regulation of both routine releases of hazardous air pollutants relies on technology-based standards rather than risk-based standards. This approach is needed to overcome the inertia that plagued the health-based standard setting process authorized by current law.

Specifically, the bill lists 189 toxic pollutants and allows EPA to add or delete pollutants from the list.

Any major source emitting more than 10 tons per year of any one pollutant on the list or 25 tons of any combination, must reduce its emissions using maximum achievable control technology—MACT.

Mr. President, the MACT requirement is the cornerstone of this approach. It means that the source may need to install a scrubber, selective catalytic reduction, adjust the combustion temperature of its equipment, substitute materials or apply other methods to reduce air emissions. With respect materials substitution, the substitution of, or changes in, metal or mineral bearing raw materials that are used as feedstocks or material inputs for the purpose of establishing MACT at mining, extraction, beneficiation and processing facilities should not be considered. Unlike other industries, the mining, beneficiation and processing industry has limited if any flexibility in changing the composition of domestically mined natural resource-based feedstocks.

The bill requires MACT for all major sources of any of the 189 pollutants. Howev-

er, let me be clear about two points with respect to MACT.

First, the bill directs the EPA to list categories and subcategories for these major sources so that MACT is appropriately applied. Moreover, to facilitate consistency in the regulatory process, Congress expects the EPA to establish source categories under this Title so as to parallel, to the extent practicable the classifications established under section 111 for new source performance standards and under part C for the prevention of significant deterioration.

This directive to the EPA may have relevance to among other industries, primary aluminum reduction plants where the use of two distinctively different technologies—the Soderberg process and the prebaked anode process are already recognized as different processes in EPA promulgated New Source Performance Standards. Therefore, in an effort to minimize confusion and avoid unnecessary cost and dislocations, the EPA should, in establishing subcategories for the aluminum industry, distinguish among plants using Soderberg process aluminum reduction technology and plants using prebake anode technology.

Second, the bill sets a realistic schedule that phases in when MACT would be required. The bill allows MACT to be phased in over 10 years.

Mr. President, once in place, MACT should reduce toxic air emissions by 90%. Unfortunately, in certain circumstances hazardous air pollutants may continue to impose significant adverse health effects even after MACT is in place.

By their very nature, technology standards do not assure that all health and environmental concerns will be addressed. In those circumstances where there is a significant risk remaining—referred to as residual risk—they must be reduced.

This bill, therefore, provides a safety net for residual risk. The bill requires that if after MACT is in place, a significant risk remains, EPA must tighten the standards 8 years after the initial promulgation of the MACT standard. This directive requires EPA to set "residual risk" standards for pollutants that may cause cancer whenever the risk is greater than one in one million to the person in the general population most exposed to emissions from a source in the category.

Another important provision in this Title are those addressing accidental releases. Mr. President, on December 3, 1984, a pesticide manufacturing plant located in Bhopal, India released a cloud of a highly reactive and toxic chemical—methyl isocyanate—in one of the worst chemical accidents in history. 3,400 people died, 200,000 were injured.

In August the following year—after countless assertions that "it can't happen again"—409 residents and chemical workers in Institute, West Virginia were hospitalized after being exposed to methyl isocyanate that was accidentally released.

Chemical accidents have become commonplace in the United States. Chemical accidents have been reported in all 50 states, the District of Columbia, Puerto Rico and the Virgin Islands. Seventy percent occurred at stationary sources, 30 percent were transportation related. Four high-volume industrial chemicals—chlorine, ammonia, hydrochloric acid and sulfuric acid—were the source of injury or damage in one-quarter of these accidents. And more than 400 chemicals were released during reported accidents.

The overwhelming impression one gains from a review of the accidents is that current programs have not been effective. They have not worked in preventing accidents nor in responding to accidents.

It is therefore important and appropriate that the Federal government play a lead role in accident prevention and mitigation.

The reported bill therefore, requires that EPA develop a list of extremely hazardous substances for priority attention. Sources handling such substances must prepare a hazardous assessment that outlines operating procedures, training, preventive maintenance and emergency response plans.

In addition to these requirements, the bill establishes an independent chemical safety board with three members appointed by the President. This board would investigate chemical accidents in much the same way that the National Transportation Safety Board—NTSB—investigates transportation accidents. The independence of this board is critical if it is to objectively determine the causes of accidents.

Another important provision in Title III are those controlling air emissions from solid waste incinerators. Nearly 200 incinerators are planned in communities across the nation, and other incinerators operate across the country without adequate emissions controls. These provisions will ensure that their emissions are controlled with the maximum achievable control technology.

It is important to point out that the Administrator in establishing MACT for incinerators is directed to establish different categories for units combusting municipal waste with capacity greater than 250 tons per day, units with capacity less than 250 tons per day combusting municipal waste and medical waste, and for units combusting commercial or industrial waste. In establishing emissions standards for such units, the Administrator is expected to consider cost of achieving such emission reductions, and may distinguish among classes, types and sizes of units within a category. It is also important to point out that for the purpose of these requirements, industrial units that burn 30 percent or less by weight of refuse such as waste paper, wood, yard wastes, food wastes, plastics and other are to be regulated as industrial incinerators and not municipal incinerators.

I want to also point out that sections 306 and 307 of the Senate bill included requirements that would have required recycling. The Conference Committee has withdrawn the recycling provisions from the final bill because of our belief that recycling should not be addressed piecemeal under the Clean Air Act, but should be addressed in the context of a comprehensive solid waste management framework under RCRA.

ACID RAIN

Overview of How the Acid Rain Program Works

The sulfur dioxide reduction program established under this title operates in two phases. Beginning January 1, 1995, approximately 110 high-emitting utility units will be required to make reductions in their total annual emissions to reach emissions levels no greater than the product of 2.51 lbs/mmBTU multiplied by baseline fuel consumption. Beginning January 1, 2000, all utility units emitting SO₂ at rates equal to, or greater than, 1.20 lbs/mmBTU and with nameplate generating capacity equal to, or greater than, 75 megawatts will be required to reduce their emissions to levels no greater than the product of 1.20 lbs/mm BTU multiplied by baseline fuel consumption.

The bill also includes a system of marketable allowances. Through this system, the reduction programs established by the title maximize the range of choices sources have for complying with their emissions limitation requirements. On a regional basis, this may allow areas with substantial reduction obligations and total costs to lower their net costs by producing and selling "extra" reductions—that is reductions beyond those they are required to achieve. At the same time, areas facing growth in the energy demand or units with high emissions control cost on a per ton basis may find that purchasing excess emissions reductions from plants in other areas, rather than making on-site reductions, enables them to comply with their emissions limitations at a significantly lower cost.

