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S. HRG. 104-287

# CLEAN AIR ACT: TITLE V INDUSTRIAL PERMITTING REQUIREMENTS

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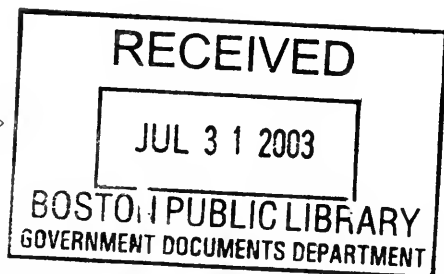
**WITHDRAWN**

HEARING  
BEFORE THE  
SUBCOMMITTEE ON  
CLEAN AIR, WETLANDS, PRIVATE PROPERTY, AND  
NUCLEAR SAFETY  
OF THE  
COMMITTEE ON  
ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE  
ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

AUGUST 1, 1995

Printed for the use of the Committee on Environment and Public Works



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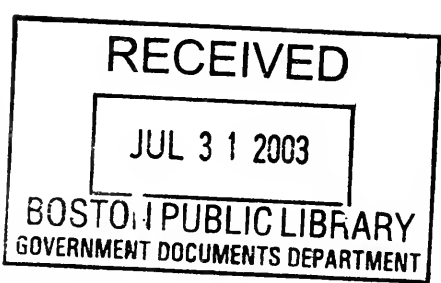
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# C O N T E N T S

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|   | Page |
|---|------|
| OPENING STATEMENTS  |      |
| Boxer, Hon. Barbara, U.S. Senator from the State of California .....  | 29   |
| Faircloth, Hon. Lauch, U.S. Senator from the State of North Carolina .....  | 1    |
| Graham, Hon. Bob, U.S. Senator from the State of Florida .....  | 36   |
| Inhofe, Hon. James M., U.S. Senator from the State of Oklahoma .....  | 7    |
| Editorial from the Oklahoman & Times .....  | 8    |
| Thomas, Hon. Craig, U.S. Senator from the State of Wyoming .....  | 9    |
| WITNESSES   |      |
| Bartosh, Dan V., Jr., Corporate Environmental Manager, Texas Instruments<br>Inc. ....                               | 9    |
| Prepared statement .....  | 47   |
| Eisele, Paul, Director, Health, Safety and Environmental Affairs, Masco Cor-<br>poration .....                      | 5    |
| Prepared statement .....  | 45   |
| Hawkins, David G., Senior Attorney, Natural Resources Defense Council .....   | 3    |
| Prepared statement .....  | 41   |
| Hodanbosi, Robert, Chief, Division of Air Pollution Control, Ohio State Envi-<br>ronmental Protection Agency .....  | 24   |
| Prepared statement .....  | 61   |
| Nichols, Hon. Mary, Assistant Administrator, Office of Air and Radiation,<br>Environmental Protection Agency .....  | 31   |
| Prepared statement .....  | 95   |
| Responses to additional questions by Senator Faircloth .....  | 102  |
| Saitas, Jeff, Deputy Director, Office of Air Quality, Texas State Natural<br>Resource Conservation Commission ..... | 22   |
| Prepared statement .....  | 60   |
| Wimbish, Richard, President, Techform, Inc. ....  | 11   |
| Prepared statement .....  | 53   |



# **CLEAN AIR ACT: TITLE V INDUSTRIAL PERMITTING REQUIREMENTS**

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**TUESDAY, AUGUST 1, 1995**

**U.S. SENATE,  
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,  
SUBCOMMITTEE ON CLEAN AIR, WETLANDS, PRIVATE  
PROPERTY AND NUCLEAR SAFETY,  
Washington, DC.**

The subcommittee met, pursuant to notice, at 2:01 p.m. in room 406, Senate Dirksen Building, Hon. Lauch Faircloth [chairman of the subcommittee] presiding.

Present: Senators Faircloth, Inhofe, Thomas, and Graham.

## **OPENING STATEMENT OF HON. LAUCH FAIRCLOTH, U.S. SENATOR FROM THE STATE OF NORTH CAROLINA**

Senator FAIRCLOTH. Good morning, and thank you for the attendance we have today, and thank you to the audience. Obviously there's a lot of interest in this subject, and, well, there should be. It's a most important one.

There's a growing sentiment across the country that the Clean Air Act is way off course. Federal bureaucrats administering the Act, mainly the EPA, are wrong in their mandates of a "one-size-fits-all" prescription for clean air to the detriment of our citizens, jobs, and frankly, to the goal of clean air.

Before I continue, let me state in very clear language, because I believe strongly, as most Americans do, that I am for clean air. It's totally necessary for our lives and for our country and for the world. However, the question that is now ready for debate is how best to achieve improvements in air quality by employing practical, reasonable, cost-effective science-based approaches.

I believe that a great deal of financial and other resources could be focused on improving air quality instead of diverted to mindless paperwork exercises to ensure that bureaucrats have jobs. Since last November's election, we have heard much about flexibility from EPA. As part of this new era of goodwill, EPA has expressed an interesting in pursuing administrative fixes to the States' numerous complaints with the Clean Air Act and its implementation.

But the inescapable fact is that EPA is incapable of providing the fixes needed. The Agency simply does not have the basic cost-benefit cultural orientation required to comprehend and solve problems with the Act's implementation. EPA is not nearly as constrained by the concept of opportunity cost as are business people and State officials. Businesses and States must make difficult choices about how to spend limited dollars. Money spent on jumping through

EPA's hoops cannot be spent on advancing new technologies that actually improve the environment.

That is perhaps the most disturbing aspect about Title V. Despite its massive costs and the creation of a huge new bureaucracy, it was never intended to and will not result in significant improvement in air quality. Title V permits were supposed to simply be recordkeeping permits. They were not designed to impose additional limits on a mission. They were designed to collect all applicable Federal limits and requirements together in a single permit.

In short, the Title V program is a massive paperwork exercise that will do little or nothing to improve air quality. In fact, the program could even hurt air quality by depriving American industry of flexibility. The Title V program inhibits technological improvements, thus reducing incentives for environmental change. Even with all of Title V's original defects, EPA has devised ways to make the program even more onerous and less useful.

Five years after the passage of the Clean Air Act Amendments of 1990, all States and industries have from EPA is a long history of issuances and retractions of proposed regulations and guidance. There are now about 1,000 pages worth of guidance on Title V. And if we've learned one thing from the program, it is this: thousands of pages of often contradictory and ever-changing guidance will be forthcoming in the future.

Finally, and what's perhaps most disturbing, EPA has attempted to alter the intent of the Clean Air Act by promising operational flexibility for businesses which agree to emission limits. EPA has taken a record-keeping program and used it to hold the American business community hostage. The original proponents of the Act understood that operational flexibility was essential for businesses to remain competitive, especially in the "quick-or-dead" world of cutting-edge industries.

EPA has twisted that understanding and conditioned such flexibility upon business looking the other way while EPA expands the reach and scope of the program. This is totally unacceptable. We need to make sure that common sense gains a toehold in this program.

Given the extent of uncertainty and confusion surrounding the program, I believe that a temporary suspension of Federal enforceability should be seriously considered, at least until EPA actually finalizes some of the regulations concerning the program. I believe we need to examine what the role of business, that is, the employers of this Nation, should be in addressing the problems in Title V.

Finally, I believe we need to take a hard look at whether States are better equipped to do the job. I mentioned earlier that businesses and States are already facing more than 1,000 pages of instructions about this program. That's 1,000 pages of instructions just about Title V.

I recently asked a State official if, given a chance, she could simplify the program. And she said, "Senator, I can write regulations that incorporate the intent of Title V in three sentences. States shall codify in a single document all the Federal requirements that apply to any sources subject to Title V of the Clean Air Act Amendments of 1990. As changes are made to such facilities, States shall



use their own 'new source' procedures as appropriate to allow these changes, and shall automatically add these changes to the operating permits. States shall use their own existing reporting requirements to make certain that sources comply with the terms of their permit."

Of course, to be able to make a program that simple and that thorough, we might need more legislative relief and fewer bureaucrats.

I would like to now ask the first panel of witnesses to be seated at the witness table. Mr. David Hawkins, Dr. Paul Eisele, Mr. Dan Bartosh, and Mr. Richard Wimbish.

While they're coming forward to take their chairs, I'd like to give you just a brief overview of how we will proceed. We have eight witnesses who will be testifying today. And I want to also mention that not all members of the subcommittee are with us today. We do have subcommittee staff who are here, both Republican and Democrat, and they will be monitoring and reporting back to their members.

While you listen to the testimony today, whether you approve or disapprove, we would like for you to keep it to yourselves, no outward response. Each witness will be allocated 5 minutes to give his or her opening statement. As you see, the lights will be here. The yellow means to begin to conclude, and when the red comes on, we hope you will stop shortly thereafter.

Following all of the 5-minute comments by each witness, I will then ask any members of the subcommittee if they would like to ask questions.

If we are ready to begin, let me introduce the first member of the panel. We will start with Mr. David Hawkins.

**STATEMENT OF DAVID G. HAWKINS, SENIOR ATTORNEY,  
NATURAL RESOURCES DEFENSE COUNCIL**

Mr. HAWKINS. Thank you, Mr. Chairman. Let me thank you for inviting Natural Resources Defense Council to participate in this hearing. Our organization has participated extensively over the years in Clean Air Act implementation and in the Title V operating permit program.

I would like to summarize my opening statement, and if I could have the full statement in the record, I would appreciate that.

Senator FAIRCLOTH. So ordered.

Mr. HAWKINS. Thank you.

Your opening statement, Mr. Chairman, has included a number of challenging propositions, and I think this hearing will be valuable if it provides all of us with different perspectives on those propositions and the issues that they raise.

I would like to make four points that try to highlight the themes in my testimony. The first is that we've made enormous progress on clean air objectives, but the job is not yet done. Millions of tons of pollutants are now out of the air, compared to what would be in the air today as a result of the Federal program. It has provided a structure for States to make progress that they were unable to make on their own prior to the enactment of the 1970 law.

But there is much to be done—the American Lung Association last week simply summarized the fact that there have been hun-

dreds of violations of the existing ozone standard already this summer. We have particulate problems that are still very pronounced, and are associated with very significant health impacts. And those are just mentioning a couple of items.

To make further progress toward completing the job, we're going to have to use all available tools. One of the tools is better compliance. I would submit that the operating permit program is an important method of achieving better compliance. Let me just give a couple of points on that.

As you said in your opening statement, the intent of the program is to provide a compilation of the federally enforceable obligations that an air pollutant emitting source has. That is something that does not occur in many States in the absence of a Federal operating permit program, and something that the program can indeed deliver. Its benefits are that with such a compilation, it will clarify the source's obligations, for the source operator as well as for the enforcement agencies and for the public at large—the neighbors around these sources.

Critical to that objective is the ability to improve compliance. We think that the operating permit program will indeed result in emission reductions because emission reductions don't occur from putting a rule on a piece of paper. Emission reductions occur when the emitter complies with those requirements.

So any tools that we have to improve compliance are tools that will reduce emissions. By having a program which puts in front of the source operator, the public and the enforcement agencies in an understandable form, the collection of those obligations, and the emission monitoring and reporting requirements that go along with it, we should be able to do a better job of finding out where the compliance problems are and improving that compliance performance.

The third point I'd like to make relates to the need for public participation. In many ways, these permit programs are a statement to the public of what this source's performance obligations are, and while the intent of the program is to codify existing State air quality programs, as has been noted by many, those programs are complicated to understand. Their requirements are dispersed throughout various documents that have been generated over a 20-year period, and unfortunately, it is not a clear and simple matter to incorporate them accurately into a compiled document.

So safeguards are needed to ensure that they are compiled correctly. A permit shield operates once a permit has been approved. It's important that there be an opportunity for the public to participate. After all, it is the public's air that these emitters are using. It's important that the public have a role to play.

My final point is the need for these programs to include adequate compliance and monitoring provisions. In my statement, I indicate this is perhaps where we have the greatest concern about the agency's program. It has not established adequate monitoring provisions. It runs the risk, if it isn't watched carefully, of having paper compliance certifications that don't have any gold to back them up, gold in the form of information.

Finally, I would just like to thank you for conducting these oversight hearings. It's critical for Congress to be actively engaged in

the implementation of these programs. I hope that while your concern today is with the complexity and costs associated with the program, you will also find the opportunity to look at the performance in delivering clean air. There are ways that oversight can actually help the agency do a better job at bringing clean air to the public. Thank you very much.

Senator FAIRCLOTH. Thank you, Mr. Hawkins, and we certainly will take a full, and not a narrow view, of the program.

Dr. Paul Eisele, Director of Health, Safety and Environmental Affairs, for Masco Corporation.

**STATEMENT OF PAUL EISELE, DIRECTOR, HEALTH, SAFETY AND ENVIRONMENTAL AFFAIRS, MASCO CORPORATION**

Mr. EISELE. Good afternoon, Mr. Chairman. If it's agreeable to the subcommittee, I'd like to summarize and request that my full written statement be included in the record.

Senator FAIRCLOTH. We certainly will, it will be done.

Mr. EISELE. Thank you.

I'm Dr. Paul Eisele, Director of Health, Safety and Environmental Affairs for Masco Corporation. Masco Corporation is the largest furniture, kitchen cabinet and plumbing product manufacturer in the United States, with over 200 small- to mid-sized manufacturing operations. While Masco is a comparatively large corporation, most in the furniture industry can be characterized as small business manufacturers.

Masco facilities are located in a number of States. For example, we have about 12,000 employees in North Carolina, 500 in Kentucky, and 2,000 in California. Forty percent of our manufacturing facilities will require Title V permits.

I'm appearing on behalf of the American Furniture Manufacturers Association, the largest furniture industry trade association in the United States. The industry takes seriously its responsibility to help the Nation meet its Clean Air Act goals, even though our industry accounts for less than one half of one percent of VOC emissions. For example, Masco has participated in voluntary EPA initiatives to reduce emissions, specifically the EPA's 3350 program.

Recently, the American wood finishing industry concluded an historic rulemaking with EPA, States and environmental groups, establishing RACT and MACT rules for the industry. I was privileged to serve as a co-chair of the industry group in this activity. Our industry's efforts and commitment were recognized in a 1995 letter from EPA Administrator Carol Browner, and I quote: "You are to be commended for incorporating pollution prevention into all aspects of the agreement, and for your innovation in dealing with the challenges of such a diverse industry and complex emissions source. Your work is a credit to industry-environmental-governmental cooperation."

The industry's principal concern during the "reg-neg process" was to achieve reduced air emissions in a manner that allowed the greatest operational flexibility. Through the negotiation process, the industry was able to achieve its goal of flexibility in exchange for tighter controls of potentially toxic compounds, which was the concern of the negotiators from the environmental groups.

The bright lights of this mutual success have been significantly dimmed, however, by ongoing development of the vehicle that translates these rules into a compliance program for each of our plants, that is, the Title V air permit. While the negotiators at the wood-finishing regulation table were looking at ways to make air emission reduction process flexible under Titles I and III of the Act, EPA was expansively interpreting the statutory requirements of Title V of the Act, and decreasing the flexibility employers need to meet customer desires and achieve timely, sound environmental results.

While the wood-finishing negotiations were working on making the emission rules simple so that they could be understood and implemented by small woodworking shops, the EPA was developing rules that only the most sophisticated environmental attorneys and engineers could understand.

We believe that Title V can be most effective as a mechanism to provide total facility air emissions to the appropriate local, State and Federal regulatory officials. The public should also have access to this information and the right to public review and comment at the initial stage of granting an operating permit. We also believe that Title V is the proper place within the statute to contain the legitimate applicable requirements, in our case furniture, Titles I and III are the most applicable.

Title V should not be a stand-alone additional enforcement mechanism as it has become. Unlike many industries that can chart long-range operational needs for product development, furniture manufacturing runs on short cycles. We are a fashion industry, and every 6 months fashions and our manufacturing plans change. We have spent a good deal of time and worry on how we can make the manufacturing shifts necessary under a proposed permit system which can require continuous permit modifications with concomitant public hearings, etc., the seemingly minor changes in finishing material use.

I believe that the implementation of Title V should maintain a distinction between a State's New Source Review program and the Federal Operating Permits program. New Source Review is best handled between the local agency and EPA without involving every permit applicant.

I'm also concerned about the potential for abuse of the public review process, should public input be required for even minor process changes. Industry knows from experience that there are interest groups who do not share our goal of reconciling strong environmental protection with economic vitality.

We've begun to review the Agency's July 10 Title V white paper. We compliment the Agency on beginning to address some of the problems raised by the States and employers. However, until the changes discussed in the white paper have been finalized, there are continuing questions about what comprises a complete operating permit.

Therefore, rather than subjecting employers and their workers to enforcement uncertainty, we propose a delay in the Federal enforceability of these requirements for at least 2 years, and until such times as the States, the public and employers have certainty of the requirements they must meet. This does not and should not

be interpreted to waive our responsibility to provide our emissions inventories or our obligations to meet Titles I and III substantive requirements as agreed to in the regulatory negotiations.

As a permittee, I am caught on the horns of a dilemma. Is unreasonable certainty better than reasonable uncertainty? That is, would we be better off accepting a rigid and inflexible permitting scheme in return for the certainty of knowing the ground rules in advance? Or should our planning be suspended while EPA settles on a more workable approach?

Clearly, forcing a choice between these options is neither reasonable, fair nor in the public interest. I am hopeful that the oversight process initiated by this Congress will result in a sound and flexible permitting framework that provides sufficient guidance for facilities to comply with EPA's goals, but which also accommodate the process changes necessary to the success of American industry.

I appreciate Mr. Hawkins' statement that the NRDC is now supporting streamlining and flexibility in the Title V process. While the devil may be in the details, if the EPA had already promulgated such an approach, I would not be here today. Indeed, it is because of EPA's numerous, overly burdensome past proposals that we believe the Congress should now act by adding certainty to this process.

I appreciate the opportunity for presenting the viewpoints of small to midsize manufacturing operations, and I'm prepared to answer any questions.

Senator FAIRCLOTH. Thank you, Dr. Eisele.

And Mr. Bartosh, we have on the floor right now a roll call vote to invoke closure on the reauthorization of the State Department. If you will excuse me, I will be back in about 5 minutes, as quick as I can go vote and return. We'll be in recess for a few minutes.

[Recess.]

Senator FAIRCLOTH. We'll come back in order.

We were just having a visit from Senator Chafee, the Chairman of the EPW Committee. He can't stay with us, but he stopped by to wish us well, and be on his way to other work. And Mr. Bartosh, if you will bear with us a minute, Senator Inhofe and Senator Thomas have joined us. And I think they have opening statements, and we will start with you, Senator Inhofe, for your statement.

#### **OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE STATE OF OKLAHOMA**

Senator INHOFE. Thank you, Mr. Chairman.

The hearing today on the implementation of the Title V of the Clean Air Act is critical, since this is one of the most onerous and burdensome sections of a very cumbersome environmental law, the Clean Air Act. Title V is not about providing cleaner air for Americans to breathe, its only accomplishment is to provide volumes of paper for regulators for enforcement purposes.

Title V requires facilities to compile all of the Clean Air Act requirements into one permit application, which has resulted in applications totaling thousands of pages, which must be changed every time a process is slightly altered. It does not clean the air, improve the quality of life, or encourage companies to make envi-

ronmentally sound decisions. In fact, Title V has the opposite effect.

Companies are not given the incentive to make environmentally sound changes in their processes, since any change would require the reopening of a permit including the months long public hearing steps. In a hearing on the House side in May, Intel Corporation raised the environmental issue as well as the economic issue of the months in delays every time they want to change their process. It makes it impossible to keep up with foreign competition. They are put at an extreme disadvantage which is endangering the competitiveness of the industry.

I know this foreign competition issue well. The oil and gas industry in Oklahoma is in danger from foreign competition, largely because of regulatory burdens placed on the industry by our costly, both in dollars and jobs, environmental laws. Title V is adding greatly to the burden on our domestic petroleum industry, which is a national security issue.