Allowance Program for Existing and New Units

The system of marketable allowances established under this title is the compliance linchpin for sources subject to the emissions limitations imposed by this title. When the regulatory program under this Title is fully implemented, the ultimate measure of compliance for a source will be its ability to match its actual annual emissions with the number of annual allowances it holds. In fact, under this title financial and emissions limitation obligations are imposed on the owners and operators of units failing to hold enough allowances to match their units' emissions. Section 403(g) of the Act, as amended by the bill, makes it explicitly unlawful for a unit's sulfur dioxide emissions to exceed the number of allowances held for the unit, rendering the number of allowances held for the unit the legal emissions limitation requirement for the unit.

It is essential to note that this requirement to each unit for which allowances are allocated. While utilities may "pool" allowances allocated for a group of units for their own dispatching purposes, compliance is strictly based on each unit's annual emissions not exceeding the total number of annual allowances held for the unit.

The system works in the following manner. The owner or operator of each unit that must meet a sulfur dioxide tonnage-based emissions limitation under this title will receive from the Administrator annual allowances equal in number to the tons of annual emissions that each unit is permitted to emit once the title's emissions limitations are in effect.

By the beginning of Phase II, the sources subject to the requirements of this title shall be emitting no more than 8.9 million of sulfur dioxide annually (not counting bonus allowances allocated for the first 10 years of Phase II). Thus, the Administrator's authority to allocate and issue allowances is circumscribed by the annual 8.9 million ton emissions constraint (again, leaving aside the bonus allowances authorized in Phase II).

To demonstrate compliance at the end of each year, the owner or operator must submit to the Administrator continuous emissions monitoring data and allowances allocated for that year, or remaining from previous years, that equal the unit's emissions.

Let me point out that this approach reinforces the overall tonnage-performance approach of the reduction program established under this title—that is, that on an annual basis no more than 8.9 million tons of SO₂ are being emitted by utilities. In the face of projected SO₂ emissions growth, estimated to be as high as 4.5 million tons over

the next 20 years, that objective would simply be unattainable unless specific tonnage limitations were imposed on each unit.

Let me further point out that the allowances issued under this title are transferable both between units and from a current year to a future year. Any unit that reduces its emissions more than is required will be required to surrender to the Administrator fewer allowances than have been allocated to it. The remaining allowances can be transferred to another unit for its use in meeting its compliance requirements. Alternatively, the remaining allowances can also be applied to meet emissions requirements in a future year.

Mr. President, the transferability of allowances both between units and from current years to future years is the key both to strong environmental policy sought in this title and to the flexibility the title creates for sources in choosing the means for complying with their missions obligations. Since units can gain cash revenues from the sale of allowances they do not use, they will have a financial incentive both to make greater-than-required reductions and/or reductions earlier than required.

Since selling unused allowances is tantamount to selling emissions reductions, the incentives created by the allowance market should stimulate innovations in the technologies and strategies used to reduce emissions. Coupled with the overall flexibility in compliance that the title affords sources, the allowance market should encourage sources to exploit energy efficiency, enhanced emissions control technology, fuel-switching and least-emissions dispatching in order to maximize emissions reductions.

At the same time, the flexibility created by the allowance-trading system alone has been estimated by the EPA to produce a nationwide cost-savings of 50% in Phase I of the program, 14% to 20% when the program is first fully implemented at the beginning of Phase II and a 20% cost-savings in 2010. On a regional basis, allowance transfers also yield significant cost-reductions.

Mr. President, I would also like to point out that in promulgating regulations under this title the Administrator must be mindful first, that allowances are intended to ensure that the aggregate emissions limitation requirements set forth in this title are met. The Administrator must ensure that ultimately there is a precise match between allowances and emissions, and that the regulations do not inadvertently give sources opportunities to produce emissions in amounts that exceed their allowances.

Second, the allowance system is intended to maximize the economic efficiency of the program both to minimize costs and to create incentives for aggressive and innovative efforts to control pollution. In formulating regulations the Administrator should be mindful that to exploit the efficiencies afforded by the allowance system, parties will transfer them between and among themselves pursuant to a wide variety of commercial arrangements such as under leases, sales agreements and exchanges between emissions and electric power or capacity. Ownership of allowances by brokers, investors and other market makers will maintain fluidity in the allowance market, link ultimate utility buyers with original sellers and facilitate rational price-finding.

Additionally, to ensure the full flexibility of the allowance system the Administrator should assure that transfers become effective as quickly as possible with minimal burdens on the parties to the transfer. Since

the essential compliance event under this title is matching each unit's actual emissions with the number of allowances it holds, no unit should be legally entitled to avoid its emissions limitation obligations under this title by claiming possession of allowances held, and applied to compliance, by another source. Thus, transfers should be virtually automatic to minimize or eliminate such claims, for once a transfer was deemed effective, by definition, only one unit could claim the transferred allowances.

Mr. President, it is important to point out that the reason for characterizing the legal or property status of allowances in this title is to make clear that regulatory actions taken subsequent to the issuance of allowances are not subject to the "takings clause" of the U.S. Constitution. Allowances are, in large part, simply iterations of each unit's permit under this title. Since the permits will be legally binding statements of each unit's emissions limitation obligations under the pollution control program established herein, this title makes clear that should Congress or the Administrator limit, revoke or otherwise modify the allowances or the underlying regulatory program established by this title or the regulations promulgated pursuant thereto, the U.S. government will not be obliged to compensate allowance-holders for loss of the allowances or any loss in their value. Allowances are but the means of implementing an emissions limitation program, which can be altered in response to changes in the environment or for other sound reasons of public policy.

At the same time, Mr. President, the allowance system is designed so that the allowances will be treated in part like economic commodities. As such they will stimulate pollution sources to engage in actions that will advance both the environmental and economic objectives of this title. Accordingly, allowance holders should expect that allowances will partake of durable economic value and that commercial and other relevant law will apply to allowances and function to protect that value.

Mr. President, I would also like to comment on the reasons for a post-2000 cap in this title. Without such a cap on emissions in the form of a new source offset requirement, emissions would quickly increase and would defeat the objectives of this title. EPA projects that between 1985 and 2010 new sources, though relatively low-emitting on a unit-specific basis, will add between 800,000 and 2.7 million tons of annual SO₂ emissions in the absence of an emissions "cap". Such emissions growth, if unchecked, would clearly undermine the purpose of the title.

Let me also point out that the aggregate emissions cap is the final ingredient in a recipe for promoting energy conservation as a principal method for reducing acid precursor pollutants. By reducing the amount of fossil-fuel consumed in the process of providing required energy services, energy conservation has the broadest range of environmental benefits simply because it leads to the reduction of all pollutants resulting from fossil fuel use. Energy efficiency is a crucial tool for controlling the emissions of carbon dioxide, the gas chiefly responsible for the intensification of the atmospheric "greenhouse effect".

Thanks to the flexibility created by the transferability of allowances, no individual unit will in practice be bound to a fixed emissions cap by either the emissions limitation requirements or by the new-unit offset requirement. As a result, neither of these

requirements will impair utilities' ability to service the energy demands of a growing economy. In fact, history demonstrates that there is little correlation between emissions growth and economic growth. Between 1970 and 1987, the U.S. economy grew substantially, but SO₂ emissions decreased by 28% in that period. During that same period electricity generation increased by 76% and coal use increased by 50%.

In addition, throughout the program, the retirement of exiting units could prove to be a key source of new unit offsets. The EPA estimates that the emissions reductions achieved when a large uncontrolled boiler is retired or repowered could provide offsets for units with three or four times the capacity of the retiring unit.

Finally, the allowance system itself will facilitate new units' access to the needed offsets. Because the allowances market will create incentives for overcontrol—that is, for more emissions reductions than required—new units will be engaging a market already rich with incentives for existing sources to use energy conservation, repowering and improved control technology to achieve the emissions reductions that new units can acquire in the form of offsetting allowances.

Phase I Sulfur Dioxide Requirements

The bill lists approximately 110 units with mandatory emissions reductions in Phase I of this title, although emissions reductions from other units may be substituted in whole or in part for the reductions required of any listed unit shall also be required to make reductions. The listed units represent those units with both the highest SO₂ emissions levels and the greatest opportunities to make cost-effective reductions. The number of allowances specified for each unit is equal to the number of tons of annual emissions to which each affected unit is limited. When fully implemented, Phase I of this title will result in annual sulfur dioxide emissions reductions of 2.8 to 4.4 million tons beginning on January 1, 1995.

Mr. President, this title requires as a matter of law, an absolute emissions limitation obligation on each unit listed in the bill in Phase I. Thus, for example, even if the Administrator fails to implement the allowance or permit programs, the owners and operators of units listed in the bill bear an absolute obligation to meet the emissions reduction. Further, such an obligation is sufficient to trigger liability under this title or any other relevant provision of the Clean Air Act or any other applicable law.

Units subject to Phase I emissions reductions may achieve compliance through the transfer of allowances between and among allowance holders. In implementing these provisions the Administrator's chief responsibility must be to ensure that the emissions reduction trading that an owner or operator proposes to undertake between and among the owner's or operator's units actually results in total emissions reductions that are equal to, or greater than, the emissions reductions that would have been achieved had the listed unit itself. Accordingly, the owner or operator must submit an emissions reduction sharing or unit substitution proposal that demonstrates conclusively that the required reductions will be achieved.

Considering the potential benefits of the allowance trading system in general, this provision is intended to give the owners and operators of Phase I units opportunities and incentives for emissions reduction strategies that lower costs, maximize pollution reduc-

tion and promote energy efficiency and innovation.

To enhance cost-saving opportunities for midwestern ratepayers and to protect Appalachian coal miners, Phase I includes a bonus incentive program.

Units using qualifying technological systems of continuous emissions reduction, (i.e., 90% removal) upon approval by the Administrator, will receive allowances from a bonus reserve in an amount sufficient in number to permit them to delay compliance until January 1, 1997. In addition, units receiving such allowances may also receive bonus allowances equal in number to the tonnage emissions reductions they achieve below a level equal to 1.20 lbs/mmBtu multiplied by their fuel consumption baselines. The bonus allowances allocated to these units are limited in number of 3.5 million or to a lesser number equal to the total emissions reductions projected by the Administrator to be achieved in calendar year 1995 and adjusted in 1996 if actual reductions are fewer than projected.

Allowance Allocations

Under no circumstances may the EPA allocate basic Phase II allowances so to authorize more than 8.9 million tons of emissions. Should the applicable allocation formulas otherwise result in the allocation of more than 8.9 million in basic Phase II allowance, then the EPA is required to reduce each unit's allocations on a pro rata basis in an aggregate amount equal to the excess allocations that would otherwise be made.

As discussed below, an additional, separate allocation of 530,000 is also authorized. There are also allocation authorized in Phase I and Phase II for Phase I units in certain Midwestern States. These additional Midwestern allocations reflect a complete and final resolution of a lingering methodological controversy sparked by Dr. James Mahoney. Between 0 and 200,000 tons of uncertainty in inventorying emission has been identified; thus 200,000 allowances are allocated "temporarily" in Phase I and an addition 50,000 in Phase II.

Phase II Sulfur Dioxide Requirement

The emissions limitations set forth in Phase II capture virtually every stream-electric utility unit in the 48 contiguous States and effectuate the 10 million ton reduction in annual sulfur dioxide emissions that is a chief objective of this title.

Like units subject to Phase I requirements, this title requires, as a matter of law, an absolute emissions limitation obligation on each utility unit in the 48 States. Thus, for example, even if the Administrator fails to implement the allowance or permit programs in this title the owners and operators of units subject to the emissions limitations have an absolute legal obligation to meet those limitations. Such an obligation is sufficient to trigger liability under this title or any other relevant provision of the Clean Air Act or any other applicable law. Once allowances are allocated, then, by operation of section 403(g) of the Act as amended, the number of allowances held for the unit become the unit's absolute sulfur dioxide emissions limitation.

Mr. President, this title reflects a policy of imposing actual reduction obligations on higher-emitting units, which, as a general matter, can make the most reductions most cost-effectively. At the same time, by permitting emissions increases to occur at lower-emitting units, the title adopts a form of least-emissions dispatching, encouraging

increases in power production to occur at those units with lower emissions rates. In so doing, the title in effect rewards lower-emitting plants by permitting emissions increases at such units.

Phase II begins January 1, 2000 and reductions achieved in calendar year 2000, the first year of Phase II, are banked in a fund of 5.3 million allowances to be re-distributed at a rate of 530,000 a year for 10 years. These allowances are distributed to coal-fired plants with low capacity factors, to plants under construction and to plants in States with State-wide average emissions rates below 0.8 lbs/mmBtu based on each plant's share of electrical generation.

The size of the bonus pool—5.3 million allowances—is intended to match the tonnage reduction achieved in calendar year 2000. Thus, calendar year 2000 is treated as a "banking" year. However, by operation of compliance extensions available to units that adopt repowering technologies for purposes of compliance, year 2000 reductions may be fewer than 5.3 million tons. To compensate for this, the EPA is required to calculate the number of allowances that will be allocated in year 2000 to implement the extension (i.e., those required to cover the difference for each unit between 1.2 lbs/mmBtu X baseline and uncontrolled levels) and to reduce pro rata all units' basic Phase II bonus allocations for each of the first 10 years in an amount equal to 10% of the total repowering extension allowances allocated in year 2000.

The legislation does not require such a "ratchet" to compensate for all allowances allocated to extension units in every extension year simply because current projections are that very few units will delay compliance under the repowering extension. Had projections been otherwise, the legislation would have treated these delayed reductions differently.