Currently under Title V, if an oil refinery has an equipment failure, and must install new devices, they would be in danger of violating the rule or permit which could shut the entire plant down. In addition, the rules of Title V permit aggregate oil and gas exploration and production sides in order to make the major source requirements of the law.

This makes no sense to anyone who has ever been in oil fields. Many times, operations are scattered across many miles in remote areas, and individually emit very low levels of air pollutants. I can just imagine some bureaucrat tucked away in an office in Washington, DC, dreaming up this regulation, having never been to Oklahoma, or never having seen an oil well.

This program adds nothing to environmental protection. It just creates expensive monitoring, recordkeeping, reporting and compliance certification obligations. I think we'd all be better off if we'd just repeal the entire Title V.

According to the Competitive Enterprise Institute, it wouldn't have any appreciable effect in the air we breathe if we did repeal it, but it would make America more competitive again. One of the more outspoken radio talk show hosts said something the other day I thought was kind of interesting, he said, if you really want to be competitive with the Japanese, export our regulations to Japan and we'll be more competitive. So Mr. Chairman, I think this is a jobs bill, not a clean air bill.

Senator FAIRCLOTH. Thank you, Senator Inhofe. I failed to mention that Senator Inhofe, for those of you that didn't know, is from Oklahoma, and is a great addition to the Senate.

Senator INHOFE. Can I make a unanimous consent request that we add an editorial that appeared in the Daily Oklahoman May 27 of this year called "Cleaning Up Red Tape" as part of the record.

[The editorial follows:]

[From the Saturday Oklahoman & Times, May 27, 1995]

#### CLEANING UP RED TAPE

Most Americans agree a certain amount of government regulation is inevitable and even beneficial. But they feel Congress, in passing regulatory law, and agencies, in writing the actual rules, have gone too far in many instances.

That undoubtedly accounts for much of the anti-government feeling prevalent in the country today. Occasional horror stories of regulatory enforcement gone wild don't help any.

The Republican-dominated Congress is engaged in rewriting the "clean laws"—the 1990 amendments to the Clean Air Act and the 1972 Clean Water Act. Democrats in general and environmentalists in particular are horrified. They claim the changes would "turn the clock back" on decades of environmental improvement and protection.

The bureaucrats and environmental extremists have done it to themselves, and now the public is up in arms.

One example of excessive and costly regulation is Title V of the Clean Air Act. As explained by Ben Lieberman of Competitive Enterprise Institute, it makes no substantive additions to the air pollution control measures in the rest of the law. It does, however, compel about 34,000 industrial sites to obtain air emission permits that compile all of the Act's other requirements into a single enforcement document.

Both corporations and State environmental agencies, to whom the permits must be submitted, are finding out how expensive implementing the program will be. Lieberman says that, as enacted, the law required revisions to existing permits only when the permit holder made a relatively large change in its operations.

However, the Clinton Administration expanded the requirements so that all but the most minute process changes invoke procedural steps that may take several months to complete, Lieberman says. Companies making a change must wait for approval or risk legal penalties and the expense of undoing the changes should the revised permit application later be denied.

Lieberman recommends repealing Title V outright, insisting it wouldn't make any appreciable difference in the air we breathe but would lessen damage to American competitiveness.

Senator FAIRCLOTH. Thank you, Senator.  
Senator Craig Thomas, from Wyoming.

#### **OPENING STATEMENT OF HON. CRAIG THOMAS, U.S. SENATOR FROM THE STATE OF WYOMING**

Senator THOMAS. Thank you, Mr. Chairman, I'll be very brief.

First of all, we do have oil wells in Wyoming also. I'm glad you're having an oversight hearing, and there have been successes and failures in the Clean Air Act, and we need to sort through them to make some determinations as to whether legislative changes should be made in 1997. So I think it's good.

My interest, of course, or much of it, is in the idea of utilizing clean coal, much of which is produced in our State. And we've had some difficulties in that, some restriction in interstate commerce, in the movement of coal, that sort of conflict I think with this law. However, today the hearing concerns the way the law is administered in terms of ability to be competitive, whether the costs are compatible with the results.

I look forward to hearing the witnesses. I might mention to that fugitive dust in the mining area is a subject we're very interested in and very concerned about in terms of how it impacts the competitiveness. Mr. Chairman, thank you for the hearing.

Senator FAIRCLOTH. Thank you, Senator Thomas.

And now, Mr. Dan Bartosh, Corporate Environmental Manager, Texas Instruments Incorporated, Dallas, TX.

#### **STATEMENT OF DAN V. BARTOSH, JR., CORPORATE ENVIRONMENTAL MANAGER, TEXAS INSTRUMENTS, INC.**

Mr. BARTOSH. Thank you, Mr. Chairman, and good afternoon.

I'd like to request that my full statement be included in the record.

Senator FAIRCLOTH. So ordered.

Mr. BARTOSH. I appreciate the opportunity to testify for this important hearing on the implementation of Title V of the Clean Air Act. I especially would like to thank you, Chairman Faircloth, for inviting me here today, and your willingness to find an appropriate solution to the problems presented by Title V of the Clean Air Act.

I'm testifying on behalf of TI and the Air Implementation Reform Coalition, normally called A.I.R. The A.I.R. Coalition is an ad hoc group of quick-to-market companies from several industrial sectors devoted to the enactment of procedure changes to the Clean Air Act. The agenda of the A.I.R. Coalition is to clear away the Clean Air Act's unnecessary red tape and bureaucracy that diverts our resources from reducing pollution and strikes at our ability to compete in a global marketplace.

TI is a high technology company, with 43 manufacturing plants in 17 countries. In the United States, we have 16 manufacturing companies in Texas, Kentucky, Massachusetts and Michigan. Our products include semiconductors, advanced electronic systems, printers, notebook computers, and consumer electronic products.

TI is the world's sixth largest semiconductor manufacturer, with approximately 56,000 employees around the world, and 33,500 in the United States. Between January of 1994 and December of 1996, TI will have invested over \$1.5 billion to construct three new semiconductor wafer manufacturing plants in Texas that will add 1,700 new jobs.

I work with the environmental regulations every day. Today I'd like to testify about the impact of Title V regulations and how they can severely restrict our business. We are on a technology treadmill. We have to make changes every day to keep up with the rapid pace of technical development and innovation in our business.

On an average, an electronics company could make as many as 300 process changes per year. Mr. Chairman, that's about one change every day. Most of these changes are environmentally insignificant. They don't result in any additional health or environmental risk. Yet just about all of these changes could be caught up in a lengthy bureaucratic process.

Under the Title V regulations that EPA currently proposes, even minor changes that don't increase emissions would require permit revisions. This means that before I could make a change in my facility, I would have to notify the EPA and the State, wait for over a month, possibly go through a public hearing and then if the change gets approved, it could be vetoed by the EPA within 45 more days.

Mr. Chairman, I'm looking at delays stretching into months for most of the changes we make, whether these changes increase emissions or not. TI cannot do business this way, nor can any other quick to market company. For example, my company is now selling more DRAM memory chips than ever before. With our success, we have found it necessary to expand, in the process, creating thousands of new American jobs.

But with the expansion, we have more process changes than we might otherwise. Again, many of these changes can trigger a long, drawn-out permitting revision cycle before the change can be made. Some cases, these changes and time delays could cost us millions



of dollars, billions of dollars. In the electronics industry, the one who gets the new product to the market first wins, and wins big. We are in a global fight for survival with foreign competitors, who would like nothing better than to see us stumble. In this business, we are either quick, or we are dead.

Recently, the EPA has given some signals that they are willing to work on these problems, and we are very pleased with the EPA's recent action to correct the problems with the permit rule. But I am worried that their actions may be too little, too late. First you must realize that none of the recent steps taken by the EPA have been incorporated into any rules. So far, all we have are promises and policy statements.

Second, the fact that electronics firms and others have been working with EPA for almost 5 years to develop a workable permitting system only now after extensive congressional oversight, for which we are gratefully appreciative, has the EPA said that they will fix these problems. And I am concerned that this progress will stop absent continued congressional action.

And third, Texas and many other States have State permit programs that are working just fine. We've been able to make our process changes and stay within all the limits set up by the State and the EPA. Mr. Chairman, I want to emphasize, it is not the environmental standards that worry our industry. The real enemies are delay and uncertainty.

In summary, Title V was intended only as a collector of all the Federal regulations that apply to a plant. The problem is that EPA's implementation has strayed from congressional intent. The EPA has created a system that adds a layer of bureaucracy on top of this simple ideal. Both industry and States object to EPA's approach.

So what is the solution to the problem, you might ask? To fix this program once and for all, Congress must act to reaffirm its intent. We believe with a targeted technical amendment to the Clean Air Act, Congress can reaffirm its intentions, and the States and industry will not have to go through massive changes to their existing program.

Thank you for this opportunity to tell our side of the impact of this major EPA rule. I cannot overemphasize the importance of this issue, not only to my industry, but to American competitiveness. Thank you, and I'll be glad to entertain any questions.

Senator FAIRCLOTH. Thank you, Mr. Bartosh.

Now, Mr. Richard Wimbish, President of Techform, a plastics manufacturer. Mr. Wimbish, from Mount Airy, NC. We're delighted to have you and look forward to your testimony.

#### **STATEMENT OF RICHARD WIMBISH, PRESIDENT, TECHFORM, INC.**

Mr. WIMBISH. Thank you, Mr. Chairman. We call it God's Country.

Senator FAIRCLOTH. I believe Andy Griffith was from there.

Mr. WIMBISH. Well, sometimes I introduce myself as being from Mayberry, USA.

[Laughter.]

Mr. WIMBISH. Mr. Chairman, members of the subcommittee, I'm Richard Wimbish, President of Techform, Incorporated, from Mount Airy, NC. Techform is a small manufacturer of precision plastics thermoformed packaging for food, medical and consumer applications. I founded the company in 1962, and we currently have about 50 employees.

We are also members of the Society of the Plastics Industry, SPI, whom I'm representing here today, along with small businesses in general. I appreciate this opportunity to testify, and would ask that my full written statement be included in the record.

Senator FAIRCLOTH. So ordered.

Mr. WIMBISH. Thank you.

SPI is the principal trade association for the U.S. plastics industry, which indirectly and directly accounts for over 3 million jobs in the Nation's economy, and 35,000 jobs in North Carolina. I appreciate very much the subcommittee holding this hearing on Title V, the permit title of the Clean Air Act, which has and will have a significant effect on many businesses, including those in the plastics industry.

SPI fully recognizes the need for an operating permit program. But we believe that its requirements should be simple and clear. SPI seeks and supports a revised permit program that will be fair and equitable to the regulated community, and not unduly burdensome to small companies, such as my own. In my brief time today, I wish to highlight a few key concerns which if address will go a long way toward achieving a program that will accomplish what the writers of the Clean Air Act intended without jeopardizing small business and a healthy economy.

First, the Agency should shield good-faith emissions estimates. One of the most difficult tasks facing smaller companies is determining in the first place whether or not they must apply for a permit. Many facilities are not currently permitted and have not had to undertake an emissions inventory. Thus, they often do not have detailed emissions data for their facilities.

Since the Clean Air Act was enacted in 1970, many plastics, molding and forming operations have been considered clean, that is, not emitting much in the way of air pollutants. That's the case with Techform. But the 1990 Amendments changed this. As you know, Mr. Chairman, Title V potentially extends regulations to many companies, particularly small, previously unregulated companies, such as my own.

As part of a permitting program, it makes sense to me that EPA should use its expertise to help these facilities to develop reasonable emissions estimates. The guidance issued by EPA with an accurate emissions checklist would be a good start. EPA publications, such as AP-42, should be refined to more accurately represent real expected emissions. And companies should then be allowed to rely on them without fear of reprisal.

Above all, EPA should not penalize facilities who make good faith estimates of their emissions, even if it's later determined that the estimates were low.

Next, streamline the permit program. The Title V permitting program requirements should be clear and easy to implement. Regulated facilities already operate in compliance with comprehensive

air pollution control requirements. Small facilities especially should be allowed and encouraged to spend their limited and valuable resources on controlling emissions, not on burdensome paperwork.

This will usually yield clear environmental benefits, and by far, will give the best buying for the pollution control buck. EPA should especially keep small businesses in mind as they revise permit requirements, because small businesses will be hardest hit by these requirements. Techform, with about 50 employees, is typical in size of the 12,000 plus companies in SIC code 308, which includes about two-thirds of the plastics industry.

We urge EPA to streamline the permit process, starting with a workable standard application form that requires only the needed information. For a familiar analogy, consider the Internal Revenue Service tax short form. Applying this idea to Title V could produce a Title V short form with helpful line-by-line instructions that any company could initially file. This short form would only have basic company data, pollutant types and quantities, monitoring proposals and applicable requirements. Permitting authorities could request more information if needed.

Finally, permit only sources that are actually major. Simply put, EPA should permanently exclude facilities from Title V whose actual emissions have never exceeded major source levels, and should give greater credence to a facility's operating history. A facility's status as major or minor should be based on realistic data calculated from actual physical and operational conditions, not on hypothetically projected worst case scenarios that assume continuous operations of all potential sources. This is useless overkill.

In conclusion, we urge the subcommittee to consider staying the effective dates for Title V implementation. We would also urge you to make legislative changes as necessary to shield good faith emissions estimates, to streamline the permits program, and to limit permits to sources that are actually major sources.

I appreciate this opportunity to be here this afternoon. Thank you.

Senator FAIRCLOTH. Mr. Wimbish, we thank you for coming. And we certainly thank all of you for the time and effort to be here.

I pick up a sort of a general trend, before I get into the questions, I just want to say that it looks as if everybody's saying pretty much the same thing, and we've heard it not only in EPA and in the Clean Air and Title V. The EPA bureaucrat enforcers get death-bed religion—as it looks like Congress is going to really clamp down, all of a sudden they are going to improve. I have seen that in a number of other programs, not particularly with EPA, but once the heat comes down, the rules go back to about where they were.

Mr. Hawkins, do you feel that EPA has gone too far toward the business community in implementing Title V? Has it become burdensome beyond its value?

Mr. HAWKINS. Senator Faircloth, if I understand the question correctly, first you would like my opinion whether they've gone too far in addressing business community concerns, and also—

Senator FAIRCLOTH. No, no, not too far in addressing concerns. Has EPA made the program too difficult for business to comply with, too much paperwork, more paper than benefit.

Mr. HAWKINS. As I said in my testimony, the program is complex, and as experience has developed, I think there's a convincing argument that there are ways to simplify it without losing environmental opportunities. That's something that our organization would certainly support, not just because it will make it easier for business to comply, but it also will make it easier for citizens to understand.

Citizen groups have no reason to be in favor of complexity. Complexity disables participation. Complexity also impairs compliance. If something's complicated, then confusion can set in, and people rightly or wrongly can get confused about their obligations.

We are four-square in favor of simplicity. The tension occurs when you want to also have lots of flexible options. And I have given talks about a rule that you can have three attributes for a program, but you can't maximize all three. And they are, simplicity, flexibility and rigor. And if you try to maximize two of those, it usually comes at the cost of one of the other one. "Thou shalt not kill," is a simple and rigorous statement, but it isn't very flexible. You can come up with similar examples.

So the challenge to EPA and all of those of us who have been participating in developing this program is to try to come up with a program that's rigorous, that is, has clear requirements, but also simple, and still allows what these other gentlemen on the panel appropriately desire, which is the flexibility to conduct their business without having to wait months for an answer.

Senator FAIRCLOTH. All right, thank you, Mr. Hawkins.

Dr. Eisele, how many people work on the permitting issues within your company?

Mr. EISELE. Well, Mr. Chairman, over the last couple of years we've had a large staff working on Title V, which is one of the reasons I'm here. In NC, for example, we prepared a Title V permit for a Henredon facility in Morganton, NC. We spent 400 man-hours preparing it, and it turned out that the State's program was then rejected by the EPA.

So it made the 400 hours of effort null and void. The time maybe was not totally null and void from the standpoint that some of the information will be useful. We had mobilized our environmental coordinators at all of our plants to be prepared for the program over the last 2 years and began to do the emissions inventories.

I don't know that I could estimate the time, other than say we believe we have about 80 facilities that will require Title V permits. And if you multiply 400 hours times 80 plants, we're in that process.

Senator FAIRCLOTH. About how many people, just roughly?

Mr. EISELE. Oh, I'd say probably 110 people involved in the process, one at each plant and in the corporate office besides.

Senator FAIRCLOTH. You have 110 people working on Title V?

Mr. EISELE. As part of their activities, yes.

Senator FAIRCLOTH. Are State programs generally more flexible than Title V?

Mr. EISELE. Yes, they are. In fact, they allow flexibility. But I think one of the biggest difficulties we're running into now is that the State people don't understand Title V, and Title V is changing

so much that they can't give us good advice as to how to prepare our Title V permit applications.

So I think in terms, they're sympathetic, at least generally the people that I've dealt with have been sympathetic but still confused as to exactly what to require, what type of information we should have. For an industry like ours in furniture manufacturing, where we have to make a lot of changes, Title V gets into a process called alternate operating scenarios. And we've been through so many alternate operating scenarios that we can't keep ourselves straight.

Senator FAIRCLOTH. You can answer this yes or no, do you know anybody that does understand Title V?

Mr. EISELE. Well, if I knew them, I guess I'd hire them tomorrow.

Senator FAIRCLOTH. What is this doing for global competition in your business? Although you probably are not doing a lot of exporting, are you?

Mr. EISELE. Oh, no. Furniture has a fair amount of export. The United States is probably the top furniture manufacturer in the world. So we have that advantage. Again, we have the problems of getting to the marketplace. The issues that we have are what the buyers want and being able to make it fast enough, and supply it while the fashion demand is there.

So Title V does have the problem of stalling our manufacturing, our ability to manufacture new product and will therefore affect our positions in the global marketplace in that regard.

Senator FAIRCLOTH. Mr. Bartosh, what are the effects of Title V on technology, instant change, or quick-to-market matters in businesses such as yours? What are the effects, or what will they be?

Mr. BARTOSH. The effects will be that we will be at a competitive disadvantage with our international competitors. We will be delayed due to the permit processes in a lot of cases, so that we will be hampered as far as being the first to market. And the first to market is the one who wins, as I stated earlier.

Senator FAIRCLOTH. A question you might not know the answer to, but your principal competitor in the microchip business is Asiatic countries, Japan probably in particular. Do they have any laws such as this, say, Mitsubishi or a big manufacturer, what would they have comparable there?

Mr. BARTOSH. Since I have worldwide responsibilities, sir, I am familiar somewhat with the international laws. My familiarity with that is that their laws are not near as stringent as those in the United States, and they do not have near the enforcement that we have in the United States.

Senator FAIRCLOTH. Could this program delay you in bringing new products to the market?

Mr. BARTOSH. Absolutely. In one word.

Senator FAIRCLOTH. I read it the introduction to your written testimony that Texas Instruments operates plants in 17 countries. How will Title V affect your company's decision as to where to build and how to expand? How will it affect it? There's certainly going to be, maybe if you move to another country, you might have advantages and disadvantages. Maybe one of the advantages would be getting away from Title V, but you might pick up countervailing disadvantages. What do you think the ultimate washout would be?

Mr. BARTOSH. I think that we, as other major industries, will use it as a key factor in determining where we will build our future sites. Because of the bureaucracy and paperwork, it will cause delays in permit timing, present a major handicap and strike at our ability to be competitive in the global market. So it will be a key factor in future site selection.

Senator FAIRCLOTH. I'm going to move on, because Senator Inhofe and Senator Thomas also have questions they want to ask. So I'll move to Mr. Wimbish, what does the imposition of the Title V permit program mean to your business in terms of affecting the ability to create jobs, innovation and profitability?

Mr. WIMBISH. Mr. Chairman, I'm much more concerned with the future of Title V, and what would happen in continuing along the present road, and what's happening right at this present time. Techform is virtually an insignificant company as far as having any emissions. We virtually have none. But it's very easy to cross that threshold between where we are and becoming a minor or maybe even a major emitter if we're dealing with the current definitions of potential to emit and the natural growth of the company.

Senator FAIRCLOTH. I'm sorry, I didn't understand you. You say it's crossed that threshold by becoming an emitter or the regulation becoming more stringent?

Mr. WIMBISH. A little of both. Right now, we're dealing with major emitters—

Senator FAIRCLOTH. You mean Title V is?

Mr. WIMBISH. Title V is.

Senator FAIRCLOTH. Yes.

Mr. WIMBISH. There are ten times that many falling in the category going from major to minor. And as my company grows, and as Title V becomes more restrictive and is applied so that more of these 340,000 companies come under it, it becomes very significant to us. My interest here is much involved in representing the industry and a lot of my competitors and friends who are much larger than I am and who are concerned as an industry about their ability to compete.

And one thing that we ran into was one somewhat larger company, according to the AP-42 tables, was above that threshold emitting 12 tons. When he had rather expensive studies made, he was down to two tons. And I'm concerned about having to go through that paperwork and the burden of trying to prove that Techform is not an emitter. That's about it.

Senator FAIRCLOTH. In the essence of time, here, so we can move on, I will ask Senator Inhofe if he will proceed with his questions.

Senator INHOFE. Thank you, Mr. Chairman.

Dr. Eisele, I wasn't here during your testimony. I noticed in your written testimony you were desiring to delay Title V enforceability for 2 years until the State, public and employers can decide on the certainty of the requirements. I could put two interpretations on that. One is, would that delay be partially because it may be repealed, or the other because you don't know for sure what you have to do to comply?

Mr. EISELE. I think it probably has components of both. But what I meant was the latter, Senator, that there's too much confusion right now to know exactly what we have to comply with in

that regard. I would, I think it would be inappropriate for EPA to take enforcement action with States and oversight activities with States and permittees during that time period.

Senator INHOFE. Well, that does make sense.

Mr. Wimbish, the one thing I like about this subcommittee, I'm learning an awful lot about North Carolina manufacturers.

[Laughter.]

Senator INHOFE. I have only been through the facility of one of your competitors, perhaps it was Mr. Ballenger's operation, and it appeared to me that it was very labor-intensive at your industry.

Mr. Wimbish. Actually, Mr. Bollinger's operation is a somewhat different type of plastic processing. But generally, the plastics industry is not terribly labor-intensive.

Senator INHOFE. In the final production markets it is, because at one time he was talking about the difficulty in North Carolina where you have full employment in finding people.

Mr. Wimbish. That's accurate.

Senator INHOFE. Have you ever tried to analyze in various operations within your industry, referring to the permit process, the cost of compliance of this on some kind of a unit basis, so you could quantify what these regulations actually cost?

Mr. Wimbish. Not per se, but I will pick up on the comment made earlier when these gentlemen asked about the labor and the time applied. We have a management staff of 10 people. Three of those 10, myself and a couple of others, have been involved in Title V. That's about 30 percent of our management force. So in terms of our resources available to address it, it's considerable.

Senator INHOFE. Do you compete abroad?

Mr. Wimbish. Only indirectly.

Senator INHOFE. Indirectly, OK.

Mr. Wimbish. A lot of our customers compete abroad, and then we're the second-tier supplier.

Senator INHOFE. And of course, Mr. Bartosh does compete abroad.

Mr. Bartosh. Absolutely.

Senator INHOFE. Mr. Bartosh, you're in, did you say 17 different countries?

Mr. Bartosh. Yes, sir.

Senator INHOFE. How does your U.S. operation compare in size? Is Texas Instruments home office the largest of the 17?

Mr. Bartosh. Yes, sir, it is.

Senator INHOFE. What would be the next largest?

Mr. Bartosh. Our next largest would be in Japan, where we have five sites.

Senator INHOFE. Yes. And what would motivate someone like Texas Instruments to come up with a sizeable operation in Japan?

Mr. Bartosh. It was a business decision before my time to get us in the global market, so we would be in a position so that we could compete globally.

Senator INHOFE. In other words, the costs, I would have to assume that the costs of compliance with Title V, with other regulations up here relative to other countries, is enough that it would be very difficult to be competitive on a global basis and still comply with the costs of the regulations here.

Mr. BARTOSH. That is true, sir. We estimate that it would cost approximately \$250,000 for each one of the permits that we will have to get in regards to the Clean Air Act to be in compliance.

Senator INHOFE. I have always felt that there are two major factors that have been the cause of the job losses in this country in recent years. One is our tort liability system, the other is over-regulation. So when I made the quote from the well-known radio talk show host, when he said if you want to be competitive with Japan, export our regulations to Japan to be competitive, do you seem to agree with that statement?

Mr. BARTOSH. Yes, sir, I do. It is a lot different operating in the United States versus the international locations. As I said earlier, they do have some of the laws and regulations that are similar to ours. They're not as stringent as ours, and they do not have the enforcement that we have in the United States.

Senator INHOFE. And would you say they don't have the redundancy, in other words, filling out the same forms to different agencies?

Mr. BARTOSH. If you ever work with people in Japan or Asia Pacific, they are very efficient, and they see a lot of the work that we do as redundant, and a lot of paperwork that is a waste of resources.

Senator INHOFE. Do any of you except Mr. Hawkins, because you're not in the manufacturing, have you looked at other countries and found any other countries, well, let's take your case, Mr. Bartosh, of the 17 countries where you have operations, are any of them, do any of them have regulations that are as costly as those in the United States?

Mr. BARTOSH. No, sir, not that I'm aware of.

Senator INHOFE. Mr. Chairman, that was the point I was trying to make in the opening statement. I really view this as a jobs issue more than I do a clean air issue.

Senator FAIRCLOTH. Thank you, Senator Inhofe.

Just a quick question before I go to Senator Thomas. Do you have any plants in Oklahoma?

Mr. BARTOSH. No, sir, we do not. But we're right next door.

Senator FAIRCLOTH. Nor in North Carolina, if I might add, Senator.

Senator Thomas.

Senator THOMAS. Just very briefly.

You've talked some about other countries. Do you believe we ought to have the same sort of regulations they have? Do you think the results are as good?

Mr. BARTOSH. I do not believe, first of all, that any company in the United States argues that we don't need laws and regulations. But I think what you will find is that companies are questioning the amount of paperwork that is required and the redundancy with regard to State programs that already exist.

Senator THOMAS. Do you have a recommendation as to how you would change it?

Mr. BARTOSH. I would recommend, first of all, that legislative action be taken. Because we have heard the EPA in their promises and their policy statements, but there have been no rules changed. Also, it is a slow process. As you are aware, industry has worked



5 years with the EPA trying to come up with an operating permit. You see where we are. So we need some legislative action, and it needs to be taken now.

Senator THOMAS. I don't disagree with you, but I must tell you that from our standpoint, it's pretty hard to legislate some of these kinds of things. We find ourselves micromanaging and you'd like that less, probably.

Mr. BARTOSH. Yes, and no. I know that's kind of a wishy-washy answer. But I think we're at a point now that to depend on the EPA to take appropriate actions and to make changes that are meaningful, I think it's too little, too late. I think we're at a point where legislative action is required. We do need some rule changes now.

Senator THOMAS. Why do you think it's been 5 years of effort and you still apparently don't have a satisfactory resolution?

Mr. EISELE. Well, Senator, I don't know that I know the answer to that. That would be a question to ask EPA, I guess. From an industrial standpoint, we've been trying to deal with what's been given to us in terms of draft regulations and proposed regulations. There seems to be constant change in those.

As I indicated in my statement, we're at a point now where unreasonable certainty is better than reasonable uncertainty. We'd like to know where we're going and what we have to do. I think that in my statement, I requested a 2-year delay so we could have EPA tell us exactly what's necessary in a permit.

Senator THOMAS. Why would you ask for a 2-year delay? We've had 5 years, apparently. What do you expect a 2-year delay to produce?

Mr. EISELE. Senator, I believe that this congressional oversight has done a good job from the standpoint of getting EPA to focus on what it is that they really need in the Title V permit. I think that once EPA develops the final regulations, with some targeted changes in the Act, that a 2-year delay would be appropriate to let everybody get on board and understand exactly what's required before enforcement.

Senator THOMAS. You would think, I'm no expert in it at all, but I hope you understand that we've been working at this regulatory thing in a number of areas for this whole year. And almost invariably, no one denies that there needs to be regulation. But it's always the process that is troublesome. But it would seem as if you would start defining what it is you want the result to be. Has that been made clear by EPA, where you want to go?

Mr. EISELE. Senator, from our perspective, in our industry, we have focused on the regulations. And we've focused on the actual framework of the regulations that deal with our emissions limits, what we actually would operate under. Title V has been strictly the vehicle that these would be put into. Title V has taken on a life of its own over the last 5 years.

And it's really become broader than just documentation of the actual regulations that affect us. We would be affected in our VOC emissions under Title I, and under hazardous air emissions under Title III, and that's what we've spent, quite honestly, I've spent a tremendous amount of my time in a negotiated rulemaking over

the last 2½ years on that. And Title V should strictly be a vehicle for that. And, it's taken on its own life.

I guess if the question is, did we focus there or should we have focused here, I think EPA has taken an expansive view of it. I think they could have taken a less expansive view.

Senator THOMAS. I'm interested in resolving the problem. It seems like we ought to. Frankly, with all these titles, my eyes are glazing over. It would seem to make sense to start collectively by saying, what do you want the result to be.

I remember testifying before I ever came to Congress on EPA, thinking why don't you do it like the highway patrol does. If you break they law, they nail you. If you don't, you're fine. Don't you measure results, Mr. Wimbish, do you measure what comes out of the plant, or do you measure the procedure?

Mr. WIMBISH. We measure our products and we measure what goes into the plant.

Senator THOMAS. I'm talking about under these rules, rules on air quality.

Mr. WIMBISH. We measure what comes out, of course.

Senator THOMAS. Then why do they care how you do it?

Mr. WIMBISH. As far as I'm concerned, they shouldn't.

Senator THOMAS. Well, that's my point. Interesting. It's frustrating as hell for us, too, because we don't seem to be making much progress in terms of bringing the process of regulation into a fairly effective, reasonable cost result. That doesn't seem like an unreasonable purpose, but we don't seem to get there. Thank you, Mr. Chairman.

Senator FAIRCLOTH. Thank you, Senator Thomas. The afternoon's moving on, and we do have other panels. But just very briefly, on this question, so we can get to the other panels, Mr. Hawkins, you've heard the three other witnesses representing national, international and relatively small business. All are in the same boat of trying to make a profit, make a product, sell it for a profit and meet the payroll, which kind of sums up business.

What is your response, quickly, to what they had to say, and how do we go at it? Nobody wants to pollute the air. We're all here for clean air. But what we're hearing here is the just impossible, cumbersome method in which we're trying to achieve it. Would you respond briefly to that?

Mr. HAWKINS. Thank you for that opportunity, Senator.

Perhaps just taking up from Senator Thomas' last point, which I think is valid, it's to focus on the central issue: are these facilities in compliance with their obligations, and if they're not, take action. The difficulty is that given the state of affairs of the rules, rule books, it is such a complicated process to figure out what are the requirements that apply to a particular facility in the air pollution arena. There is so little information available from the facilities themselves about their compliance information, that it is a major undertaking, like renovating an attic.

It's not a matter of sitting by a roadside with a radar gun. This is a very complicated matter. Most facilities aren't required to measure their emissions. Most facilities don't have organized emission reporting requirements. Most facilities could not give you a list of the rules to which they are subject, and most control agencies

couldn't give you a list of control requirements that are applied to a facility. That mess is what the operating permit program was intended to try to organize.

It has been a complex process to get it moving. I'm sure that everyone in retrospect could figure out ways to do it better.

But with respect to the proposal of deferring enforceability, I think all that will do is defer the work that still needs to get done to bring this program to a point where it can be enforced. Everybody should understand what their obligations are, and the production operations should know what the rules are. They know how to play by those rules, and they shouldn't get blindsided by enforcement actions because they simply didn't know their obligations. Citizens can enjoy the benefits of an improved program where everyone knows the rules. You get better compliance and reduced emissions as a result, which incidentally, takes the pressure off other factories, which might be subject to more stringent rules.

As long as the air is still polluted, there will be continual pressure to find additional ways to get the emissions down. One way to do that is to write new rules. Another way to do it is to enforce the existing rules. And as long as we have a messed-up system—not knowing what the rules are and what the obligations are—we are not doing the best job we can on enforcing existing rules.

Senator FAIRCLOTH. A quick comment to that, Mr. Hawkins, and we're going to move on. The industry, the business of this country is suffering under this mess, as you well characterized it. They didn't write the rules. They're out there struggling to turn out a product and make a profit. And they have been the victim pretty much since EPA came into existence from various rules and regulations that have come out of EPA.

I'm not talking about Title V. I'm just talking about a general flow of bad, difficult, unclear rules and regulations. This is what has created the problem, the reason we're here today, is this constant flow. They didn't design them. They're just trying to run a business, and they've been the victims of them. That's where the regulations have hit. Industry, business as a whole, has had to put up with it.

Dr. Eisele, EPA issued a white paper on permit applications. What effect would that have on your company, if we came through with it?

Mr. EISELE. Mr. Chairman, I think that the white paper was good news, late good news. I would view it as a first step. I wish it had been done about 5 years ago, so that we had some understanding of what had to go in the operating permit. It does address the operating permit issue, but it does not address the flexibility issue, it does not address some of the other issues we talked about today.

Senator FAIRCLOTH. Mr. Bartosh, do you think that Title V permit rules will encourage or discourage the development of new technology, pollution prevention or waste minimizing techniques?

Mr. BARTOSH. I believe that the technology innovations for pollution prevention and waste minimization will be discouraged because of the process that it takes for new permit or permit revisions. The delays will be costly as far as being competitive in the

world market. I think it may hamper some of the innovation and pollution prevention.

Also, I believe that the new Title V also is not flexible enough, and it also hampers innovation and pollution prevention.

Senator FAIRCLOTH. Mr. Wimbish, how does your company cope with the North Carolina State permit program? Is the State program generally more flexible than Title V?

Mr. WIMBISH. The State program has just gotten off and running this year, Senator. And our coping is simply determining at this point that we are too small a potential source to really deal with it at this time. I take, picking up on Senator Thomas' comment about the speeding ticket, as a chemical engineer, we have material balances. Everything that goes in has to come out.

My approach has been to look at what went into our plant, what might be bad stuff going out, and subtract the two, and it makes it very simple at this point that there's not a problem. So we haven't had to cope.

Senator FAIRCLOTH. Well, I thank you. I thank all of you. It's been a most helpful and enlightening hearing, in that we all clearly feel that we have to protect the environment, the air, the clean air, what we're about here today. But there certainly would seem to be universal agreement that we have to find a simpler and more direct way to do it that's more compatible and less cumbersome to the industries of the country. I thank you.

The next panel is Mr. Jeff Saitas and Mr. Robert Hodanbosi. Mr. Saitas is Deputy Director, Office of Air Quality, for Texas Natural Resource Conservation Commission, and Mr. Hodanbosi is Chief, Division of Air Pollution Control, Ohio Environmental Protection Agency. As you know, we try to limit the opening statements to five minutes, but we also attempt to work with you. So we'll start with Mr. Saitas.

**STATEMENT OF JEFF SAITAS, DEPUTY DIRECTOR, OFFICE OF AIR QUALITY, TEXAS STATE NATURAL RESOURCE CONSERVATION COMMISSION**

Mr. SAITAS. Thank you very much, Senator Faircloth. I worked really hard to get it down to 5 minutes. Hopefully the red light won't go out on me.

Senator FAIRCLOTH. That's all right, we'll work with you.

Mr. SAITAS. Thank you for the opportunity to share on behalf of my agency and the State of Texas our experience with some of the difficult Title V implementation issues facing the Nation. The Federal operating permits program can serve an important and cost effective function in improving and maintaining the air quality in Texas, provided that the program remains sharply focused on codification of existing requirements, and not on creation of new requirements.

Texas has participated in the stakeholders work group and reviewed the EPA's recent Part 70 proposal, as well as the July 10 white paper. We consider both to be a vast improvement over the EPA's previous positions. However, we believe that a number of serious problems still remain.

The key to successful implementation of any program is to establish clearly defined objectives. It is our understanding that the ob-

jective of this program is to establish the applicability of already existing standards and regulatory programs in the operating permit, and not to create new requirements nor to delve into the underlying requirements of already existing programs.

The EPA's July 10 white paper contravenes this objective with the requirements outlined for the New Source Review permits. It is important to remember that these New Source Review permits have been issued under programs that have existed for over 20 years, and serve a valuable, but different, function from operating permits.

The two programs have fundamentally different objectives and substantive requirements. Because of the different nature of the two programs, we believe the close interrelationship proposed in Part 70 and the EPA's white paper has significantly interfered with the effective implementation of the operating permits program.

The following examples highlight this interference. First, the EPA is requiring environmentally significant terms and conditions of new source review permits to be included in the Part 70 permit. In addition, the EPA suggests that the States should cleanup existing New Source Review permits. Second, the EPA is encouraging the deletion of New Source Review permit provisions that they believe are unrelated to the purpose of the NSR program, such as odor limitation and limitations on toxic air pollutants. In Texas, these types of provisions are critical to the credibility of the New Source Review program in the eyes of our citizens.

Third, for those New Source Review terms and conditions that the applicant deems is federally enforceable, the EPA requires a company to certify compliance. In other words, companies are now required to certify compliance with NSR permit provisions through the Part 70 process.

Fourth, the EPA is suggesting that the States add new terms and conditions to NSR permits where necessary to make provisions federally enforceable. All of these are examples of using the operating permit program to create new requirements and delve into the underlying requirements of NSR. We believe that the implementation of Title V should maintain a clear distinction between NSR programs and the Federal operating permit programs and rely on the NSR programs to assure compliance with NSR requirements.

In addition, we believe that Part 70 should provide broad guidance rather than prescriptive requirements, so that States can create effective, streamlined programs that meet the needs of their States. The white paper allows for more flexibility, but the States have a legal responsibility to comply with Part 70. Consequently, the white paper addresses the symptoms, but the EPA has not cured the problem. Therefore, the EPA should look to revise Part 70 to broadly reflect the requirements of Title V, rather than writing guidance. It is clear based on their recent actions that the EPA is still in the process of defining the elements of a minimum program.

This uncertainty has caused Texas a great deal of difficulty in designing a program which meets the Federal requirements while integrating to the maximum extent possible existing programs and systems. We believe that it is inappropriate for the EPA to expect

States to implement programs while we wait for the EPA to finalize the program requirements.

In closing, I would like to re-emphasize that Part 70 needs to provide States and local governments maximum flexibility to develop Title V programs which both complement their existing air programs as well as promote streamlined and efficient implementation of Title V.

Again, I appreciate the opportunity to provide these comments on a subject that is very important to the State of Texas.

Senator FAIRCLOTH. Thank you, Mr. Saitas.

Dr. Hodanbosi, I am assuming that you all, although the titles I see here are a little different, hold pretty much the same position in each of your respective States, Ohio and Texas? You're chief of the Division of Air Pollution Control, and Mr. Saitas is Office of Air Quality.

Mr. SAITAS. I will briefly explain in order to assist the gentleman in answering the question, my responsibility has to do with all permitting under air, all regulation development under air, all monitoring under air, just about anything that deals with air.

Mr. HODANBOSI. And as chief of the Division of Air Pollution Control, I have similar responsibilities for monitoring air quality, development of regulations both for the State and the Federal implementation plan, and the permitting programs.

Senator FAIRCLOTH. All right, so the roles are very similar then. All right, Mr. Hodanbosi.

**STATEMENT OF ROBERT HODANBOSI, CHIEF, DIVISION OF AIR POLLUTION CONTROL, OHIO STATE ENVIRONMENTAL PROTECTION AGENCY**

Mr. HODANBOSI. Mr. Chairman, I request that my full written statement be included in the record.