In addition to the alternative formulas for allowance allocations to coal-fired plants and the formulas for oil and gas plants, the Senate bill includes a provision for "clean States". This specifies that plants in States whose average utility emissions rate of SO₂ is at or below 0.8 lbs/mmBtu may, at the election of the Governor, receive allowances under the set of non-capacity-factor-based "120%" formulas enumerated below plus allowances from a 125,000-allowance bonus pool based on their share of electrical generation.

Units >75 MWe and >1.2 lbs/mmBtu ("Big Dirties"), 1.2 lbs/mmBtu X baseline, plus, (a) for units emitting between 1.2 lbs/mmBtu and 2.5 lbs/mmBtu, with low capacity factors during the baseline period, bonus allowances equal to half the difference between the unit's capacity factor during the baseline period and a 60% capacity factor or (b) the "clean State" allocation.

0.6 lbs/mmBtu < Coal-fired Units < 1.2 lbs/mmBtu, for plants in States that do not qualify as "clean States", either (a) 1985 rate X baseline X 120% or (b) 1985 rate X baseline at a 60% capacity factor; for "clean State" plants, (a) plus a share of the 125,000 bonus allowances, based on share of electrical generation. After 2010, these plants receive allowances equal to (a).

0 < Coal-fired Units < 0.6 lbs/mmBtu, for plants in States that do not qualify as "clean States" either (a) the lesser of 0.6 lbs/mmBtu or SIP rate X baseline X 120% or (b) the lesser of 0.6 lbs/mmBtu or SIP rate X baseline at a 60% capacity factor; for "clean State" plants, (a) plus a share of the 125,000 bonus allowances, based on share of

electrical generation. After 2010, these plants receive allowances equal to (a).

0.6 < lbs/mmBtu < Oil/Gas-fired Units < 1.2 lbs/mmBtu, 1985 rate X baseline X 120%, plus, for "clean State" units, a share of the 125,000 bonus allowances, based on share of electrical generation.

0 < Oil/Gas-fired Units < 0.6 lbs/mmBtu, for units whose average fuel consumption in 1980-89 was less than 90% in the form of natural gas, the lesser of 0.6 lbs/mmBtu or SIP X baseline X 120%, plus, for units in "clean States", a share of the 125,000 bonus allowances, based on share of electrical generation.

Gas-Dominated Units, for units whose average fuel use in 1980-1989 was more than 90% in the form of natural gas, 1985 rate X baseline; plus 0.050 lbs/mmBtu X baseline or, for units in "clean States", until 2010, a share of the 125,000 bonus allowances, based on share of electrical generation. After 2010, all units in this category receive allowances equal to 0.050 lbs/mmBtu x baseline.

Pre-Enactment Units (On line between 1985 and 1990/date of enactment) allowable rate X 65% capacity factor.

Grandfather/Transition Rule Units

Units on line between September 30, 1990 and December 31, 1995, allowable or 0.3 lbs/mmBtu X 65% capacity factor. In addition, approximately 11 plants receive an outright allocation specified in the bill.

For units emitting at a 1.2 lbs/mmBtu rate or greater which are smaller than 75 MWe and part of a utility system greater than 250 MWe, 1.2 lbs/mmBtu X baseline, plus, for such units whose capacity utilization was less than 60%, allowances equal to half the difference between their capacity utilization during the baseline period and 60%. For units emitting at a 1.2 lbs/mmBtu rate or greater which are smaller than 75 MWe and part of a utility system smaller than 250 MWe, allowances equal to 1985 rate X baseline.

Repowered Sources

Mr. President, with respect to repowered sources, this title provides an extension for a subset of clean coal technologies specifically designed for, and applied to, boiler replacement or "repowering". These include, atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells or a derivative of one of these techniques as determined by the Administrator, in consultation with the Secretary of Energy.

This extension is provided only for repowering technologies because they require substantial modification or replacement of the boiler and other essential components. In order to utilize these technologies, the unit must be largely rebuilt. In contrast, other clean coal technologies involve retrofits of existing units without such substantial modifications. No extension, with a commensurate temporary loss of emissions reductions, is warranted for these technologies.

During the extension period, the Administrator shall issue annually SO₂ allowances equal to the affected unit's baseline multiplied by the lesser of the unit's Federally approved State Implementation Plan limitation or its actual emission rate for 1995. Such allowances may not be transferred to any other source. The owner or operator shall notify the Administrator 60 days before removing the unit from service to install the repowering technology. On that

date, the source shall be subject to emissions reductions requirements and allowances for the year in which the unit is removed from operation to install the repowering technology shall be calculated by multiplying 1.20 lbs/mmBtu by the existing utility unit's baseline divided by 2,000. Such allowances are transferable.

Allowances after repowering is complete shall be the product of 1.20 lbs/mmBtu of SO₂ multiplied by the existing utility unit's baseline divided by 2,000.

NO_x Program

New section 407 requires that beginning in 1995, Phase I plants with tangentially-fired boilers meet a 0.45 lbs/mmBtu NO_x emissions rate and that Phase I plants with dry bottom wall-fired boilers or cell burners meet a 0.5 lbs/mmBtu NO_x emissions rate, unless the EPA sets a higher rate upon a finding that any such boiler type cannot achieve the prescribed rate using low NO_x burner technology. In addition, the EPA is required, by January 1, 1997, to set emissions limits for wet bottom wall-fired boilers, cyclones and any other utility boiler type. These emissions limits must be based on available technology, costs and energy and environmental impacts for the best system of continuous emissions reduction and must be comparable in cost to the limits set for the Phase I units. At the same time, the EPA may revise the limits set for Phase I boiler types, but such revised limits shall not apply to Phase I units. By January 1, 1994, the EPA must promulgate a revised NSPS for NO_x based on improvements in technology.

If, after installing and correctly operating appropriate control equipment, a unit demonstrates that it cannot meet the relevant standard, then the relevant permitting authority may set a less stringent standard for the unit. Units may also comply by multi-unit emissions averaging if, in a petition to the permitting authority, they demonstrate that the averaged rate is less than or equal to the Btu-weighted rate of each unit in the absence of the proposed averaging.

Cumulative reductions are forecasted to be 26-29 million tons below projected or base case levels by 2010, and 2.0-2.2 million tons a year in 2000 and 2.0-2.5 million tons a year in 2010 as the revised NSPS begins to show an effect.

Election for Additional Sources

Mr. President, this title also provides that sources not otherwise subject to the acid rain requirements may voluntarily become part of the acid deposition control program and obtain allowances to trade within the program. This adds flexibility and can enlarge the universe of sources for which there are cost-effective reductions emissions of SO₂ or NO_x. This section provides a useful additional source of reductions that can be made voluntarily by sources choosing to be affected by the provisions of this title. Unaffected utility sources, industrial and process sources are all eligible to become affected sources under this section. There are a variety of circumstances that would persuade an owner or operator to "opt-in" under this section.