Senator FAIRCLOTH. So ordered.

Mr. HODANBOSI. Thank you.

Mr. Chairman and members of the subcommittee, thank you for the opportunity to testify today concerning the implementation of Title V of the Clean Air Act. My name is Robert Hodanbosi, and I am chief of the Division of Air Pollution Control at the Ohio EPA. In addition, I am chairman of the State and Territorial Air Pollution Program Administrators Permitting Committee.

Today I would like to cover the following items: background of Ohio's plan for implementation of the Title V program; potential difficulties with Title V; and Ohio's assessment of EPA's response to these issues.

The State of Ohio instituted a permit-to-operate program in 1972 that covers a wide range of air pollution sources both large and small. Since 1972, Ohio EPA has identified more than 80,000 individual air pollution operations at 20,000 separate facilities that are required to apply for State permits. The Ohio permit-to-operate program has been the cornerstone of the air pollution effort for obtaining compliance with State and Federal emission limits.

For the past 20 years, Ohio has operated a permit program that contains similar requirements to Title V. That is, a permit is needed to lawfully operate an air contaminant source in the State, and

the permittee must demonstrate compliance with State and Federal emission limitations before Ohio EPA can issue the permit.

When the Clean Air Act was passed by Congress in 1990, Ohio EPA recognized that we needed to employ the latest in data management technology to be successful in Title V implementation. As a result, we have developed a computerized paperless Title V permit application. This new program, scheduled for release in September of this year, will represent one of the most advanced permit application and issuance programs in the country.

Ohio EPA is committed to developing a Title V system that is user-friendly and efficient in data handling for both the regulated community and the agency. The Ohio program was developed with input from the regulated community to ensure a final product that meets the needs of the agency while being efficient and workable for industry.

On April 13, 1995, EPA proposed full approval of Ohio's Title V program with final approval expected within the next few weeks. The effective date of the program approval will be October 1, 1995. We anticipate approximately 1,000 Title V applications to be filed beginning in November of 1995, through September of 1996. Approximately 1 year ago, the EPA was expanding the scope and detail of the Title V program. EPA had proposed onerous and expensive enhanced monitoring requirements that were high on implementation costs, but would produce few benefits. In August 1994, EPA proposed complicated and confusing regulations for making revisions to a Title V permit that would have required Federal oversight for small changes in Title V sources. Throughout 1994, EPA heard from States and the regulated community about the problems with the Title V program as envisioned by EPA.

In January 1995, at a meeting initiated by the National Governors Association and the Environmental Council of States, the States had an opportunity to meet with upper management from EPA to discuss Clean Air Act issues. Some 65 individual issues were raised related to the Clean Air Act, with Title V accounting for 13 items.

In response, EPA committed to accommodate the States on the Title V issues except where clearly contrary to Federal law. As chairman of the State and Territorial Air Pollution Administrators Permitting Committee, I've had an opportunity to work with the EPA on the development of the rules for making revisions to the Title V permits and the EPA white paper in streamlining implementation of Title V.

In each case, EPA has provided draft documents and brought together stakeholders to obtain comments prior to the formal release of the documents. This consensus building approach is much more effective than having endless rounds of litigation that take years to finally resolve.

STAPPA and its sister association, the Association of Local Air Pollution Officials, have commended EPA on the development of State and local air directors in these activities. EPA has decided to re-examine the proposed enhanced monitoring rules, and has committed to consult with States in the development of any future proposals.

We are encouraged that EPA has taken this first step and hope that any subsequent proposals are more consistent with the principles of the NGA/ECOS work group. In summary, Ohio is prepared to move forward with Title V implementation over the next 15 months. EPA's recent actions and commitments to simplify the program and allow increased flexibility can lead to a better Title V program.

Given the planned changes to the Title V program, it is imperative for EPA to continue working closely with States to ensure an efficient and effective Title V program.

Again, thank you for the opportunity to present these views.

Senator FAIRCLOTH. Thank you, Mr. Hodanbosi.

Mr. Saitas, did Texas have a permitting program before, a functioning working permitting program before 1990?

Mr. SAITAS. Yes, sir. Since the early 1970's, we have probably processed in excess of 30,000 authorizations. We've had lots of experience handling those authorizations and feel we have fine-tuned the existing permit program so that both industry, it serves the needs of industry, the regulators, the citizenry, and the State of Texas.

Senator FAIRCLOTH. What is the cost of developing a new Title V permit program in Texas? What will it cost the State of Texas for a new program?

Mr. SAITAS. I'm going to answer this question as we know it today. We currently have a division called the Operating Permits Division, which has essentially 70 existing people and 50 vacancies. We had intended in fiscal year 1996 which begins on September 1 a \$6 million expansion of the program.

From the regulation standpoint, from the Government standpoint of an operating budget, probably on the order of \$10 million to \$11 million. From the industry perspective, it's \$25 per ton of emissions.

Senator FAIRCLOTH. Well, my next question, how much will Texas charge industry in fees to implement the Title V program?

Mr. SAITAS. \$25 a ton.

Senator FAIRCLOTH. A ton?

Mr. SAITAS. Ton of air pollutants.

Senator FAIRCLOTH. How much money would that cost, roughly?

Mr. SAITAS. I've seen the number, and if you'll allow me just to make a guess, I think it's near \$40 million.

Senator FAIRCLOTH. About \$40 million. Mr. Saitas, do you believe the Title V permitting program can help cleanup the air in Texas any faster or any cheaper or any more efficiently than the programs that existed before Title V?

Mr. SAITAS. We believe that Title V does have a place in the regulatory scheme of things. If you look at New Source Review, it essentially focuses on things that are being changed or new things that are being put in. Because Texas has a lot of old industry, 25 percent of the national refining capacity, over two-thirds of the petrochemical industry in the Nation, there's a lot of old industry. Much of that industry predates the existing Texas permitting requirements.

So Title V would perform a need to address what's already there that is not addressed in New Source Review. So we view both



pieces being combined. So the short answer now would be yes, sir, we see some need for Title V. But not in the manner that is proposed.

Senator FAIRCLOTH. Mr. Hodanbosi, did Ohio have a functioning program before 1990?

Mr. HODANBOSI. Yes, we have, since 1972.

Senator FAIRCLOTH. I'll ask you the same question. What was the cost of developing a new Title V program for Ohio?

Mr. HODANBOSI. I'm going to answer it a little bit differently, not in terms of an annual budget. In order to make a computerized system, we have hired a contractor. The contractor costs are going to be slightly over \$1 million in order to have a computerized Title V application.

Senator FAIRCLOTH. Will the fees you're going to charge to Ohio industry make up for the costs of the program?

Mr. HODANBOSI. Well, yes, both by Federal law and State law, the emissions fees are required to cover the costs of the program. And that is the \$25 per ton that is also indexed to the Consumer Price Index.

Senator FAIRCLOTH. Will the Title V permitting program serve to clean up Ohio air any faster, cheaper or more efficiently than you were doing before Title V?

Mr. HODANBOSI. Not necessarily quicker or cheaper, but possibly more efficiently. Our old permit system was a permit system developed in 1972. And we needed to update that program and make it more modern.

And Title V gave us the opportunity or impetus to move forward and do this in a way that we can effectively and efficiently handle data. It's a computerized system and we're going to have computerized applications. We aren't going to be shuffling thousands of pieces of paper. We're going to be sending things over computer disks.

In that way, we're able to make it more efficient than we were in the past. But it is at a cost.

Senator FAIRCLOTH. Well, that is what we're hearing today, that Title V has some benefits, maybe.

Mr. HODANBOSI. Yes.

Senator FAIRCLOTH. But the benefits seem to be somewhat minuscule as compared to the rules, regulations and paperwork involved. That's what we are generally hearing here today.

Mr. Hodanbosi, in your opinion, what is the benefit of EPA's recent white paper to the majority of Ohio's sources subject to Title V, who have already spent millions of dollars preparing, submitting and in some cases already receiving the Title V permits? What do you think the white paper does?

Mr. HODANBOSI. Well, what we need to do as a State is to take the white paper and see how we can apply it to our program. And I think the key is going to be in terms of the completeness determinations. We will be able to determine an application is complete without as much information as has been required in the past. I think that is the key; companies will be able to continue to operate under the application shield while we get whatever other additional information is needed.

Senator FAIRCLOTH. Mr. Saitas, does threat of the looming veto by the EPA of your permits have any effect on the issuance of State permits? The prospect of an EPA veto of a permit that you might issue through your office—what effect does that have on your issuance of permits?

Mr. SAITAS. Certainly it would have an effect; the fact that there would be a veto authority does have an effect on the program. I can say that in view of our current process for our current permitting system. We are a delegated State, so we no longer have to send things to EPA for final approval. We can do it ourselves. In so implementing that existing delegation, we have found that it is much more efficient than what it was prior to delegation. So we feel comfortable saying that a veto process would in fact be much slower than a process without one.

Senator FAIRCLOTH. Do you think it would make you write better permits?

Mr. SAITAS. We don't think so. We feel we're a competent State authority on permitting matters, and feel very confident that we can carry out the mission of both the U.S. Congress and the State Legislature of Texas, and provide for clean air to the State of Texas.

Senator FAIRCLOTH. In their heart of hearts, do States resent this type of oversight by EPA?

Mr. SAITAS. I wouldn't feel comfortable saying resent, but we certainly could live without it.

Senator FAIRCLOTH. That's close to it.

Mr. HODANBOSI, would you support codifying EPA's recent white paper into law?

Mr. HODANBOSI. I think, Mr. Chairman, you'd have to consider whether or not the words codifying into law would mean to put it into legislation, and whether or not you would want to be taking guidance and putting it into legislation. But maybe another avenue would be for EPA to be modifying the rules to incorporate those concepts within their Title V regulations.

Senator FAIRCLOTH. Let me ask you a question. How long have you been in the clean air and environmental territory?

Mr. HODANBOSI. For 22 years now.

Senator FAIRCLOTH. Have you seen at times when the pressure from the public industry, State regulators, begins to come to bear on EPA, that they for a brief and shining moment come with white papers or whatever might be the wording of the day, that these things are going to be changed, that these rules will be altered, that we are going to clean this situation up and we are going to reduce the paperwork.

But for whatever reason, be it an election or a change of administration or there comes a change of the atmosphere that they fall back into the same rut with more paperwork, more rules and more regulations and nothing really has changed? Have you seen that happen in 22 years?

Mr. HODANBOSI. Well, yes, I have seen that, Mr. Chairman. But let me also add, and in some of the documents that I submitted, you will see Ohio was very critical of the activities of EPA over, through 1994.

But since the beginning of this year, they have been cooperative with not just Ohio but other States and the regulated industry, trying to make this a better program. And I believe we need to keep the pressure on EPA that they complete their activities. They've made commitments, let's follow through and make sure that they fulfill them.

Senator FAIRCLOTH. Well, Mr. Hodanbosi, I am not a politician, but we had an election last November. Do you think that's had any effect upon EPA's current, more easy to work with position?

Mr. HODANBOSI. Well, they are following me, but it's possible that it did.

[Laughter.]

Senator FAIRCLOTH. You think they read the results also?

Mr. HODANBOSI. Yes.

Senator FAIRCLOTH. Thank you, thank you both so much. I thank you for coming, for devoting your time and preparation to being with us. It means a lot to the Congress and to the entire EPW committee, although we did not have as many Senators here today as we would have liked to have, there's been a lot of votes going on. And you can rest assured that all of the staff, are represented here by staff members, and everybody will be well briefed on what you had to say. Thank you.

Mr. HODANBOSI. Thank you.

Mr. SAITAS. Thank you, Mr. Chairman.

Senator FAIRCLOTH. The next panel will be Ms. Mary Nichols, assistant administrator, Office of Air and Radiation, U.S. Environmental Protection Agency, and Mr. Steve Herman, assistant administrator, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency. And Ms. Nichols, we're delighted to have you with us, thank you for being back. And I believe you're going to speaking for both of you today in the opening statement.

Ms. NICHOLS. Yes, Senator Faircloth, and I'm also accompanied at the Committee's request by Ms. Lydia Wegman of our Office of Air Quality Planning and Standards. She's the deputy director of the Office in North Carolina. She's seated right behind me, and she has played a leading role on the staff in carrying out the various changes that we have been making and that you have been hearing about in the Title V program. So she'll be available if we need her to answer any more detailed questions.

Senator FAIRCLOTH. All right, well, I thank you, and since you're speaking for two of you today, go right ahead and take whatever time you need.

I have a statement for the record by Senator Boxer that I will submit at this time.

[The prepared statement of Senator Boxer follows:]

STATEMENT OF HON. BARBARA BOXER, U.S. SENATOR  
FROM THE STATE OF CALIFORNIA

Mr. Chairman, the Clean Air Act is clearly one of our most successful environmental laws. I would like to begin my statement before the subcommittee today with a success story:

On April 24, 1995, the San Francisco Bay Area was officially designated an attainment area for ozone which makes it the largest metropolitan area in the country to reach this milestone. We went from a situation where the district did not meet the ozone standard 65 days a year to a three year average of one day a year. Expo-

sure of Bay area residents to unhealthy levels of ozone has been reduced 93 percent since 1969, 91 percent since 1979 and 42 percent since 1991.

The Bay Area Air Pollution Control District was established about 40 years ago, through state legislation, to work toward the goal of cleaner air in the San Francisco Bay Area. The District has a proud tradition as a national leader in innovative approaches to achieving cleaner air, establishing a long list of "firsts" in programs to improve and maintain air quality. I am proud to have played a part in this historic struggle. My service on the District board, including two terms as Chair, is one of things during my tenure as a Marin Supervisor in which I take the greatest pride.

I think it is an excellent example of how we can create and maintain a clean and healthy environment—and do it hand-in-hand with a thriving and vital business community that continues to produce more jobs: In the last 30 years, the Bay area population has doubled as has the number of vehicles on the roads.

The District's reclassification as an attainment zone means there is no need to prepare a new Federal ozone plan. The additional controls that would have been required could have resulted in money being diverted from transportation projects already in the Transportation Improvement Plan (TIP) to new projects required by a new Federal plan. If there was not reasonable progress toward attainment, the area could have faced future highway funding sanctions, or limits on industrial growth.

One of the reasons behind the addition of Title V to the Clean Air Act amendments of 1990 was that if we could achieve full compliance with the law, we would significantly reduce the possible of new regulations to achieve air quality standards in order to make up for noncompliance.

It was thought that having an operating permit program that granted a single permit to individual sources and that included all the sources's applicable air pollution requirements—would simplify compliance for industry and would clearly define and facilitate enforcement.

The Title V Federal rulemaking process has certainly encountered numerous problems and delays. EPA issued a final rule to implement Title V in July 1992 and was immediately sued by environmental groups, industry and states. The chief area of controversy was the process for revising permits (not procedure for initially issuing permits). In August 1994, EPA issued a proposed rule to deal with permit revision procedures. It was also heavily criticized too complicated, prescriptive, administratively burdensome, and disruptive to existing state programs. After months of discussions with a broad group of interested parties, EPA is expected to issue a supplemental proposed rule in the next few weeks.

California air districts and the California Air Resources Board (ARB) through the aegis of the California Air Pollution Control Officers Association (CAPCOA) have been working with EPA over the past 3 years to address concerns with Title V.

Also, for the past year, California agencies have participated as active stakeholders with EPA's Office of Air Quality Planning and Standards (OAQPS) in the development of proposed revisions to Part 70 and EPA's Implementation White Paper.

Additionally, EPA has recently set up a task force comprised of representatives from industry, CAPCOA and ARB to specifically address implementation issues in California that have not been addressed nationally. This task force was created in recognition of the fact that California agencies and industries have long standing experience with air pollution control programs and that requirements that are appropriate for the rest of the country may be implemented differently in California.

The EPA white paper on streamlining permit applications issued in July 1995, is a very positive step forward. I am very pleased that many of the long list of concerns and complaints issued by California Air Quality Districts seem to have been addressed.

For example, EPA recently approved a rule developed by CAPCOA and ARB that would provide a means to keep small sources out of Title V without "potential to emit" determinations. In the Bay area, this keeps over 8,000 plants out of Title V so EPA will be able to concentrate on the 150 or so plants that contribute over 85 percent of the emissions from stationary sources. More importantly, Title V programs may now be based on actual emissions rather than potential emissions. This flexibility works very well in California where we already have emissions inventories.

Another positive step is the issue of allowing Title V sources to cite existing information (emissions inventories, source test data, lists of applicable requirements etc.) instead of having to re-submit all of the data. This will greatly streamline Title V permit applications.

I believe we need a strong Federal operating permits program precisely because it facilitates national compliance. Hopefully the EPA supplemental rule expected in the next few weeks will further address the critical issues of flexibility and a

streamlined application process while strengthening enforcement and thus helping our nation achieve air quality standards that will benefit all of our citizens.

Thank you Mr. Chairman, I look forward to the testimony today on this very important issue. I would suggest that we hold another hearing once the new EPA rule is published.

**STATEMENT OF MARY NICHOLS, ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY; ACCOMPANIED BY STEVEN HERMAN, ASSISTANT ADMINISTRATOR, OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE; AND LYDIA WEGMAN, DEPUTY DIRECTOR, OFFICE OF AIR QUALITY PLANNING AND STANDARDS**

Ms. NICHOLS. I'm going to summarize my remarks because I know you've heard a lot about this program.

I just wanted to convey to you that since I have been at the EPA, which is since I was appointed by the President and confirmed by the Senate in the fall of 1993, this program has been very high on my list of projects that we needed to try to get up and running. You heard a lot about both the purposes and the potential benefits of the Title V program, as well as some of the real obstacles that industries and States have been facing in getting this program underway.

I think it's important at the outset to just make sure that we're operating from the same base, which is that in fact, nobody at this point is under any looming problems as a result of their Title V programs. States, in fact, have been doing an excellent job getting their programs submitted. We either have proposed or promulgated approval, or are in the process of proposing to approve a number of these programs.

I know you heard earlier from an industry representative from North Carolina, about some of the difficulties that they have faced in trying to get a permit approved there under the Title V program. I think they were to be commended for trying to get in early and get a program operating. But it is true that we've only just now received the North Carolina program, and we're actually in the process of preparing to approve it within the next month.

So as you can see, although in fact 5 years have passed since Congress passed the Clean Air Act Amendments, and President Bush signed them in 1990, the reality is that the program is just now beginning to get underway.

We believe that this program has significant benefits. And we'd like to talk to you about some of the specific steps that we're trying to take to make it work as we believe it should work. A successful Title V program as we envision it will benefit the environment by improving compliance with existing air pollution regulations and by making clear a source's compliance obligations.

So far with the States that are beginning to implement their programs, we are finding in fact that as the sources go through the process of preparing their applications, they are learning about either new emissions points that were never covered under their old permits, or control requirements of which they hadn't been aware. Similarly, States are finding that some of their rules are duplicative or overlapping each other, that there is confusion in their own

files, and that this program gives them an opportunity to clean up their act.

We believe the program can benefit the sources by clarifying what their obligations are. Obviously, for the vast majority of sources that want to comply, this is a benefit. And it also means that for those sources who haven't been complying as well as they should that the focus will be on them in terms of any enforcement. And that will mean that we don't have to spend time and effort trying to develop new and costly regulations, when in fact we could be getting more benefit from our existing control programs.

We also believe that from the point of view of the public that a sensible Title V program will give the public the assurance that the sources in their communities are complying, and that they have an opportunity to understand what those air pollution control requirements are. We feel that in addition, through the changes that we have been making in our regulatory approach and in the guidance that we're giving to States that Title V can give a great deal of flexibility to businesses that need to make frequent and time sensitive changes in their operations.

I think you've heard about the model permit that was approved recently in Oregon for Intel. EPA worked for about a year and a half with the State of Oregon on this approach. And we're now in the process of spreading the word to other industries and other States about how they can take advantage of this type of program.