For example, sources in a State expecting increased demand for electricity with fairly low levels of emissions from utilities may turn to industrial sources within the States as a source of allowances to ease the restrictions of the cap. The utility and industrial source may contract for allowances and pollution control costs in order to assure the

utility future sources of allowances for growth.

Excess Emissions Fee

This title also requires that sources that emit SO₂ or NO_x in excess of the allowances such source possesses for any calendar year shall pay an excess emissions fee of \$2,000 per ton. This provision eliminates any financial benefit such owners or operators might have received from non-compliance with this title. The fee is designed to annually to keep pace with inflation. The fee is designed to be high enough that most pollution control options will be cheaper than continuing to unlawfully emit the pollution. Currently, there is all too often a financial incentive to find ways to circumvent or avoid compliance with the law. This new section of the Act is an important mechanism for removing such rewards for noncompliance.

In addition, once a source has been determined to be subject to the excess emissions fee, the source must submit a plan demonstrating how such source will reduce its emissions to achieve the requirements of this title, including a plan to achieve required offsets.

Monitoring, Reporting, and Recordkeeping Requirements

This title also includes requirements for continuous emissions monitors at each affected source and clarifies the recordkeeping requirement necessary to implement the acid rain requirements.

One of the major criticisms of the Act as currently implemented is that it is so easily, "gamed" by sources that have a disincentive to comply with the Act's provisions. The allowance system of this title attempts to reverse the economic equation so sources will have an incentive to comply. The provisions in this section are crucial in determining whether a source has complied. Unlike other control requirements of the Clean Air Act, utility emissions of SO₂ and NO_x are capable of verification in a cost-effective manner through use of continuous emission monitors.

The requirements for CEMS is the linchpin in this title for without good emissions data, a problem that has hampered enforcement of the Act to date, no allowance or emissions trading scheme can affectively operate.

Repeal of Percent Reduction

In 1977, the Clean Air Act was amended to require that the new source performance standards for fossil fuel-fired stationary sources be expressed as a percentage reduction in emissions from uncontrolled levels. This amended mean that coal alone, without regard to its sulfur content, could not be used to meet the new source performance standards as had been the case before 1977.

After 1977, all new sources, under the percentage reduction requirement, had to install a system on continuous emissions control. In practice, this meant that all new utility power plants burning coal had to install scrubbers even if they were burning low sulfur coal. This exacerbated a regional split over coal use and air pollution control that had existed for some time. The original intention of the provision was to prevent western low sulfur coal from shutting eastern high sulfur coal out of the fuel market.

The provisions of this title reduce the need for a percentage reduction requirement because of the total cap on U.S. utility emissions of sulfur dioxide. After the year 2000, utilities can emit only 8.9 million tons of sulfur dioxide. With an expanding economy, this will lace a premium on the clean-

est possible power plants. New sources will try to reduce their emissions as much as possible or purchase allowances for the difference in emissions.

This provision is in no way intended to allow an increase in emissions for pollutants for which a standard has been set under section 109 of the Clean Air Act. Sources commencing operation after this section takes effect cannot emit more than they would have emitted without this provision.

The bill also allows the Administrator to consider the use of clean fuels to meet BACT requirements if a permit applicant proposes to meet such requirements by using clean fuel.

Permits

Permits are to require sources to meet applicable emissions limitations and the provisions of the title. Not later than 30 months after enactment owners or operators must submit permit applications that specify methods and schedules of compliance and statements of any intent to use alternative methods of compliance. This language, along with provisions that allowance transactions automatically amend permits and that notices amendments amend compliance plans, is intended to insure flexibility. To counterbalance plans, is intended to insure flexibility. To counterbalance this, the bill requires compliance plans to bind units to complying with emissions limitation requirements even in cases where alternative compliance strategies fail.

Phase I compliance plans are binding for the purposes of compliance until permits are issued. Any utility that plans to meet Phase I reduction requirements by shifting electrical generation load from a Phase I unit to a non-Phase I unit must identify those units, which would, in turn, be required to limit their emissions to 1985 levels.

Phase II permits are to be issued by State permitting authorities. In the case of units with multiple owners, no permit may be issued until the designated representative of the owners files a certification concerning the holding and distribution of allowances. Allowances will be deemed to be held or distributed (but not used) in proportion to each owner's ownership share of the unit.

Notwithstanding the broad latitude granted in the compliance planning process afforded units not adopting alternative methods of compliance, section 408(a) of the act as amended by this legislation specifically provides that the provisions of title IV shall be implemented by permits issued for each unit. The provisions to be incorporated included not only each unit's emissions limitation requirements but the requirements of sections 403, 409, 411, 412, 413, and 414 (all added to the Act by this legislation).

New section 408(a) together with new section 408(h) make it absolutely clear that the requirements of new title IV supersede any permit to the extent that the permit does not itself incorporate the provisions and requirements of the title. Subsection (a) expressly bars the issuance of any permit that does not include the applicable provisions of the title. Thus, a permit or compliance plan shall not alter requirements of the title that are essential to achieving the emissions limitation requirements imposed on each and every unit by the title itself or to ensuring the proper and accountable functioning of the allowance/compliance system established in the title.

Section 408 also makes it clear that the permit-compliance "shield" established in new title V applies to units subject to the requirements of title IV only to the extent

that the unit is in "compliance . . . with a permit . . . which complies with this title. . . ." This is essential to the design of the emissions reduction program established under new title IV. In the legislation itself, Congress has prescribed precise emissions limitations for each and every utility unit that are legally effective by operation of the legislation itself. In addition, the legislation sets up a nationwide emissions allowance system for compliance—a system that could achieve significant cost-reduction in addition to substantial emissions reduction, but only if the system works to function as a fluid, robust market.

Thus, because the essential elements of the program have been established in the legislation itself and do not require significant intervening activity on the part of the EPA or state authorities, it is the emissions limitations and the allowance allocation formulas and the other requirements necessary for making the system accountable and functional that must supersede any permit provision that is contradictory or inconsistent.

Finally, new section 408 includes a provision to buttress the interests of minority-share owners of a unit for which allowances are allocated. Without imposing any affirmative responsibilities or liabilities on the EPA—ultimately the protection of minority-share owners is a matter of commercial law, not environmental regulation—the legislation requires that multiple owners of a unit must reach agreement on the party that will represent them for purposes of compliance with the title. Allowances are allocated for units, not to persons. Consequently, the EPA can play little role in pre-determining equity in the disposition of allowances allocated for a multiple owned unit. However, since the EPA cannot act with respect to the allocation of allowances in the absence of a certified designated representative of the owners, the agreement that the owners will have to reach in designating a representative will give the minority-share owners powerful leverage in ensuring that they are equitably treated by their commercial partners.

OUTER CONTINENTAL SHELF POLLUTION

This bill adds a new section to the Act identical to the House passed bill except that existing sources will have 24 months to comply after the Administrator has promulgated requirements applicable to air pollution from all outer Continental Shelf (OCS) sources, except sources offshore, Texas, Louisiana, Mississippi and Alabama.

For OCS sources within 25 miles of the seaward boundary of a state, these EPA requirements must be the same as would be applicable if the sources were located in the corresponding onshore area. The requirements take effect with respect to new sources on the date of promulgation and for existing sources twelve months later and are enforced as standards promulgated under Section 111. States may be delegated the authority to implement and enforce the requirements if they submit regulations to the Administrator which the Administrator finds are adequate. For OCS sources located offshore Texas, Louisiana, Mississippi and Alabama, the Secretary of the Interior shall complete a study of the impacts of air pollutant emissions on coastal air quality. The bill defines the terms "corresponding onshore area" and "OCS source".

Subsection (a) is intended to cover all OCS sources except those located in the Gulf of Mexico west of longitude 87 degrees

30 minutes. For sources located further than 25 miles from the seaward state boundary, it is intended that the EPA administrator analyze the extent of onshore air pollution impacts and require an appropriate level of pollution control to protect Federal and State ambient air quality standards and prevent significant deterioration of air quality.

OCS facilities located within 25 miles of the seaward state boundary, will be regulated using the same air quality protection requirements as would apply if the OCS sources were located within the corresponding onshore area. These requirements are intended to include, but not be limited to, emission control requirements for new, modified, and existing facilities; offset requirements for new and modified facilities; and permitting, monitoring, reporting, enforcement, and testing requirements for all facilities. Administrative requirements, including the assessment of fees, will be established by the air quality permitting agency. The provisions will minimize differences in air pollutant regulations which currently exist between OCS sources and sources located in the corresponding onshore area. OCS air pollution is to be regulated to protect both Federal and State ambient air quality standards, and to prevent significant deterioration of air quality. It is intended that OCS emissions be included in any State Implementation Plan (for the corresponding onshore area) required under this Act.

Marine vessels emissions, including those from crew and supply boats, construction barges, tugboats, and tankers, which are associated with an OCS activity, will be included as part of the OCS facility emissions for the purposes of regulation. Air emissions associated with stationary and in-transit activities of the vessels will be included as part of the facility's emissions for vessel activities within a radius of 25 miles of the exploration, construction, development or production location. This will ensure that the cruising emissions from marine vessels are controlled and offset as if they were part of the OCS facility's emissions. Few OCS sources and modifications to existing OCS sources shall comply with the requirements of this subsection on the date of rule promulgation. Existing OCS sources shall comply on the date 24 months after rule promulgation. New sources are defined as per Section 111(a) of the Act to include any source which commences construction after promulgation of the rule. Any exploratory well which has commenced drilling by the date of rule promulgation shall be considered an existing source.

The responsibility for OCS air regulation is transferred from the Interior Department (under OCSLA) to the Environmental Protection Agency (EPA), in order to ensure consistent implementation of air quality laws and regulations for both onshore and offshore sources. EPA should not write a unique set of requirements, but should include the same requirements for emission controls, offsets, permitting, monitoring, reporting, and testing, as would apply if the OCS source was located in the corresponding onshore area. It is also expected that EPA will delegate Clean Air authority to regulate air pollution in the corresponding onshore area, whether that agency is a state or local air regulatory agency. EPA should delegate such authority expeditiously following receipt of a written petition requesting delegation from an onshore air regulatory agency. EPA should not withhold such delegation unless EPA finds that the on-

shore air regulatory agency's regulations are substantially inadequate to meet the requirements of this Act.

Subsection (b) requires the Secretary of the Interior to complete a study of the impacts of current and future OCS emission sources located in the western and central Gulf of Mexico, west of longitude 87 30, on air quality within the States of Texas, Louisiana, Mississippi and Alabama. It is intended that the Secretary consult with the EPA Administrator on the scope and content of the study and on recommended actions which are found to be necessary based on the results of the study.

PERMITS AND ENFORCEMENT: ENSURING CLEAN AIR

The new legislation also establishes a comprehensive permit program that requires, for the first time, every major source to obtain an operating permit. The Conferees strongly believe this is necessary to ensure better enforcement and faster implementation of control requirements.

The bill also includes new enforcement provisions that broaden the scope of activities that can be the subject of civil or criminal sanctions and penalties.

Under these provisions, States will be required to adopt permit programs which must include, among other things, requirements for permit applications, monitoring and reporting requirements, a permit fee program, requirements for adequate personnel and funding, and authority to review, issue and enforce permits.

We recognize that the permit program is predicated on the principle that the primary responsibility for its day-to-day administration will rest squarely with state and local air pollution control agencies. While EPA has an important role of providing guidance and general oversight, the agency should not unduly interfere with states' implementation of the permit program.

The Act also gives EPA the authority to exempt certain categories or types of sources from the notification requirements of the permitting program. We believe that EPA should exercise this waiver authority judiciously, particularly with regard to types or categories of permits that merely incorporate provisions of already approved regulations within State Implementation Plans. We also encourage EPA to use discretion in electing to add categories of permits that are not required to comply with the notification requirements identified in this title.

The permit program also requires state and local permitting agencies to revise draft permits (which are subject to notification requirements) if EPA objects in writing. This section is not intended to require that state permits be revised to contain the exact language which EPA may suggest in its written objections. As long as the state modification adequately meets the substance of the EPA objections, and such revisions are necessary to meet requirements of the Act, the revised state permit is expected to be accepted by EPA and allowed to be issued.

In addition, the Conferees recognized that while the permit provisions may work well for large businesses, small businesses may need some help. That is why the bill includes a technical assistance program for small businesses. In satisfying the requirements of the small business technical assistance program, it is our intent that the required revisions to the State Implementation Plans be non-regulatory revisions. As

such, the states will be able to develop more flexible and efficient programs tailored to each state's small business needs, while at the same time allowing state and local air pollution control agencies to impose requirements in the most cost-effective manner.

Finally, with respect to permit fees, it is our intention that the program provide state and local permitting authorities with an adequate source of revenue to cover both the direct and indirect costs of administering not only the specific permit program, but those related activities that support the program. We recognize that the permits issued under this title will be the primary compliance and enforcement mechanism for achieving the goals of the Act. Accordingly, the annual fee should reflect not only the direct costs of administering the program, but the broader, indirect costs associated with the proper administration of state and local programs, such as modeling, monitoring, enforcement (including inspections), etc.

Mr. BAUCUS. Mr. President, I would like to sum up by saying that this has been a team effort. It has often been said, and it bears repeating, that there are two George's that are primarily responsible for this major effort today.