We feel that this kind of an innovative plant-wide permit will be helpful not only to the industry that wants to be able to move quickly without having to go through cumbersome process, but it's also going to make it possible for sources to engage very successfully in emissions trading programs in States that are developing those programs.

Now, as you know, EPA first issued its original rules implementing the Title V program back in July of 1992. This was before my time, and the rule was immediately litigated by States, by industries and by environmental groups. And it has been a source of contention ever since. Last August, as a result of negotiations with all the litigants, EPA put out a proposal which even at the time many people, including myself, felt was too complex and simply too difficult, and didn't really get at the heart of what was needed to make the program work.

Since that time, we have met several times and have worked closely with businesses, States, and environmental groups to try to develop a significantly simpler and more streamlined approach to permit revisions. We've also been working hard to get the program up and running to make the initial process easier for sources to get into the program, get their first permit, without undue fuss, and then be in the program so that we can deal with any changes as we move along.

We are preparing to put out a new regulatory approach, a new proposal which will supplant the last year's proposal, and which will be in the form of a proposed regulation. It will, I believe, answer many of the questions that have been raised about whether EPA is serious, whether EPA can do it or not. That regulation will be out by the end of this month. And so everyone will have an op-

portunity to judge whether we've met the commitment that we've made to put out a common sense and flexible program.

Similarly, we have begun a process of working through our regional offices and with the States to clarify the requirements for getting these programs up and running through a guidance memo. And that memo is applicable today. It does not require further rulemaking action. But it indicates that in order to get started, a source has a much simpler time than many of them believe, apparently, that they were going to have in getting their initial permits.

And this is one of the main things that we've learned through our discussions with the stakeholders, was that people were laboring under the assumption that they had to, in essence, go back over everything they had done since the beginning of recorded time and furnish all that data to EPA in order to get a Title V permit.

We made it very clear through the guidance that we are planning to build on and will build on existing good State programs and make the additional requirements as minimal as possible. We don't expect sources to go back and recalculate every admissions requirement that they were ever subject to. We only expect them to certify their compliance with their current State implementation plans and permits. And we've made it clear that their requirements in terms of compliance are simply to rectify whatever noncompliance they discover in the course of doing that.

In short, I think we can say that the reaction so far to the white paper, as it's called, has been very positive, and we have seen it producing results in terms of getting States now to finish up their permit programs and get them operating.

Let me just add that in terms of other measures to reduce the costs and the burden of getting the programs up and running, we at EPA have been operating a computer bulletin board operation which is, in effect, a hotline for States and industries with questions about what needs to be in their Title V permit applications. We're very pleased that we are seeing now these programs actually getting underway. And we look forward to working with all of our stakeholders to continue that process.

That concludes my formal statement, and I'm happy to answer any questions.

Senator FAIRCLOTH. Thank you, Ms. Nichols. And again, we are redundantly saying here, everybody is very much sensitive to the necessity of protecting the air. But there seems to be general agreement, even from you and the EPA that the methods by which we've gone after it are sorely lacking in an effective way of getting the job done.

And of course, when we impose these types of restrictions and problems upon industry and the business community, they let it well be known. And we see the results when rules and regulations are not fair and are too complex to be reasonable enforced.

Ms. Nichols, what are the costs to regulated industries of implementing the Title V program? We heard Mr. Saitas say that \$60 million in Texas, and that being one of the smaller States, what would you guess the cost would run for the Nation as a whole?

Ms. NICHOLS. Well, actually, I think Texas has more permits that they issue, and we looked at this at one time, than any other State, including my own home State of California. But we have an

estimate, I don't have a total nationwide figure for the cost of the Title V program. And part of the reason for that is that we're in the process of going back and looking at the reduced costs for the purposes of doing this new rulemaking proposal that is coming out this month. Because we think it's important that we be able to show that we can reduce the costs of the program.

But initially, we heard that for a typical large complex source, the cost of an application for a permit, that is, all of the work that they would have to do to get all their permits together, and to get their Title V permit, was about \$50,000 for an average size source.

Senator FAIRCLOTH. What would you say to, well, we heard it from a number of people, but Mr. Bartosh, I think he particular went to this point, that they are in a rapidly changing business. I think he said that they maybe had 300 some odd changes a year, roughly one a day. And this extremely cumbersome permitting process that he would have to go through, it would take months.

How does EPA reconcile itself to a company such as Texas Instruments, saying they need to make the change today to be competitive with world competition, and EPA says, well, start writing, and we'll see you in 6 months?

Ms. NICHOLS. Well, I think that would be unacceptable. And we have been trying—

Senator FAIRCLOTH. But that is where we are.

Ms. NICHOLS. I don't believe that that's the case. And let me explain why. I believe first of all that the majority of changes that will occur at any large facility are going to be small changes that will require little or no review prior to the permit being changed. That is, the process that we have laid out in our guidance and will be in our rulemaking is one in which in essence, once a source has its initial permit, for anything other than the most environmentally significant changes, they will be able to go through a very minimal process in which they will notify the agency what they've done, and that will be in effect stapled onto their existing program.

Senator FAIRCLOTH. Excuse me, I want to understand what you're saying. Texas Instruments, in a plant in Texas, they have to do whatever, they're changing a manufacturing process Friday. They can simply staple to their existing permit and send it to you, a notification that Friday morning we are changing this process, and that constitutes a new permit?

Ms. NICHOLS. There are several ways they can go after they get their first permit. There are—

Senator FAIRCLOTH. Well, I assume they've got a permit, they're operating now.

Ms. NICHOLS. Their initial permit, well, I'm talking now about the Title V permit. They've got a permit to operate in the State of Texas, and they probably have some New Source Review permits that they've gotten over the years under Federal law as well. Now they're going to get a new Title V permit, one permit that incorporates all the other permits.

Senator FAIRCLOTH. They've got that.

Ms. NICHOLS. They've got that.

Senator FAIRCLOTH. But Friday morning, they want to change the process.



Ms. NICHOLS. They want to make some changes. OK. Here are the ways they could do it. First of all, in their Title V permit, they could get a blanket permit that covered their whole facility. This is like the Intel permit that I talked about before in Oregon. Assuming the State of Texas, now, is willing to let them do it. Because remember, this is a program that's operated through the States. But if the State is willing to let them have that type of a permit, they could have one permit under which they could go up and down—

Senator FAIRCLOTH. You mean if Mr. Saitas will give it to him.

Ms. NICHOLS. If the State of Texas will give them that permit, they could then make whatever changes are included within the overall terms, and as long as they don't violate the overall blanket number of emissions, they are entitled to so many pounds of VOCs or whatever, they can get those any way they want to, and they can have that type of a permit. And we are encouraging States with facilities like Intel to adopt that type of a permit. Because we really think that that's going to be the way to go for most of these complex facilities.

But let's just say for the moment they don't have that kind of permit, because for example, Texas doesn't want to have that kind of permit. They want to issue individual permits for changes through a new source review program. From our point of view, as far as the Title V program is concerned, all we would ask for over and above what the State of Texas would already require would be that there would be notification and if it was a significant increase over their existing emissions, there would have to be some opportunity, 30 days if it was the most environmentally significant, changes before the change went into effect.

But for many types of changes that sources make, when they switch fuels or switch one piece of equipment on and off, they wouldn't even have to go through that amount of public notification before they actually made the change.

Senator FAIRCLOTH. Who decides what's significant? I mean, that's the key word here. Who decides what's significant?

Ms. NICHOLS. There are cutoffs in terms of the amount of the emissions increased, which the State would determine, and it's up to the State to establish those limits to match the degree of public participation to that significance level. It would be defined by the State.

Senator FAIRCLOTH. I'll ask this question of Mr. Herman or you, although you've mentioned that Title V permit developed for an Intel facility in Oregon, and the success of the program. But it's my understanding that the permit took 4 years to negotiate. Could you tell me what it was about the permit that took over 4 years to complete?

Ms. NICHOLS. I believe that 4 year figure reflects maybe the time from when the idea first dawned in somebody's mind to the time when the permit was actually issued. It was a year—

Senator FAIRCLOTH. No, they—

Ms. NICHOLS. It was a year and a half from the time the application was actually filed, and from the time that EPA got it, I believe it was 5 months, which is still not good enough for somebody who's making changes, but for the very first of these kinds of permit,

that's not bad. That's well within the bounds of what it would normally take for a large facility to get an initial permit.

Senator FAIRCLOTH. Well, of course, the permit was for 4 years in negotiating to file the permit correctly.

We are delighted to welcome Senator Graham from Florida. Senator Graham was Chairman of this subcommittee last session of Congress, and is very, very familiar with the Clean Air Act and Title V. Senator Graham, would you like to have an opening statement?

**OPENING STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR  
FROM THE STATE OF FLORIDA**

Senator GRAHAM. Thank you, Mr. Chairman. I appreciate your generous remarks. I apologize for being so tardy, and in light of that, I will try to listen. I have a statement for the record.

[The prepared statement of Senator Graham follows:]

STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Thank you, Mr. Chairman.

During this Congress, there has been a lot of discussion about two important issues. One is how we can simplify government regulations. The other is how we can improve the relationship between the Federal Government and the states.

Today's hearing implicates both of these issues.

The permitting provisions of the Clean Air Act may be the most significant regulatory exercise ever undertaken by the Environmental Protection Agency. The permitting requirements potentially effect almost 35,000 businesses. The compliance costs are estimated to be more than \$500 million a year.

Given the scope of this regulation, it is critical that EPA take an approach that is flexible and that is sensitive to the special needs of small businesses, which may not have the resources or expertise to deal with extensive new permitting requirements.

The permitting provisions of the Clean Air Act also will have a big impact on the relationship between EPA and the states. I believe that most states are both willing and able to play a larger role in the implementation of our national environmental laws. I also believe that a larger state role can be achieved in a way that improves environmental protection. So I believe that it is critical that the Clean Air Act permitting program be designed in a way that states the flexibility and resources that they need to be full partners.

Finally, Mr. Chairman, we should keep in mind that today's hearing is not just about the permitting process. It's also about clean air; about reducing pollution.

Senator FAIRCLOTH. We are into our third panel, and Ms. Nichols has just spoken and Mr. Herman chose not to have an opening statement, and I had just been talking to Ms. Nichols. We've had three very good and very strong panels. And we've had people from industry and from the environmental interest groups, also. So if you would care to—

Senator GRAHAM. One of the goals of Title V of the 1990 Amendments to the Clean Air Act was to try to create a consolidated permit. I remember during the hearings leading up to those 1990 amendments that one of the criticisms was multiple permits which were often at least perceived as being inconsistent. From the standpoint of the person who has had the responsibility, at least in recent months, to administer this program, how well do you think we are proceeding in terms of accomplishing that objective of a single, coherent air quality permit?

Ms. NICHOLS. Well, Senator, I think we're getting there. We have two States now, and they're really at the head of the wave, that

are the ones that we actually have some experience with seeing Title V permits being issued. And so far, they are coming out exactly the way we would hope they would have.

In other States, they are just at the stage now of receiving the application and reviewing them and working with their industries to get their permits in line. And as a result of, I think, the improved dialogue that we've had with the States in recent months, we're seeing that there's a lot of improvement in terms of people coming to closure on what's going to be in the permit, and trying to make it into the kind of one stop permit that we have all envisioned that it was going to be.

It has been a more difficult task than I suspect anybody envisioned when Congress passed this provision in 1990 because of the fact that the different States have developed their own permit programs, and they are very well developed in many States, and are very different from each other. And so it was important for EPA to be able to come in and to figure out how we could give the minimum amount of guidance to have a program which is national in scope, and which does guarantee a certain level at least of enforceability and accessibility, but at the same time doesn't force States to go back and change systems that are working well for them.

And I think we are now finally at the point, we believe, when we put out our proposed regulations this month, where we will have that sort of a program laid out in the statute, where it really will be a simplified, single air permitting program.

Senator GRAHAM. Are there any modifications in the section 5 statutory modifications that you would recommend that might enhance the operation of the program?

Ms. NICHOLS. Frankly, Senator, I think at this point we have now worked our way through enough of the underbrush, so to speak, that we think we have a proposal for a regulatory changes which will meet the objectives that Congress had and that will give the public the benefits of a good Title V program. And we would not see at this stage a need for additional legislation.

Senator GRAHAM. We're in the midst of considering a major regulatory reform bill. One of the critiques of the regulatory system has been that Congress has not always been as clear as to what its intentions were, and therefore given adequate direction to the public at large, including those responsible for managing the program. Do you believe that criticism is applicable as it relates to Title V of the Clean Air Act? Is the intention of Congress sufficiently clear?

Ms. NICHOLS. Well, actually, Senator, as one who's worked primarily with the Clean Air Act throughout my career, I would have the opposite criticism, that usually we're given too-specific guidelines in terms of deadlines and numbers of things and types of chemicals and regulations that have to be issued, rather than too little guidance.

I think if anything in the early days of implementing this law that the Agency suffered just from having such a huge laundry list of mandatory things that they had to do that sometimes the big picture, such as Title V, kind of got lost for the trees. And so in that sense, I think it's almost the opposite of the problem where the Agency is given too much discretion. I think if we had been

given more flexibility in the light of hindsight, we could have done a better job.

Senator GRAHAM. If I could ask one last question, Mr. Chairman.

Senator FAIRCLOTH. Help yourself.

Senator GRAHAM. In addition to the statutory skeleton of a program, you then have the muscle, which represents the human beings and others who have the task of performing it. I know this is a time in which there have been some significant reductions in funding for various programs under the EPA. Do you feel that in the current budgets that are being proposed for the Agency that you will have sufficient personnel and other resources in order to carry out the congressional intent of Title V?

Ms. NICHOLS. Well, Senator, we have been looking very hard at what we would have to do if we were confronted with the roughly one-third cut in resources that would be our share, if the House appropriations bill goes forward, as it currently is. I think the major impacts for us would be in the area of information and technical assistance that we would be giving States in implementing their Title V programs.

Many companies, especially those that operate in more than one State, want EPA to give more guidance about specific, sometimes very technical issues, about what should be in a Title V permit and what doesn't need to be in a permit, that type of thing. And we would find ourselves, frankly, I think, in a position where we would have to be focusing all of our efforts on meeting mandatory requirements to get out things like toxics rules, and would not be able to provide that kind of assistance.

I think that would be bad for the program, it would be bad for the sources. And Mr. Herman, who runs the enforcement office, has a different problem. He's facing a 50 percent cut.

Mr. HERMAN. Senator, the proposed cut in the bill that passed the House yesterday does provide for a 50 percent cut for non-Superfund enforcement and compliance assurance efforts at EPA. As I think you may know, was reorganized by Administrator Browner 2 years ago.

So the impact is not just on bringing cases, but it involves a fairly extensive gamut of activities, including extensive compliance assistance for small business, also for larger business. And all of our activities, with a 50 percent cut, we will have to go back to the drawing boards and basically examine everything, everything we do.

Senator GRAHAM. Thank you, Mr. Chairman.

Senator FAIRCLOTH. Mr. Herman, are most enforcement efforts undertaken for violations of the Clean Air Act done by the Federal or by State officials?

Mr. HERMAN. The vast majority of enforcement actions are State actions. The Federal actions are basically a very, very small percentage of the enforcement activity that takes place throughout the country.

Senator FAIRCLOTH. Of course, the States are closer to the problem. But are they more effective in enforcing the Clean Air Act requirements than the Federal agencies?

Mr. HERMAN. I wouldn't characterize it like that. I would say that the Federal and State efforts should complement each other,

that there are certain things that the Federal Government can do better than the States, and certain things that the States can do better than the Federal Government.

Certainly, with regard to multi-state companies or situations where you have pollution that travels across State lines, in cases where States are adopting different standards, the Federal Government basically is there to provide a level playing field between both States and also among competing businesses. And I think in that regard, we play an essential role.

In other efforts, where the problems tend to be more local, where the State government knows the industry best, the States do it best. And what we've been trying to do is have a program where our efforts complement the States' efforts.

Senator FAIRCLOTH. There is a question that has come up and we've heard it, is it EPA's policy to take an enforcement action against a facility that based on a good faith estimate of its emissions, determined that it did not need a permit, if it is later discovered that that facility did in fact need a permit?

Mr. HERMAN. Senator, the way I would answer that is to say that we would have to look at the specific facts in the case to determine what constitutes good faith—what was the knowledge at the time, what were the requirements at the time? Now that that is taken into account, we might bring an action to just get injunctive relief so that the situation is corrected, or we might bring an action for the company to get a permit, whatever would be appropriate.

Senator FAIRCLOTH. Well, I'm sure that's, and I understand your answer, but it would just seem grossly unfair to me that if a company, in good faith, it was determined they did not need a permit, and sometime later it was determined they did, I just can't imagine some sort of prosecution of that company because they acted in good faith and it was proven to be wrong.

Mr. HERMAN. If I might just build on something you just said. I want to make it clear that I am not talking about changing the rules in the middle of the game or after the fact and going back and saying, you didn't get back then what we're saying you need now.

What we're talking about, and what I assume you are talking about is, what the existing requirement was at the time the company made the judgment. And then I think, you're right, we would look at all of the factors which went into the company's decision not to get the permit.

Senator FAIRCLOTH. This is my last question, and if Senator Graham has one, we'll go to that. This is one of the things that has been particularly bothersome for industry and for the private sector, and that is the extensive avenues for professional environmental organizations with large staffs of experienced lawyers to meddle in the permitting process. They get deeply involved in it. They can delay the process, they can sue the industry for just about anything in the Clean Air Act, even minor technical violations.

Are there any checks on environmental groups involved? If there are, what are they? And is this getting ready to become a vehicle for just anti-industry activists whose sole desire is to harass business?

Ms. NICHOLS. Maybe I can address that issue, because it really fell into the rulemaking piece of this.

Senator FAIRCLOTH. And it's becoming, and I don't mean to interrupt you, but it's becoming an increasing broad based problem for industry.

Ms. NICHOLS. I understand the concern that industry is raising. And Title V does provide that citizens can petition EPA to object to a change at a facility. But I wanted to make it clear that this only occurs after the permit is issued. So it's not something that could be used as a method to delay or slow down a change at the facility.

In our rules, we have provided that any petition must be based on issues that were raised during the public comment period, so you can't have some group that's sort of going around looking at permits and trying to challenge them after the fact. In other words, they have to use their due process to come in and make any objections they have during the public hearing process, if there is one, or public comment period if there is one.

And then, if a petition is filed and the EPA agreed that it had merit, the EPA would then work with the State to ask the State to make any changes by reopening the permit. In other words, if it really were apparent that there had been some violation of the law. But this would not subject the plant itself to any penalties or any other kind of enforcement type action unless in a highly unusual case where the source itself had made false statements in their application or was deliberately concealing some violation of the law, which of course would always be subject to an enforcement action.

But I think that it should be clear and I believe it is clear in the rules themselves that Title V doesn't open up any new ways for people who are just seeking to cause permits to be stopped to halt those permits from being issued or to prevent business from going about their way. There is a balance here in which citizens do have a right to petition on these permits, and EPA has made it clear that we're not planning to review any but the most significant permits, and then only to look at them if there is some issue that's raised that we feel really has merit.

This is a process that has worked, I believe, in the Clean Water Act in the past, and I checked with my colleague on this issue, and he was unable to come up with an example where it has ever actually been used in this context.

Senator FAIRCLOTH. Would you care to comment on what Mr. Hawkins was saying about their involvement?

Ms. NICHOLS. Well, I read Mr. Hawkins' testimony, though I wasn't able to listen to all of it. Generally speaking, I think he is disappointed that we haven't gone further in terms of asserting an independent EPA veto over even insignificant permits and feels that we should be requiring more in the way of direct public involvement by citizens, in all changes that take place at any permitted facility.

We have proposed to strike the balance a little bit differently because we feel that although citizens clearly do have a right to information and should be able to be involved when there are major changes going on in their communities, we also believe that for

most of the routine permitting actions that States actually are engaged in, it just isn't worth the burden to industry for any additional benefit that citizens are going to get as a result of it.