First, George Bush, who submitted legislation to the Congress. George Bush turned around the previous administration's point of view—the Reagan administration was very opposed to clean air. The Bush administration very much is in favor of clean air legislation. President Bush deserves major credit.

The major credit goes to our majority leader, GEORGE MITCHELL. GEORGE MITCHELL has been working tirelessly for over a decade to try to get the passage of clean air legislation. He almost accomplished that goal 2 years ago, but was unable to do so because various Senators could not agree on a bill. But he finally, today, is seeing the passage of clean air legislation which includes not only a very, very significant acid rain title, but also other titles on global sources—chlorofluorocarbons, air toxics, much more than even he, I think, anticipated when he started this effort a few years ago.

Mr. President, in addition to the two George's, I would like to again compliment my teammate on the Environment and Public Works Committee, Senator CHAFEE. I cannot think of anyone with whom it is easier to work with than Senator CHAFEE. He worked tirelessly, and always in good cheer. It is amazing, it is remarkable. I am very honored to be joining with Senator CHAFEE in the passage of this bill.

Mr. President, I would also like to pay special attention to and point out the work of the chairman of our committee, Senator BURDICK. Senator BURDICK has marshaled this process. He has created the conditions under which this process has worked with no partisanship, rather on a collegial basis, and I would like to again thank the chairman for his insistence and for

without first meeting new source permitting requirements;

2. Ensure that an existing unit would not trigger new source review where there is no causal link between a change at the unit and an increase in the unit's annual emissions; and

3. Allow utilities to undertake needed repairs at an existing unit without triggering an obligation to meet stringent new source performance standards.

Two additional issues raised by EPA's WEPCo policy should be addressed by the conference report. First, the provisions in the Senate bill that specifically address "temporary" and "permanent" clean coal technology demonstration projects should be preserved. Second, the provision in the Administration proposal which equates low-NO_x burners with BACT should be part of the final bill.

We understand that draft language that would accomplish the aforementioned goals was appended to our colleagues earlier letter on this issue. We greatly appreciate your taking the time to find a solution to this complex problem.

Very truly yours,

DONALD W. RIEGLE, JR.
PHIL GRAMM.
STROM THURMOND.
DON NICKLES.

PUHCA EXEMPTION

Mr. McCLURE. Then, Mr. President, there is the issue of the exemption from Securities Exchange Commission jurisdiction granted to utility holding companies regulated under the Public Utilities Holding Company Act of 1935 as it relates to the allowance trading program. Under the 1935 act, the Commission is granted authority to review the lawfulness and appropriateness of a range of transactions entered into by regulated holding companies.

The conference agreement provides that holding company allowance transactions involving associate and unrelated companies are not subject to Commission jurisdiction. In response to my letters of October 4 and 9, 1990, concerning the interplay between the Public Utility Holding Act of 1935 and the allowance trading system found under in the Clean Air Act, the Commission has offered its views concerning exemption in a letter to me dated October 11, 1990, from Richard C. Breeden, Chairman of the Commission.

Chairman Breeden specifically states that "the Commission would not oppose enactment of the amendments if they provided that the creation, acquisition or disposition of allowances for sale or trade, including the issuance of securities or the undertaking of any other financing transactions with respect to such allowances, were not subject to the 1935 Act."

I also observe, Mr. President, that it is the sense of the conferees that allowance transactions involving regulated holding companies with associate or unrelated companies are exempt from Commission jurisdiction under

the 1935 act. And I understand that the floor managers share this view.

Mr. President, I ask unanimous consent that the correspondence I mentioned be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

U.S. SENATE,
COMMITTEE ON ENERGY AND
NATURAL RESOURCES,
Washington, DC, October 4, 1990.

Mr. WILLIAM C. WEEDEN,

Assistant Director, Division of Investment Management, Office of Public Utility Regulation, Securities and Exchange Commission, Washington, DC.

DEAR MR. WEEDEN: I and others interested in the implementation of the Clean Air Act amendments of 1990 have recently grown concerned about the interplay between the Public Utility Holding Act of 1935 ("PUHCA") and the allowance trading system found in both the House and Senate versions of those proposed amendments, which are now being considered in conference.

In part, our concerns are prompted by a statement in the Report of the House Committee on Energy and Commerce to the effect that "... allowances created in [the] legislation will be utility assets and as such subject to the jurisdiction and regulation of State (and sometimes Federal) regulatory authorities." H.R. Rep. No. 490, 101st Congress, 2d Sess. 366(1990). This could mean that utilities subject to the PUHCA may have to seek Securities and Exchange Commission ("SEC") approval of various actions associated with the transfer of sulfur dioxide allowances. As I see it, there are two potential impediments to allowance transactions facing registered holding companies that are subject to PUHCA. First, is the possibility that allowance sales and purchases may be declared an interest in a business subject to SEC approval and, second, is the possibility that allowance transactions within registered holding company systems would have to be at cost rather than at market rates.

Obviously, these types of requirements could put registered holding companies at a competitive disadvantage in the hoped-for allowance market in which they will be competing against entities that are not subject to the PUHCA. In that light, and given any other opinions that the SEC may have reached concerning its jurisdiction over allowance transfers by registered companies, I want to know whether the SEC would favor a provision that would limit the Commission's involvement in the sale and transfer of allowances. Given the likelihood that the conference committee may soon complete its work and the importance of this matter to those subject to the PUHCA, I would ask that the Commission provide a reply to these questions within four working days, if at all possible.

I thank you in advance for your cooperation and efforts in responding to this inquiry.

Sincerely,

JAMES A. McCLURE,
Ranking Minority Member.

U.S. SENATE,
COMMITTEE ON ENERGY AND
NATURAL RESOURCES,
Washington, DC, October 8, 1990.

Mr. WILLIAM C. WEEDEN,

Assistant Director, Division of Investment Management, Office of Public Utility Regulation, Securities and Exchange Commission, Washington, DC.

DEAR MR. WEEDEN: Recently, I sent a letter to your offices inquiring as to whether the SEC would favor a provision that would limit the Commission's involvement in the sale and transfer of emission allowances under the Clean Air Act Amendments of 1990. Given the possibility that the clean air conference committee may soon complete its work and because of the importance of this matter to those utilities subject to the Public Utility Holding Company Act, I would ask that the Commission staff, rather than the Commission, provide a reply to my correspondence as quickly as possible.

Again, I thank you in advance for your cooperation and efforts in responding to this inquiry.

Sincerely,

JAMES A. McCLURE,
Ranking Minority Member.

U.S. SECURITIES AND
EXCHANGE COMMISSION,
Washington, DC, October 11, 1990.

Hon. JAMES A. McCLURE,

Ranking Minority Member, Committee on Energy and Natural Resources, U.S. Senate, Dirksen Senate Office Building, Washington, DC.