So we believe we have the discretion within the statute to draw the line.

Senator FAIRCLOTH. I thank you, Ms. Nichols, Mr. Herman. Senator Graham?

Senator GRAHAM. I have no further questions, thank you, Mr. Chairman.

Senator FAIRCLOTH. We thank all of you, the audience and the participants, too. This is what Government is about. We have had a good session, and I thank you for coming.

[Whereupon, at 4:34 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Additional statements and material for the record follow:]

STATEMENT OF DAVID HAWKINS, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

Mr. Chairman and members of the Subcommittee, thank you for inviting the Natural Resources Defense Council (NRDC) to testify today on implementation of Title V of the Clean Air Act, the Federal operating permits program.

NRDC is a national citizens organization with over 150,000 members, dedicated to more effective programs to protect and enhance human health and the quality of the environment. Since its founding in 1970 NRDC has participated in implementation of the Federal Clean Air Act as one of our group's priority programs. I have worked in this area, at NRDC since 1971 and also was privileged to serve as EPA Assistant Administrator for Air, Noise, and Radiation during President Carter's Administration.

WHY HAVE A PERMIT PROGRAM?

The first question I'd like to address in today's testimony is "why do we need a Federal operating permit program at all?" Let me start by sketching some significant features of Federal, air pollution control history.

Thirty years ago State and local governments were pretty much on their own when it came to air pollution control. There was effectively no Federal funding to support operation of control programs and no laws establishing minimum requirements for either State or Federal control programs. However, there was air pollution. Both large metropolitan areas and less urbanized interstate regions were afflicted with high concentrations of various pollutants that damaged health, fouled skies, and inflicted economic damage in the form of soiling and accelerated wear of structures and materials.

While a number of functioning municipal air pollution programs existed outside of California there was little in the way of State program activity. This structure of managing air pollution demonstrated its inadequacies. The air did not get cleaner; as the economy grew, the air got dirtier. Lack of funds was a major problem. But lack of a firm foundation on which State and local programs could be built was a bigger problem.

The cliché that air pollution does not respect political boundaries is worth restating. Many serious interstate pollution problems simply could not be resolved without the cooperation of numerous jurisdictions—cooperation that usually was difficult to obtain in the absence of a national framework to structure goals and define responsibilities.

Even apparently purely "local" air pollution problems were difficult to combat without a Federal program to support efforts. While a given factory's pollution might be local, the firms owning such factories were often headquartered elsewhere and operated facilities in many States. Such firms were not shy about threatening to move their operations when State or local governments sought to adopt pollution control measures on a local level.

In an attempt to turn the corner on a steadily worsening national air pollution problem Congress in 1967 took the first halting steps to provide a framework of State-developed programs aimed at State-selected air quality objectives. A short 2-year experiment with this approach was enough to convince both Congress and the States that a more comprehensive structure would be needed.

To meet this need Congress enacted the Clean Air Act Amendments of 1970, whose basic outlines remain in today's Clean Air Act. As you know, the Act divides responsibility between the Federal, State, and local levels of government. National Ambient Air Quality Standards—the environmental goals toward which we strive—are set by the Federal Governments and programs to meet those objectives are adopted by State and local governments.

Health and environmental needs are the central decision criteria in the first component of the program—setting the air quality standards. Costs, technical feasibility, and other social goals are considered in shaping the second component—adoption of control requirements for various industrial, commercial and consumer categories as well as in the selection by Congress of the timetables for achieving the air quality standards. The general scheme of the Act calls on the States to adopt control requirements for existing, pollution sources while the Federal Government is directed to adopt requirements for new stationary and mobile sources and. For sources of particularly toxic air pollutants.

Compared to the situation 30 years ago, the Federal clean air program has enjoyed tremendous successes. Each year millions of tons of harmful pollutants, are no longer released into the air. Across the country tens of millions of people are now breathing air that meets air quality standards in dozens of localities that were badly polluted in the past. This progress has occurred while the country has enjoyed enormous economic growth and major increases in motor vehicle traffic.

While we should celebrate the success we have achieved, we should not ignore the need for additional progress in meeting environmentally sound air quality targets. In our largest metropolitan areas, where scores of millions live, and in many less populous areas, our air all too frequently fails to meet established public health standards. Wide areas of the country, rural, suburban, and urban, are afflicted with pollution-caused haze—a term that sounds misleadingly innocuous when one considers that the particles forming that have been identified in carefully done studies as responsible for as many as 60,000 deaths per year. In addition, many sources of toxic pollutants are just now being addressed by control programs and the sources of the atmospheric poisoning of the Great Lakes are still not controlled.

Since 1970, the Act has, been amended several times and the dates set by Congress to meet air quality goals have been extended from the original targets of 1975 to a range of dates stretching from 1993 to the year 2010. Along with extensions of attainment dates, Congress enacted additional program requirements based on testimony from State and local government, citizen groups, business, and the Federal Government. In 1990 Congress added a requirement for an operating permit program as part of State air quality programs.

Congress' decision to add the operating permit program to the Act sprang from an interest in identifying a cost effective mix of strategies that could help us complete the job of meeting our air quality goals. Congress recognized that the additional emissions reductions needed to achieve cleaner air could come from only two strategies: adoption of more stringent emission controls and improved compliance with existing control requirements. Congress heard testimony from many that the Act should not focus exclusively on new and tighter emission standards. There was and is good reason to believe that significant cost-effective emission reduction opportunities lie in the strategy of better and more universal compliance with rules that already are in place.

Accordingly, Congress provided an enhanced set of compliance tools in the 1990 Act, including broader enforcement methods, requirements for improved monitoring, and reporting of emissions, and an operating permit program. As, you know, the concept of an operating permit is straightforward the operating permit is a document that compiles in one place the air pollution control obligations that apply to a pollution source; both emission limits as well as requirements to monitor and report emissions.

Most Federal environmental pollution abatement statutes have had such permit programs for many years. The lack of a permit program in the Clean Air Act contributed to confusion and enforcement controversies regarding sources compliance obligations. In the absence of a permit it is extremely difficult for anyone whether the State, a citizen, EPA, or even the source operator to determine all of the requirements that apply to that source. While the term State Implementation Plan suggests a document, the reality is more like a coral reef, with complex formations that have accreted over time and numerous features hidden in surprising nooks and crannies. Requirements applicable to a single, source may be scattered in scores or even hundreds of separate rules, adopted over 20 years. In addition, many State rules are written to apply to categories of sources and controversies have arisen over whether a particular source falls under, a particular category.



This complex relationship of control requirements and sources has made it difficult to evaluate source compliance in an efficient fashion. The damage done by this situation is clear: if sources are not certain of their compliance duties, the likelihood of inadvertent noncompliance increases. This in turn results in continued excess air pollution and more intense controversy when and if enforcement authorities eventually figure out that a source is not doing what it should have been doing.

The lack of a comprehensive document setting forth control requirements and emissions information also impedes development of more flexible "trading" programs to meet environmental goals. For example, facility-wide emissions caps for a pollutant require complete information about the facility's emissions and all of its control requirements. The lengthy and difficult process of assembling this information in the absence of a permit program imposes large front-end costs that function as "barrier to entry" for many firms that otherwise might discover opportunities to reduce compliance costs and improve environmental performance.

To remedy these problems, President Bush proposed a permit program as a key part of his comprehensive Clean Air Act revision bill in 1989 and the parent Committee of this Subcommittee included such a program in the bill it reported to the full Senate. See S. Rept. No. 101-228 (1989).

#### EPA'S DEVELOPMENT OF THE PERMIT PROGRAM

On passage of the 1990 Act EPA quickly drafted rules to implement the new permit program but controversy soon developed. The final rules were not issued until July 1992, following months of intense disputes between industry, EPA, other Federal agencies, State and local agencies, and environmental groups.

When the rules were issued they were promptly challenged in court by my organization, by various industry groups, and by a number of States. Since those challenges were filed there have been many hours of negotiations where the parties have attempted, I believe in good faith, to understand each others concerns and to see if common ground could be found. In addition to these litigation negotiations, there have been many hours of meetings with broader groups including States and industries not involved in the litigation.

In August 1994 EPA issued a proposal to revise the 1992 rules in a number of respects. Some of the features of that proposal reflected changes that the litigating parties agreed to, while many others were not agreeable to all parties but were proposed to solicit broader comment. The August 1994 proposal is complex. That complexity is due in large part to EPA's good faith attempt to provide a range of procedures designed to accommodate differing objectives and concerns of States, industry, and citizen groups. I know that Assistant Administrator Nichols felt the August 1994 proposal was excessively complex and time has confirmed her judgment.

There have been significant developments since the August 1994 proposal. First, EPA has convened numerous meetings of industry, State and environmental interests in an effort to craft a simpler model. These meetings have helped the participants make significant progress in resolving differences and there is reason for optimism that a reasonable resolution is possible. Second, the process of preparing permit applications has sharpened a number of issues relating to the information and certifications that must be included in applications.

EPA has taken a number of steps to address the remaining issues in the Title V program. In April 1995 the agency circulated a draft supplemental rule relating primarily to permit revisions and has stated it intends to issue a supplemental proposal this summer. In recent weeks EPA has issued several documents that spell out how the agency intends to proceed. These include a July 20 letter to you Mr. Chairman, a June 20 letter to Representative John Dingell, and a July 10 "White Paper".

In connection with these actions I would like to highlight a few issues that are of great importance to citizens who will depend on the permit program to provide basis for improved compliance and a more transparent system for informing communities of their sources of a pollution and the control obligations of those sources.

#### OPERATIONAL FLEXIBILITY AND PERMIT REVISIONS

Of great concern to all participants are the procedures for making changes in operations for sources covered by Title V permits. The ideal process is one that is simple, speedy, facilitates public participation, and ensures clear, enforceable permit terms. Satisfying all of these criteria simultaneously has proven to be a big challenge!

Since permit terms are to be a reliable codification of a source's obligations and since a shield against enforcement of other requirements may attach to such permit terms, NRDC believes the public must be notified of changes in required emission

limitations and associated requirements, including test methods, monitoring, record-keeping, and reporting. We believe that the program's "operational flexibility" provisions changes with only 7 day, notice to the permitting authority should be limited to switching between alternative obligations that have already been reviewed and subject to an opportunity for comment.

As for other changes, we favor a streamlined system that allows for quick turn-around of less significant changes while assuring public access and participation opportunities for more important changes. NRDC is in general agreement with the approach that EPA has evolved since last year and that the agency has outlined in greater detail over the last few weeks. As we understand it, the first feature of this approach is to rely on State new source; review (NSR) programs to satisfy Title V participation requirements. This is sensible. We have always stated our interest is in assuring in opportunity for public participation in State approval of facility changes. If that opportunity is provided by existing NSR processes, there is no need to repeat the process to incorporate the change into the Title V permit.

EPA intends to propose a three-track system with specific minimum notice and comments opportunities for the most important changes; State discretion as to the amount of notice and comment for the middle range of changes; and no required notice and comment for *de minimis* changes. In principle, NRDC believes this approach is worth trying. We urge EPA and the States to carry out this more flexible approach with proper concern for the public's desire to be able to learn about permit terms and offer comments when needed. States should not treat the *de minimis* exemption as a device to shut out citizens from important changes; and the discretion to pick appropriate procedures for the middle-range changes should be exercised in consultation with interested citizens groups in an effort to accommodate valid concerns. If the flexibility is not abused, the proposed EPA approach may prove to be a workable one.

The Act gives EPA authority to object to permit terms acid to permit changes as not in accord with the Act's requirements. EPA has proposed to waive, for a 5-year period, its right to object to middle-range changes, except when petitioned by citizens. We are concerned with this blanket waiver. We think a better approach would be for EPA to implement a waiver policy that is more closely tailored to the presence of other safeguards in each State's program. Under a tailored approach, States that afford broader public participation opportunities under the flexible approach proposed by EPA would enjoy a broader waiver of EPA's authority to object; States that provided fewer opportunities for the public would be subject to a greater potential for EPA objection in appropriate cases. This tailored approach would treat public participation and EPA objection rights as complementary safeguards; where one safeguard was more substantial, the other could be more limited.

In contrast, EPA's intended approach appears to guarantee a blanket waiver of EPA-initiated objections even when a State chooses to restrict public participation to some irreducible legal minimum. But in such a State EPA cannot assume that citizens will know enough about permit changes to submit timely petitions to EPA to use its objection authority. Accordingly the diminished safeguard of public scrutiny makes an independent EPA objection safeguard more necessary.

#### COMPLIANCE PLANS AND SCHEDULES

We believe compliance plans and schedules for achieving compliance are critical elements of an adequate permit. Many new requirements will, become effective during the terms of permits. The public depends on timely compliance with these requirements to deliver cleaner air. For many requirements there, are significant lead-time needs for selection, design, and installation of needed equipment. Without compliance schedules, an agency or the public might have to wait until after the actual date that emission reductions were to be achieved before an enforcement action could be taken. This could result in additional years of continued pollution in amounts above required levels. In our view, EPA's rules should be changed to address this problem.

#### EMISSIONS MONITORING

One of the biggest defects in the nation's clean air program is the failure to have adequate emissions monitoring so that the public, agencies, and pollution source operators can know how the day-to-day performance of sources compares to their control obligations. EPA's permit rule contains inadequate guidance on how States should close this very large gap in our air pollution information system. We are concerned that EPA may be heading away from implementing the Act's requirement for better actual emissions information; relying instead on indirect methods for

guessing at emission& based on operation and maintenance information. We believe this would be a fundamental mistake.

#### COMPLIANCE CERTIFICATION

The Act's requirement for compliance certification is a critical reform that places the primary responsibility for compliance where it should lie; with the operators of emission sources. In its July 10 White Paper, EPA has announced a large step back from a full compliance certification program: it will not require sources to address their previous permitting applicability determinations in their Title V permit applications. The apparent justification for this decision is a concern that for some, sources, the burden of a thorough review of previous determinations would be so large as to jeopardize the source's ability to submit a timely application. But the exemption intended by the agency is broader than warranted by this rationale. If EPA proceeds with this exemption from the Act's certification requirement, it should require a source seeking a deferral of the, certification regarding previous determinations to certify instead that the burden of the review would prevent timely submission of its application. EPA also should clarify that once permits are issued, the annual certifications required by the Act will have to address the source's previous applicability determinations.

#### CONCLUSION

In closing, I want to thank the Chairman and the rest of the Subcommittee members for conducting oversight hearings into the implementation of the Clean Air Act. Continuing involvement by Congress in the decisions made by States and EPA under the Act is crucial to your understanding the program's strengths and weaknesses and to remedying deficiencies.

I am aware that some Senators may feel that the most pressing problems to address in such oversight hearing's are those related to complaints about the cost, complexity, and burdens associated with Clean Air Act compliance. I think you should address these concerns and give them a full airing. However, I hope that you will consider directing your attention to other aspects of the program as well; in particular, to a thorough assessment of the progress we are making to achieving the pollution reduction and air quality objectives of the Act. While we undoubtedly can do a better job of making the Act easier to comply with, it is also true that we, need to get better at the core tasks of cleaning the air. Your involvement and interest in this part of the clean air challenge will be vital to the program's success.

Thank you for the opportunity to present these thoughts. I am happy to answer any questions you may have.

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#### STATEMENT OF PAUL J. EISELE, DIRECTOR, HEALTH, SAFETY AND ENVIRONMENTAL AFFAIRS, MASCO CORPORATION

Good afternoon, Mr. Chairman and members of the Subcommittee. I want to thank you for the opportunity to testify on this important issue for our industry. I am Dr. Paul Eisele, Director of Health, Safety and Environmental Affairs for Masco Corporation.

I am appearing on behalf of the American Furniture Manufacturers Association (AFMA). AFMA is the largest furniture industry trade association in the United States. Approximately \$20 billion in sales are produced annually by domestic furniture manufacturers, and sales by AFMA member companies make up the vast majority of that figure. AFMA members have home offices or facilities in almost every state and employ approximately 500,000 workers.

Masco Corporation, and its allied sister companies, Masco Tech and Trimas, are Fortune 1000 diversified manufacturers. Masco Corporation is the largest furniture, kitchen cabinet and plumbing product manufacturer in the United States, with over 200 small to mid-size manufacturing operations. For example, plant size within Drexel Heritage, a Masco furniture manufacturer, ranges from 50 to 650 employees. While Masco is a comparatively large corporation, most firms in this industry can be characterized as small business manufacturers. Masco facilities have about 12,300 employees in North Carolina, 500 employees in Kentucky, and 2,300 in California. Forty (40) percent of our manufacturing facilities will require Title V permits.

This is a highly competitive industry, in which success depends on responding to rapidly changing consumer preferences. We are deeply concerned about the Clean Air Act Title V Operating Permits Rule, which would reduce our flexibility to re-

spond to such changes, and thereby hurt our competitiveness in a cost-conscious global marketplace.

The industry takes seriously its responsibility to help the nation meet its Clean Air Act goals, even though our industry accounts for less than 1/2 of one percent of VOC emissions. For example, Masco has participated in voluntary EPA initiatives to reduce emissions. Masco Corporation and Masco Tech have received commendations from EPA Administrators Reilly and Browner, respectively, for meeting the 1993 reduced 33/50 emissions goals of potentially toxic compounds. Both companies have already exceeded their 1995 reduction goals, and I fully expect this progress to continue in the years ahead.

Recently, the American wood finishing industry led by the American Furniture Manufacturers Association, Kitchen Cabinet Manufacturing Association, Business and Institutional Furniture Manufacturing Association and National Paint and Coating Association concluded an historic negotiated rulemaking with EPA, states and environmental groups establishing Reasonably Available Control Technology (RACT) and Maximum Achievable Control Technology (MACT) rules for the industry. I was privileged to serve as a co-chair of the industry group in this activity. This effort consumed an unprecedented amount of time and effort, but reflects our company's and our industry's commitment to advancing the nation's Clean Air Act goals. Our efforts and commitment were recognized in a January 1995 letter to industry participants in the Reg-Neg from EPA Administrator Carol Browner:

"You are to be commended for incorporating pollution prevention into all aspects of the agreement, and for your innovation in dealing with the challenges of such a diverse industry and complex emissions source. . . . your work is a credit to industry-environmental-governmental cooperation. . . ."

This unique process represents the largest Clean Air Act "Reg Neg" completed by EPA, impacting thousands of woodworking manufacturing operations throughout the Nation. The industry's principal concern during the Reg-Neg process was to achieve reduced air emissions in a manner that allowed the greatest operational flexibility. Instead of automatically requiring costly add-on control equipment, the goal was to let the individual furniture plant find the best means of reducing air emissions from several options. Options could include using reformulated coatings, improved solvent management or, if appropriate and cost effective, add-on control equipment. Through the negotiation process, the industry was able to achieve its goal of flexibility in exchange for tighter controls of potentially toxic compounds which were the concern of the negotiators from the environmental groups. Thus, we agreed on cheaper, cleaner and smarter regulations that are now going through the Rulemaking process. The bright lights of this mutual success have been significantly dimmed, however, by ongoing development of the vehicle that translates these rules into a compliance program for each of our plants, that is, the Title V air permit.

While the negotiators at the wood finishing regulation table were looking at ways to make the air emission reduction process flexible, under Titles I and III of the Clean Air Act, EPA was expansively interpreting the statutory requirements of Title V of the Clean Air Act and decreasing the flexibility employers need to meet customer desires and achieve environmental results. While the wood finishing negotiations were working on making the emission rules reasonably simple so that they could be understood and implemented by small woodworking shops, the EPA was developing rules that only the most sophisticated environmental attorneys and engineers could understand. Let me provide some examples.

Companies are presently in the process of preparing Title V permit applications. Masco furniture operations in North Carolina completed its first draft application in January of 1995 to serve as a model for other company applications to meet the State of North Carolina projected March 1995 deadline. Unfortunately, EPA did not approve the North Carolina program, and our proactive work was for naught. It took our employees over 400 hours to develop the application based on their best judgment about its permit requirements. Our plants in Virginia are in greater uncertainty as the EPA has disallowed Virginia's plan and they are embroiled in legal squabbling.