DEAR SENATOR McCLURE: This responds to your letters of October 4 and 9, 1990 concerning a proposal to limit the Commission's involvement in the sale and transfer of allowances under the proposed Clean Air Act amendments of 1990 ("Amendments"). The Amendments would require an ultimate reduction in utility emissions of sulfur dioxide to an annual aggregate of 8.9 million tons. Public utility holding companies registered under the Public Utility Holding Company Act of 1935 ("1935 Act") that reduce their emissions below the statutory standard would have allowances that could be sold or traded to otherwise noncomplying companies.

The Commission would not oppose enactment of the Amendments if they provided that the creation, acquisition or disposition of allowances for sale or trade, including the issuance of securities or the undertaking of any other financing transactions with respect to such allowances, were not subject to the 1935 Act.

Sincerely,

RICHARD C. BREEDEN,
Chairman.

ENERGY CONCERN

Mr. McCLURE. In many respects the conference agreement before us ignores current trends in oil imports. While everyone is willing to talk about oil imports, no one is willing to do anything about it.

Among the provisions agreed to by the Senate conferees is the House Outer Continental Shelf provisions. There was not even an effort to seek a compromise. Under the House provisions, State and local governments are effectively given a veto over OCS oil and gas development. This is unprece-

dented regulatory authority over Federal territory now outside the jurisdiction of State and local governments. The precedent being set here will come back to haunt us, particularly those of us from public land States.

Another area of concern to me is alternative fuel. Once again we are about to adopt environmental policies without understanding their energy policy implications. In this instance, it is proposed that the Federal Government create a new, artificial market for alternative fuel vehicles.

What our country needs instead, is a well thought out, coherent, and comprehensive energy strategy designed to satisfy the needs of American consumers well into the 21st century. The goals of such an energy strategy must be: first, to clearly identify the objectives to be achieved; second, to specify in detail the means by which those objectives are to be realized; and, third, to garner political consensus and public acceptance.

In no arena is this need greater than the requirement for secure, long-term supplies of transportation fuels. Our continued reliance on gasoline as our principal automobile fuel creates significant economic, energy and environmental consequences for all Americans.

Unless we develop and implement a comprehensive energy-environmental strategy, it is without question that at some point in the not too distant future, we will once again wake up and find ourselves in the midst of a national energy crisis. And once again both our energy and environmental interest will suffer from hastily created policies to satisfy political imperatives.

My only hope is that the national energy strategy that is to be transmitted to the Congress early next year will address this issue in a comprehensive manner.

ECONOMIC COSTS

As we undertake to improve the quality of our environment, we must be concerned for the consequences of our quest for our national economy. Under the President's proposal the costs associated with achieving the anticipated environmental benefits were some \$19 billion annually. Thus, many of us were disturbed by the substantially higher initial cost estimate for the measure reported by the committee on Environment and Public Works which exceeded \$40 billion annually.

In large part, these additional costs stem from the prescriptive nature of the various provisions, which were accompanied by marginal, incremental environmental benefits. The same prescriptive provisions serve as a restriction on the actions not only by industry but by the American people themselves. The bipartisan agreement attempted to restore the flexibility contained in the President's proposal; however, this prescriptive flavor is

again reflected throughout the conference agreement. As a consequence, this legislation essentially prescribes the very lifestyle of many Americans.

For the most part, what little flexibility that remained from the President's initial proposal when it has now vanished. Once again Members of the Congress are going to permit congressional staff to substitute their scientific and technical judgment for that of EPA under the guise of a perceived lack of environmental progress over the last decade.

CONCLUSION

Although the measure before us represents progress, there is little reason to celebrate. After years of drought, the American people deserved more from its leadership.

Sad to say, Mr. President, it is political expediency rather than need that may provide the real and final reason this bill may pass. Who among us standing for re-election is willing to face the fury and the consequences of the powerful and well-financed environmentalist juggernaut? Who among us about to travel to his or her home State can easily withstand the anger and the threats of environmentalists who are willing and able to whip public sentiment to a frenzy through half-truths and lies?

Who among us is willing to tell constituents "I did not vote for the Clean Air Act because I don't know what is in it, and I do not want to sell you down the river to get a good rating from the environmental lobby coalitions."

I am fortunate in that regard, Mr. President, not because I am not running for re-election and so can thumb my nose at such pressure, but because I represent the very practical and intelligent people of Idaho. These are people who do not run screaming to the shelter of Government regulation at the first hysterical cries of panic from environmental doomsayers. These are people who think for themselves and do not lead upon others to warn them of environmental consequences.

The people of Idaho are people very close to the environment. They treasure it; they love it; they are acutely conscious of their stewardship and of their need to protect that environment. Often, their credentials as environmentalists are superior to those who represent themselves as environmentalists.

I can tell the people of Idaho, as I do now, that this bill is not in their best interests. I know that they will listen and consider what I say with minds unclouded by panic or fear.

I must say to my colleagues, Mr. President: Your constituents, too, can hear the truth if you state it simply and honestly. The overwhelming majority of the people you represent cannot blame you for wishing to see

what you are voting on and for having the opportunity to truly debate it. Each of our constituents deserves nothing less.

Throughout the debate on the Clean Air Act amendments we have returned to the recurring question: do the environmental benefits of this legislation outweigh the economic costs? For me, the answer to this question for the Senate passed measure was no. With respect to the conference agreement, the answer is even a stronger no.

But a more critical question is, do the environmental benefits of this legislation outweigh the restrictions on individual freedom that pervade this measure. And, again, the answer is no.

The PRESIDING OFFICER. The question is on the adoption of the conference report on S. 1630, the Clean Air Act.

The yeas and nays have been ordered.

Mr. BYRD addressed the Chair.

The PRESIDING OFFICER. The Senator from West Virginia.

Mr. BYRD addressed the chair.

The PRESIDING OFFICER. The Senator from West Virginia is recognized.

Mr. BYRD. Mr. President, I shall vote against this conference report. I have been tied up in conference on the transportation appropriation bill all morning. Therefore, I have not had an opportunity to speak against the conference report.

Mr. President, no other Nation on Earth has been endowed or blessed with the magnificent natural resources that we have in the United States. No other State in this Nation can match the natural beauty of my home State of West Virginia. Having been so blessed, we have a responsibility to be good stewards of those resources. We owe it to ourselves, our children, and our children's children to preserve and protect the quality of our environment.

Protecting our environment and improving the quality of our air are important national goals. Yet, they are not our only goals. In seeking to protect the environment, we have a responsibility to enact legislation that is balanced. We have a responsibility to enact legislation that takes into account the interests of all of the regions of our country. We have a responsibility to enact legislation that looks beyond our environmental goals alone, and that takes into account our economic and energy needs as well. We have a responsibility to enact legislation that balances these competing interests and conflicting goals and needs.

When S. 1630 was originally reported by the Senate Committee on Environment and Public Works late last year, it failed, in my opinion, to strike such a balance. When this bill was