We believe that Title V can be most effective as a mechanism to provide total facility air emissions to the appropriate local, state and Federal regulatory officials. The public should also have access to this information and the right to public review and comment at the initial stage of granting an operating permit. We also believe that the drafters of the Act were correct to have a place within the statute to contain the legitimate applicable requirements. Title V is that place. These Title V requirements must be recognized in the context of the first four titles of the Act, and in the case of the furniture industry, Titles I and III are most applicable. Title V should not be a stand alone, additional enforcement mechanism, as it has become.

At Masco we have been focusing on what I believe to be the substantive issues of doing emission inventories and developing operational plans to meet manufacturing needs under a five year permit. This is no easy task for furniture plants. Unlike many industries that can chart long-range operational needs for product development, furniture manufacturing runs on short cycles. We are a fashion industry and at least every six months, fashions change. Our industry has a Spring and Fall Market every year in High Point, NC, where the buyers make or break manufacturing plans. The marketplace decides what products we will build over the coming months. Therefore, rightly so, we have spent a good deal of time and worry on how we can make the manufacturing shifts necessary under a proposed permit system which can require continuous permit modifications with concomitant public hearings, etc., for seemingly minor changes in finishing material use. We still will comply with our statutory emissions limits imposed under Titles I and III.

I believe that the implementation of Title V should maintain a distinction between a State's New Source Review program and the Federal Operating Permits program. New Source Review is best handled between the local Agency and the EPA without involving every permit applicant.

I am also concerned about the potential for abuse of the public review process, should public input be required for even minor process changes. Many process changes that have little or no emissions impact are nonetheless indispensable to competitiveness and must be implemented quickly. Industry knows from experience that there are interest groups who do not share our goal of reconciling strong environmental protection with economic vitality. An unlimited public review framework could be misused by such groups to grind innovation and competitiveness to a halt.

While this is the substantive issue, many other evolving issues regarding the permits seem to spring up, blossom and fade as EPA develops the permit guidance and rules. An example of this is compliance certification, especially the "lookback" enforcement provisions proposed earlier this year. Fortunately, EPA, in its July 10 white paper, has eliminated this lookback. One must ask why they proposed it in the first place.

We have begun to review the agency's July 10 Title V white paper. While we recognize that these policies have not been embodied in a final rule, we must compliment the agency on beginning to address many problems raised by the states and employers. We believe that until the changes discussed in the white paper have been finalized, as the agency itself has acknowledged, there are continuing questions about what comprises a complete operating permit. Therefore, rather than subjecting employers to enforcement uncertainty, we propose a delay in the Federal enforceability of these requirements for at least 2 years, and until such time as the states, the public and employers have certainty of the requirements they must meet. This does not, and should not be interpreted to waive our responsibility to provide our emissions inventories. This will not affect our obligations to meet the Titles I and III substantive requirements as agreed to in the regulatory negotiations.

As a permittee, I am caught on the horns of a dilemma. Is unreasonable certainty better than reasonable uncertainty? That is, would we be better off accepting a rigid and inflexible permitting scheme in return for the certainty of knowing the ground rules in advance? Or should our planning be suspended while EPA settles on a more workable approach? Clearly, forcing a choice between these options is neither reasonable, fair, nor in the public interest. I am hopeful that the oversight process initiated by this Congress will result in a sound and flexible permitting framework that provides sufficient guidance for facilities to comply with EPA's goals, but which also accommodates the process changes necessary to the success of American industry.

I appreciate the opportunity for presenting the viewpoints of small to mid-size manufacturing operations and am prepared to answer any questions.

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STATEMENT OF DAN BARTOSH, JR., CORPORATE ENVIRONMENTAL MANAGER, TEXAS INSTRUMENTS, DALLAS, TX

#### I. INTRODUCTION

My name is Dan Bartosh. I am the Corporate Environmental Manager for Texas Instruments Incorporated or "TI". I appreciate the opportunity to testify for this important hearing on the implementation of Title V of the Clean Air Act I especially would like to thank Chairman Faircloth for inviting me here today and his willingness to find an appropriate solution to the problems presented by Title V of the Clean Air Act.

I am testifying today on behalf of both TI and the Air Implementation Reform Coalition or "A.I.R". The A.I.R. Coalition is an Ad Hoc group of companies from several

industrial sectors devoted to enactment of procedural changes in the Clean Air Act. What these companies all have in common is the absolute necessity to react quickly to an ever changing and fiercely competitive global market. These companies also share a strong and proactive environmental ethic and support the fundamental premise of the Clean Air Act—clean air for every American. The essence of the AIR agenda is to clear away the Clean Air Act's unnecessary red tape that diverts our resources from reducing pollution and strikes at our ability to compete in the global marketplace.

TI, a worldwide corporation headquartered in Dallas, TX, is a high-technology company with 43 manufacturing plants (39 wholly-owned by TI, 4 are joint ventures) in 17 countries. In the US, we have 16 manufacturing plants in Texas, Kentucky, Massachusetts, and Michigan. TI products include semiconductors; defense electronics systems; printers, notebook computers, and consumer electronic products, electrical controls, and metallurgical materials.

TI is the world's sixth largest semiconductor manufacturer, and currently employs approximately 56,000 people worldwide and 33,500 in the United States. TI has a net market value of approximately \$14 billion, net revenue in 1994 of over \$10 billion. Between January 1994 and December 1996 TI will have invested over \$1.5 Billion to construct three new semiconductor manufacturing plants in Texas that will add over 1,700 new jobs, not to mention the hundreds of jobs created during the construction of these facilities.

The topic of this hearing—the Federal permitting program under Title V of the Clean Air Act—is of critical importance to TI and other “quick-to-market” companies, particularly companies in the semiconductor and electronics industry. It is important to understand from the outset that TI regards the Title V permitting program as a critical rulemaking from the perspective of the global competitiveness of the U.S. Semiconductor industry.

The 1990 Clean Air Act Amendments in general, and Title V in particular, have raised flexibility concerns for TI and other “quick-to-market” companies. TI's paramount goal is to ensure the compatibility of the Title V permit application, issuance, revision and renewal requirements with the hundreds of routine process upgrades, advancements and innovations that a semiconductor manufacturer must undertake each year to compete in the global marketplace, to control costs, to increase output, to maintain quality, to control pollution and to meet corporate pollution prevention goals. Regulatory flexibility—as defined by the ability of our industry to undertake these routine changes without undue permitting delays—is critical to our global competitiveness.

Through the Air Implementation Reform Coalition and the Electronics Industries Clean Air Task Force, TI's has worked to develop solutions to our flexibility concerns to achieve three overriding goals: (1) improved air quality, (2) public accountability, and (3) industry flexibility to compete in the global marketplace.

In this context, the Title V operating permit program provisions have represented a key area of focus. Nowhere in the Clean Air Act is there a bigger threat to our industrial competitiveness as a nation. And nowhere is there a clearer opportunity to make common sense changes in the Act which could streamline implementation while maintaining Clean Air.

In my testimony today, I would like to discuss the key flexibility-related concerns that TI has with regard to the Title V program. My comments will also focus on EPA's most recent actions with regard to Title V and conclude with recommended solutions. First, however, I would like to provide some background on TI's manufacturing operations, both from a technical standpoint, by describing the types of changes that we undertake at our facilities on a routine basis, and from a regulatory standpoint.

## BACKGROUND ON SEMICONDUCTOR MANUFACTURING

### I. ROUTINE SEMICONDUCTOR MANUFACTURING CHANGES

The technologically dynamic nature of the semiconductor industry distinguishes it from other traditional manufacturing sectors. Indeed, semiconductor manufacturing processes are in constant evolution. Roughly every 18 to 24 months, new manufacturing processes are introduced, and of these new processes, approximately one-fifth involve major departures from the prior processes in terms of chemistries, equipment, and/or chemical use.

The constantly changing technology of the integrated circuit has resulted in quantum leaps in memory capacity and computing power on a single chip. The number of transistors on TI's digital signal processor chips are increasing fourfold every 2 years, with anywhere from 1 to 4 million transistors on chips currently in produc-

tion. Dynamic Random Access Memory chips (DRAMs) now in production have the capacity to store 16 million bytes of information, and the next generation will be able to store 64 million bytes. Being quick-to-market with a new generation of chips is absolutely imperative to maintaining TI's competitive advantage in the global marketplace.

The extremely competitive and rapidly evolving nature of TI's business makes it imperative that TI have the flexibility to make changes to its manufacturing processes and facilities without delays due to administrative processing required for permit revisions or amendments. Delays of even one week in starting up a new product line or process can often make a huge difference in the profitability of the product, due to the importance of being first-to-market with a new product. It is commonplace for TI to have to install a new production process quickly in order to meet the demands of its customers. For the most part, the changes do not result in increased air emissions above those allowed under existing permits, although it is frequently necessary to amend these permits due to relocations of existing sources or changes from one chemical to another.

To provide a concrete example of the types of business challenges faced by the semiconductor industry, the Electronic Industries Clean Air Task Force has conducted an analysis of a typical, modern semiconductor manufacturing facility. This analysis demonstrates that beginning at start-up, and for each subsequent five-year period that follows, a typical facility using the latest process technology would:

- Introduce at least two new generations of manufacturing technology, which may occur through constant changes phased in over time or by completely "gutting" the interior of the facility other than the piping, ducts and other components which link the manufacturing operation with the general facility services area.
- Make 30 to 60 process chemical and equipment changes per year as existing processes are refined and new processes are developed.

Five years is an eternity in the semiconductor business. For example, in 5 years, TI has gone from producing 1 Megabit DRAMs to 4 Megabit to 16 Megabit, and is currently developing the 64 Megabit production process. Yet 5 years is also the typical life of a Title V air permit. Given the rapid pace of change in our industry, TI could expect to go through 150 to 300 permit revisions in just one permit cycle. State regulatory agencies do not have the resources to manage this volume of paperwork. Also, TI cannot reasonably hope to predict all of the changes that will take place over a five year period. Nor do I think this would be a useful exercise. It is far more useful to keep our focus on what is really important—controlling air emissions.

## II. AIR PERMITS FOR SEMICONDUCTOR MANUFACTURING

TI's four major U.S. Sites that will require Title V permits include active manufacturing operations and research and development facilities, but each differ substantially in terms of production capacity and manufacturing processes.

I am the Corporate manager with responsibility for environmental matters at all of our facilities. These facilities produce a wide variety of semiconductor chips such as at Dynamic Random Access Memory (DRAM) chips, Digital Signal Processors (DSP), microprocessors, and various logical and linear circuits. The fastest growing segment of TI's business is in Application-Specific Integrated Circuits (ASICs), which incorporate all of the necessary components to perform complex computing functions on a single chip. These ASICs are customer-specific devices, and require extremely short cycle times from chip design to final delivery for TI to be competitive in the global marketplace.

With multiple products and rapidly changing markets, the flexibility to move and change operations within the plants is critical to the success of our business. Yet the changes we make rarely effect total site air emissions. If we are forced into a Title V permitting process where each change at our facility could trigger a lengthy review and revision of our permit, we will not be able to meet the needs of our customers and we will lose our position in the marketplace. With so few American businesses still able to claim a dominant share of a global market, this issue has serious implications for global competition.

For example, if TI were to react to changing market conditions by greatly expanding production of DRAM memory chips, we would have to make certain changes within our manufacturing facilities. Even if these changes had no impact on total air emissions, they would trigger a Title V permit revision that could result in delays of several months. In the semiconductor industry, just a couple of months is enough time for our overseas competitors to beat us to the market.

In addition to the problems with delay due to permit revisions, it is important to point out that the cost of the initial permit application can be quite high. Due to the amount of information required, TI estimates that it will cost \$250,000 to obtain a Title V permit for each of our 4 major U.S. Facilities. A \$1 million price tag is a significant cost even to a company like TI. If these costs are multiplied across all of the facilities subject to Title V, the national costs are very steep.

Each State in which TI operates has a different set of air quality regulations in their State Implementation Plans (SIPs). This makes the problem of how best to develop a workable permitting system specific to each State. However, the general conclusion can be made that permits should focus more on environmental results rather than on every minor change made within a facility. This change in focus would make permitting more workable in every State and provide the flexibility needed for economic development.

### III. GENERAL COMMENTS ON TITLE V

It is important to remember that the framers of this Act intended Title V as solely an administrative provision. Its goal was to collect and maintain all of the regulatory requirements under the Federal Clean Air Act in one place to make it easier for States, industry and anyone else to track compliance.

I want to be very clear that TI does not oppose the substantive standards that actually clean up our air that we oppose. In fact, we meet or exceed all relevant environmental standards. Nor do we oppose the notion of Title V as an administrative vehicle to collect regulatory requirements and thereby streamline compliance. The reality however, is that EPA has refused—or perhaps is simply unable—to implement Title V in a manner limited to this administrative purpose. Instead, Title V, as envisioned by EPA, would create an overlay of bureaucracy and delay on every action within a facility—no matter how minor. It literally creates a regulatory straitjacket on every industry without any concern about their environmental record or the existing State permitting program.

Texas has long had an excellent air permitting program which provides for New Source Review of major and minor sources, including a review of the health effects of the chemicals to be emitted. This program has provided an outstanding level of protection to the citizens of Texas while enabling companies to operate and expand their businesses within the limits defined by the Clean Air Act. TI and many other companies in Texas believe that the benefits of the Title V program—as currently implemented by EPA—are not justified by the cost, since for the most part it is merely an overlay on a State program that has already proven to be successful, and it does not take into account the flexibility needs of industries like ours.

TI has a long history of commitment to environmental health and safety issues, and takes whatever steps are necessary to protect its employees, the community, and the environment from the hazards associated with its manufacturing processes. To protect air quality, TI has installed or will install over \$14 million in new air emissions abatement equipment at its Dallas Expressway site alone between 1990 and 1996, and has spent over \$26 million worldwide since 1989 to eliminate CFC's and other ozone depleting substances from its manufacturing processes by 1995.

TI has an active pollution prevention program and continuously strives to identify and implement new pollution prevention opportunities in its manufacturing processes. Moreover, TI has been the recipient of five EPA Stratospheric Ozone Protection awards. We have also received the EPA Region VI Environmental Excellence award for our solid waste recycling program, which is widely regarded as a benchmark for large industries.

Notwithstanding our proactive record on the environment, TI and other environmental leaders are faced with an ever increasing Federal bureaucracy focused not on incentives for encouraging environmental protection, but on strict command and control enforcement and endless paperwork. Rather than recognizing companies for their achievements in the environment, Title V and similar programs, like EPA's enhanced monitoring rule, treat all businesses as if they are environmental criminals.

The problem with Title V is not its intent, but its implementation. One could envision a much less prescriptive approach, that provides States with the authority and resources to achieve the same or improved environmental results, maximizes flexibility for industry and States, and minimizes second guessing from EPA.

Most ironic is the fact that Title V may actually have a negative effect on the environment. Review of every change within the facility, regardless of how small, has a chilling effect on companies that are striving to implement pollution prevention programs. If every minor tweak or change within the facility potentially triggers a



lengthy review, permit revision and possible EPA veto, there is a strong disincentive to make these process changes.

Process changes are not only the foundation of all pollution prevention achievements but they are also the building blocks of technological innovation. Congress clearly did not intend Title V to restrict innovation and pollution prevention.

#### IV. RECENT EPA ACTIONS REGARDING TITLE V

In the wake of increased Congressional oversight of its programs, EPA has recently signaled their intent to resolve some of the concerns regarding Title V. Although EPA's recent actions are helpful and provide hope for a workable program, we still have concerns that EPA's actions may be too little, too late.

Specifically, after the House Commerce Committee heard testimony on this program in May, EPA sent a letter to members of that Committee to outline changes that they plan to make in the Title V regulations. In this letter, EPA promised to deliver a "white paper" that would spell out what information is required to be submitted with Title V permit application. In addition, EPA promised that several changes would be made to the permit rule in a re-proposal due in July. These changes are intended to "simplify and streamline" the permit revision process and build on existing state programs to minimize duplication.

We are encouraged by EPA's recent recognition of the problems with its approach to Title V implementation. Notably, EPA's recent actions have resulted primarily as a result of Congressional oversight. In particular, the recent letter regarding Clean Air Act implementation from the Chairman of this Subcommittee, and EPA's subsequent partial response has been very useful in shedding light on the problems with the Act.

However, EPA's widely criticized 1994 Title V proposal is still operative and many States have adopted its provisions in developing their own permit programs. Indeed, none of EPA's recent steps have been codified in rulemaking—thus all of these changes may be illusory. Thousands of hours and millions of dollars have been spent since the enactment of the Clean Air Act to convince EPA to make Title V more flexible, so please excuse my cynicism for waiting to see the fine print before accepting a solution.

Notwithstanding such cynicism, EPA's suggested new direction to Title V implementation is commendable and ought to be codified as quickly as possible. However, other concerns regarding Title V remain. For example, EPA has suggested that minor changes made at a facility would no longer trigger a permit revision process. But, EPA also states that review of such minor changes is still an applicable requirement to be included in the permit. So at best it is confusing to States how to handle minor changes at a facility. A much cleaner approach would be to simply declare that only major changes need to be reflected in a Title V permit.

Another issue that is somewhat confused at this point is compliance certification. Although not required by the Act, EPA had proposed that each facility subject to Title V submit a certification that they are in compliance with all federally enforceable conditions. EPA originally held that the certification must cover all regulatory determinations over a 5-year "look back" period prior to the permit application. (EPA's White Paper amends this policy to require compliance certification only for current requirements).

The concept of using Title V to ensure full compliance with all regulatory requirements is a good one, but EPA's implementation is flawed. Rather than requiring all facilities certify compliance with past regulatory determinations—a process rife with uncertainty and liability—a better approach would be to ask companies to self-identify and self-correct any current or past compliance problems. If EPA agreed not to prosecute companies that disclose and remedy problems discovered within a Title V application, companies would have a major incentive to self assess and address any compliance issues. This policy would be far more effective at bringing the regulated community "up to code" than the threat of enforcement actions.

#### V. POSSIBLE SOLUTIONS

TI will continue to work closely with EPA and the States to develop a workable permit program. The problem is that even if EPA were to issue a workable final rule for Title V, the question remains as to whether the rule will withstand judicial scrutiny that will almost certainly come when it is challenged. The bottom line is that Congress should consider targeted legislative changes to reduce the red tape created by Title V.

TI supports ensuring the public accountability by providing notice of major permit changes. EPA's most recent Title V proposal, however, requires advance notice and public comment for so many environmentally insignificant changes that, in addition

to impeding a source's flexibility to make needed process changes expeditiously, the proposal actually frustrates its own goal of promoting public participation. The continual public notice and comment required for even minor changes will so overwhelm the permitting system that State permitting authorities, EPA and the public run the risk of missing significant permit changes through sheer information overload.

For example, if our facility in Dallas made just 30 process changes per year—this is likely a low estimate—we would need a permit revision every other week! Who would review all of these changes? What environmental benefit would be gained by going through all of this paperwork and delay?

TI and the AIR coalition have proposed six "common sense" principles which we feel should be the basis for the Agency and Congress to re-examine the fundamental approach to air permitting:

- *First Principle: One size does not fit all.* States and regulated industries are very different from one another and cannot be treated as homogeneous groups. It may not be appropriate or feasible for all States to adopt exactly the same process.
- *Second Principle: Public Accountability.* The public must have access and input to the key decisions in a permit. But public review should be solely focused on important environmental issues and must not become a barrier to industrial flexibility.
- *Third Principle: Flexibility.* Flexibility is the lifeblood of innovation and pollution prevention. Both industry and States need maximum flexibility to succeed.
- *Fourth Principle: Trust.* EPA must delegate authority with responsibility. Industry and States cannot operate in a climate of constant second guessing.
- *Fifth Principle: Efficiency.* Just as industry has finite manufacturing resources, so too do the States and EPA have resource limitations. Finite resources necessitate that priorities be developed to ensure that the program is focused on the most important *environmental* issues.
- *Sixth Principle: Simplicity.* EPA has developed a system that is totally inaccessible to all but the most educated and specialized. To be effective, the Title V program must be understandable and clear to all stakeholders.

These principles can guide EPA and Congress to make the needed changes to the Title V program. Specifically, TI believes that targeted legislative reform based on these principles is needed and should be enacted by this Congress. Such reform would clear away the command and control climate of the current legislation and create a new, more progressive atmosphere where EPA, States, the public and regulated industry could forge partnerships to address the real environmental challenge of air pollution.

In the absence of new legislation to address the problems of Title V, TI urges EPA to adopt the most flexible regulations possible based on the principles above. At a minimum, EPA should suspend federal enforcement and sanctions associated with Title V until the policy and the rules are established and understood by all stakeholders.

#### CONCLUSION

TI's primary concern is the economic and procedural burdens imposed by Title V. We are confident that we meet, and in most cases far exceed, all applicable *environmental* standards. Yet, as explained above, the fast paced nature of our business cannot flourish in a command and control regulatory regime.

I urge the Congress and EPA to fundamentally review the Title V program from the bottom up based on the principles outlined above. As a nation, we cannot continue to develop programs based on an outdated model of federalism that serve to repel innovation and creativity and, in the final analysis, add nothing to the ultimate goal of environmental protection.

Finally, it is important to recognize that business decisions are not necessarily inconsistent or at odds with the environmental goal of reducing pollution. TI's process upgrades, advancements and innovations are aimed at increased productivity and efficiency. We strongly believe that part of increasing productivity involves reducing pollution. Indeed, pollution is inefficient and simply interferes with the quality of our products and adds costs. TI believes that a strong economy and a healthy environment are mutually reinforcing goals.

I appreciate the opportunity to testify at this important hearing. TI will continue its dialogue with the EPA and State regulators on these issues. I urge Congress to

continue to play a strong role in reforming this program. Together we can forge a workable program that meets both our economic and environmental goals.

STATEMENT OF RICHARD WIMBISH, TECHIFORM, INC., ON BEHALF OF THE SOCIETY OF THE PLASTICS INDUSTRY, INC.

TITLE V OF THE CLEAN AIR ACT

The Society of the Plastics Industry, Inc. (SPI) is pleased to provide these comments to the Committee in connection with its hearing on Title V of the Clean Air Act. SPI is a 2,000 member not-for-profit trade organization representing all segments of the plastics industry in the United States. The Society's members include processors and manufacturers of plastics and plastics products, suppliers of raw materials, processors and converters of plastics resins and manufacturers of accessory equipment for the plastics industry. All told, the plastics industry, directly or indirectly, accounts for over 3 million jobs in the U.S. Founded in 1937, SPI serves as the major national trade association of the plastics industry. Many SPI members are subject to Title V permit requirements, a few have already been required to submit permit applications.

A. BACKGROUND

Perhaps more than any other Clean Air Act issue, the operating permits program has, and will continue to have, a significant effect on many businesses, especially small businesses, including those in the plastics industry. SPI, therefore, is pleased to participate in this hearing. Above all, SPI is seeking a revised operating permit program that will be fair and equitable to the regulated community and will avoid unduly burdening small companies. SPI recognizes the need for an operating permit program, but we also believe that its requirements should be simple and clear.

In this testimony, SPI would like to highlight a few key concerns that, if addressed, would go a long way toward achieving a program that will both accomplish the goals of the Clean Air Act and maintain a healthy economy. This testimony, therefore, focuses on the following:

- the need to "shield" good faith emissions estimates;
- the need to streamline the permit program;
- the need to limit permits to sources that are truly major; and
- the need for EPA to consolidate policy decisions.

We urge this Committee to consider revising the applicable effective dates of the Title V program. Right now, the Title V permit program is like a complex railroad system whose obligation to keep to a schedule is jeopardizing the safety of the passengers. Over the last few years, EPA, which strives to provide consistent, advance direction to the States on implementation issues, has not been able to adequately fill that role. In attempting to meet unrealistic statutory deadlines on complex issues involving diverse industries, it is almost inevitable that certain approaches and assumptions are not workable. EPA has, as a result, issued a number of guidances, some of which changed the Agency's earlier positions on several key Title V policy matters, but this an approach represents a patchwork solution at best. Moreover, EPA has been unable to resolve litigation over the July, 1992 final Title V rule. Indeed, even as this testimony is being prepared, we are awaiting a supplemental proposal stemming from the pending litigation.

Because of Clean Air Act deadlines, however, the States have been compelled to move ahead with implementation of their permit programs based on the July, 1992 final rule, which the Agency acknowledges will change significantly due to the litigation. It does not make sense to require facilities to submit applications without knowing what EPA's final revised permit rule will require, but that is what is happening.

Adding to the uncertainty is EPA's inability to implement the statutory requirement to impose enhanced monitoring on major sources. Facilities are required to propose enhanced monitoring criteria in permit applications, and permitting authorities are required to incorporate monitoring criteria in permits. Yet, EPA has not issued a final rule to guide them. EPA proposed a rule to implement the enhanced monitoring requirement on October 22, 1993. That rule was the subject of much justifiable criticism because it was overly burdensome and, as a result, has never been finalized. We believe that EPA has acted appropriately in backing away from that proposal. EPA's latest effort to implement the enhanced monitoring provisions of the Clean Air Act, the compliance assurance monitoring rule, has not yet been proposed and a final rule is not expected until July, 1996 at the earliest. Consequently, it makes sense to stay implementation of the Title V permit program to

give EPA sufficient time to promulgate a revised final permit rule and a final enhanced monitoring rule, and to give the States sufficient time to implement these final rules.

#### B. "SHIELD" GOOD FAITH EMISSIONS ESTIMATES

One of the most difficult tasks facing facilities that emit air pollutants is determining whether they are required to apply for a Title V permit. Many facilities are not currently permitted by the State air pollution control authority or have not been required, as part of the State permitting process, to undertake an emissions inventory of their entire facility. Consequently, they may not have a complete and detailed picture of their facilities' emissions.

Since the Clean Air Act was enacted in 1970, many plastic molding and forming operations have been considered to be "clean." In short, plastics operations have historically not been viewed as contributing much in the way of air pollutants. Other plastics fabrication operations that had emissions were considered too small for concern from a regulatory perspective. And, as a result, not much work was done to precisely characterize those emissions. But, the 1990 Amendments to the Clean Air Act changed this. The 1990 Amendments extend regulation to many companies, particularly small companies, who were previously subject to few, if any, air standards.

Estimating emissions from plastics processes is often less than straightforward. For example, SPI spent approximately \$30,000 to prepare a workbook to assist its members and their customers in estimating the emissions of a single hazardous air pollutant typically used in a particular manufacturing operation. That represents just one workbook for estimating emissions of one chemical from one portion of the industry. We should note, emissions of this chemical were fairly easy to estimate. Indeed, some facilities in the plastics industry combine several highly complex processes and use a variety of materials, greatly increasing the cost of preparing accurate estimates. It is easy to see that the cost of just determining whether you are subject to the Title V program can be phenomenal. The least costly methods, which are likely to be all that a small business can afford, will be generally less reliable than more costly methods.

EPA should issue guidance that includes a checklist to help facilities, such as those in our industry, develop emissions estimates. It would also be helpful if EPA would allow facilities to rely on emissions factors, including such EPA publications as AP-42, without the threat of future enforcement action should EPA later determine that the emissions estimate was below actual emissions. It seems logical that, as part of the implementation of the permitting program, EPA should lend its expertise and assist facilities, particularly small facilities, in estimating their emissions. At a minimum, EPA should not penalize facilities who make good faith estimates of their emissions if it is later discovered that the estimate was low.

#### C. STREAMLINE THE PERMIT PROGRAM

The requirements of the Title V permitting program should be clear and easy for facilities to implement. Regulated facilities already operate in compliance with a vast array of Federal, State, and local air pollution control requirements. The acronym list includes terms such as: BACT, RACT, MACT, LAER, PSD, NSR and others.<sup>1</sup> These requirements are often complicated and costly to implement with substantial penalties for non-compliance. As EPA stated in its recent "White Paper for Streamlined Development of Part 70 Permit Applications" (dated July 10, 1995), permits are a "procedural task." Facilities should be allowed to focus their energies and resources on meeting emission control requirements because these usually yield clear environmental benefits. Facilities should not be spending much time at all on permitting which at best yields indirect environmental benefits.

EPA should keep small businesses in mind in particular as they revise the permit requirements for the final permit rule because small businesses will be hardest hit by these requirements. Techform, Inc., a plastics thermoforming plant which employs 50 people, is not atypical of this industry in terms of size. Techform is in Standard Industrial Classification Code 308. In SIC code 308, there are 12,589 manufacturing facilities; 6,285 employ fewer than 20 people; 10,865 employ fewer than 100. That the permitting program will affect small businesses is not a theoretical possibility. These small companies, like Techform, which provide real jobs to real people, will be affected by the permitting program, as well as other Clean Air Act

<sup>1</sup>"BACT" means Best Available Control Technology. "RACT" means Reasonably Available Control Technology. "MACT" means Maximum Achievable Control Technology. "LAER" means Lowest Achievable Emissions Rate. "PSD" means Prevention of Significant Deterioration. "NSR" means New Source Review.

requirements. Small companies generally cannot afford to employ an "environmental manager," so completing a permit application or determining if the company needs a permit application will either require hiring outside consultants or diverting employees from other, more productive tasks.

#### 1. REDUCE THE BURDEN OF THE PERMIT APPLICATION PROCESS

SPI supports the development of a national standard for permit application forms. Section 502(b)(1) of the Clean Air Act clearly envisions the issuance of "a standard application form" for use by the States.<sup>2</sup> For a company with facilities in several different States, it makes the job of completing the applications a good deal easier because the company is being asked for the same information in the same format. For a company that competes with companies in other States, standardization means a level playing field because no one company will have a lesser or greater burden in completing its permit application. We would urge EPA to work with STAAPA/ALAPCO on developing a reasonable standard form to foster consistency among States.

Many of the operating permit applications developed by permitting authorities are costly to complete and are downright bulky. Permitting authorities are taking a one-size-fits-all approach, and as such are asking for a great deal of information which is unnecessary. Immensely large and costly applications are not necessary and should not be required. According to EPA's White Paper, applications should contain sufficient information to allow a permitting authority to make three determinations: (1) whether the facility is subject to regulation, (2) which requirements are applicable, and (3) whether the facility is in compliance. The current regulations, however, require a source to describe all significant emissions units, including those *not* regulated by applicable requirements. This is just one example of information that is not related to the three determinations required by EPA. We are encouraged to learn that at least one State has developed a checklist of its air rules, so applicants can check off which ones apply. Unfortunately, the same State also requires sources to explain why rules that are not identified as applicable are not applicable. We urge EPA, working with State representatives, to develop a workable application that requires only information that is needed to make the three required determinations.

We are suggesting a streamlined application process. First, every major source would fill out a simple form, perhaps 2 or 3 pages. We have drawn from some materials currently used by the States, but made an effort to consolidate the information into a digestible form. Attached to the written testimony is a draft of such a form. In some respects, we might draw an analogy to IRS tax forms. There is a short form that everyone files. Permitting authorities would have the option of requesting more information of the facility if necessary. This could be done with a request for more information, or through the use of attachments to the basic form. We would expect that permitting authorities would only request additional information in a small percentage of cases, when the processes were complex or numerous or where emissions from the facility were quite high (well above the major source threshold). A facility, however, may wish to complete additional attachments for its own evaluation and should be permitted to submit these materials to the permitting authority if the company believes it would be helpful to the permit writer to have the information at the outset. The facility may want more certainty that it is in fact including all applicable requirements at all covered emission points in its application.

The basic form would not ask for a detailed description of processes, but would have basic information about the company and its operations, including pollutants it is emitting, how much is it emitting, what monitoring it is proposing, and what requirements are applicable. We would suggest that in addition to a streamlined form, EPA also provide line-by-line instructions. We appreciate the flexibility offered by EPA's White Paper, but we do not believe it goes far enough. It still requires a great deal of unnecessary information from facilities.

#### D. PERMIT ONLY SOURCES THAT ARE ACTUALLY MAJOR

In "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act" (dated January 25, 1995), EPA allowed facilities with emissions below 50 percent of all applicable major source requirements to be treated as minor until they are able to obtain federally enforceable limitations on their emissions. The guidance was a step in the right direction, but

<sup>2</sup>Section 502(b) of the Act directs EPA to issue regulations establishing the minimum elements of a permit program. "These elements shall include each of the following: . . . [r]equirements for permit applications, including a standard application form and criteria for determining in a timely fashion the completeness of application." *Id.*

we do not think that it completely resolves the matter. A facility's status as major or minor should be based on realistic data, calculated by using actual physical and operational conditions and engineering analysis, not on theoretically projected emissions that assume continuous operations. EPA should permanently exclude facilities from Title V whose actual emissions have never exceeded major source levels and should give greater credence to a facility's operating history.

#### E. IMPLEMENT POLICY DECISIONS IN THE FINAL PERMIT RULE

SPI is very supportive of the many policy decisions that EPA has made this spring relative to Title V, offering flexibility and clarifying requirements. We are concerned, however, that these decisions may not go far enough for several reasons. First, there is a timeliness problem, since the guidance may have come too late for appropriate consideration by many State permitting authorities. Second, the decisions appear in a patchwork of guidances. Third, several policy decisions are outlined in letters to Congress or private citizens, but have not yet been incorporated into Agency guidance. As a result, we would like to see these decisions incorporated into the final permits rule. It would make the policy decisions more permanent, it would give the public an opportunity to comment on them, and it would consolidate them in one place. Keeping up with the Agency's latest policy or guidance is difficult for someone located in Washington, DC. Whose job it is to track environmental matters. It would be nearly impossible for a manufacturer in Mount Airy, NC, to do so.

Please do not misunderstand. We support many of EPA's recent decisions. We would prefer, however, that they be incorporated into the permits rulemaking or consolidated in a publication that is easily accessible nationwide.

#### F. CONCLUSION

For the foregoing reasons, we urge this Committee to consider staying the effective dates for Title V implementation. We would also urge you to make legislative changes as necessary to "shield" good faith emissions estimates, to streamline the permit program, and to limit permits to sources that are actually major. We appreciate your attention to the concerns we have expressed in these comments.

**PERMIT APPLICATION  
CLEAN AIR ACT TITLE V  
OPERATING PROGRAM**

**A. Owner/Applicant: Name, Address & Contact**

1. Company Name: \_\_\_\_\_
2. Mailing Address:
  1. Street Address (or P.O. Box): \_\_\_\_\_
  2. City: \_\_\_\_\_
  3. State: \_\_\_\_\_
  4. Zip Code: \_\_\_\_\_
  5. Telephone No.: ( ) \_\_\_\_\_
  6. Fax No.: ( ) \_\_\_\_\_
3. Contact:
  1. Name: \_\_\_\_\_
  2. Title: \_\_\_\_\_

**B. Facility: Name, Address, Location and Contact**

1. Name: \_\_\_\_\_
2. Mailing Address:
  1. Street Address (or P.O. Box): \_\_\_\_\_
  2. City: \_\_\_\_\_
  3. State: \_\_\_\_\_
  4. Zip Code: \_\_\_\_\_
  5. Telephone No.: ( ) \_\_\_\_\_
3. Site Location:
  1. Street: \_\_\_\_\_
  2. City: \_\_\_\_\_ 3. State: \_\_\_\_\_
  4. County: \_\_\_\_\_ 5. Zip Code: \_\_\_\_\_
  6. Telephone No.: ( ) \_\_\_\_\_
4. Contact:
  1. Name: \_\_\_\_\_
  2. Title: \_\_\_\_\_

**C. Permitting Action (Check One)**

- Initial Application  
 Modification

**D. Activities:**

1. SIC Code(s) (including any associated with alternate operating scenarios): \_\_\_\_\_
2. Principal Product(s): \_\_\_\_\_
3. Principal Raw Materials: \_\_\_\_\_
4. Principal Process(es): \_\_\_\_\_

**E. Emissions Summary**

(See instructions for description of regulated pollutants and exemption for insignificant activities)

1. **Volatile Organic Compounds:** (VOCs are carbon based chemicals that are ozone precursors. Exclusions from the definition include: acetone, ethane, methane, methylene chloride, and most chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs)).

Facility emits more than: (circle one)  
 10 25 50 100 tons per year  
 None of the above

2. Nitrous Oxides (NO<sub>x</sub>) (e.g., from boilers or other combustion sources)

Facility emits more than: (circle one)  
 10 25 50 100 tons per year  
 None of the above

3. Sulfur Dioxide (SO<sub>2</sub>) (e.g., from boilers or other combustion sources)

Facility emits more than: (circle one)  
 10 25 50 100 tons per year  
 None of the above

4. Carbon Monoxide (CO) (e.g., from boilers or combustion sources)

Facility emits more than: (circle one)  
 50 100 tons per year  
 None of the above

5. Particulates (PM<sub>10</sub>) (particles with diameter of less than or equal to 10 micrometers)

Facility emits more than: (circle one)  
 70 100 tons per year  
 None of the above

6. Do you emit 10 TPY of any one or 25 TPY of any combination of the 189 hazardous air pollutants listed in the instructions?

\_\_\_ No



\_\_\_\_ Yes. If yes, please list pollutants: \_\_\_\_\_  
 \_\_\_\_\_

**F. Compliance Certification**

1. \_\_\_\_ This source is currently in compliance. We will continue to operate and maintain this source to assure compliance for the duration of the permit.

OR

\_\_\_\_ This source is not in compliance. The attached statement of corrective action is submitted to describe action which we will take to achieve compliance.

2. We are prepared to demonstrate compliance, including compliance with the regulations listed on Attachment A. (See instructions for demonstration methods, such as CEM, process parameters, etc.).
3. We will maintain required records.

**G. SIGNATURE: EACH APPLICATION MUST BE SIGNED BY THE APPLICANT.**

I certify that to the best of my knowledge and belief formed after reasonable inquiry, the statement and information in this application are true, complete, and accurate, and that, as a responsible official, my signature shall constitute an agreement that the applicant assumes the responsibility for any alteration, additions, or changes in operation that may be necessary to achieve and maintain compliance.

\_\_\_\_\_  
 Printed Name of Responsible  
 Official

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Date Application Signed

\_\_\_\_\_  
 Signature of Applicant's  
 Responsible Official

STATEMENT OF JEFF SAITAS, DEPUTY DIRECTOR, OFFICE OF AIR QUALITY, TEXAS  
NATURAL RESOURCE CONSERVATION COMMISSION

Good afternoon. My name is Jeff Saitas, and I currently serve as the Deputy Director of the Office of Air Quality at the Texas Natural Resource Conservation Commission. Thank you for the opportunity to share, on behalf of my agency, our experience with some of the difficult Title V implementation issues facing the nation.

We believe that the Federal Operating Permits Program can provide a necessary and important function in improving and maintaining the air quality in Texas, depending on how it is implemented. Within the complex web of both State and Federal air regulations, the Federal operating permit can provide the regulated community, the public, the State, and EPA a clear and certain picture of each source's air quality obligations. In turn, this should result in a higher degree of compliance. Consistent with this perspective, over the past several years, we have worked very closely with both the regulated community and the environmental groups in Texas to develop an operating permit program that will satisfy Title V and meet the needs of Texas.

However, we are concerned that Part 70 has the potential of interfering significantly with the efficient implementation of our program. The TNRC staff has participated in the EPA Title V Stakeholder's Workgroup. We have reviewed EPA's preliminary draft supplemental Part 70 proposal and the July 10, 1995 EPA White Paper for Streamlined Development of Part 70 Permit Applications (July 10 White Paper). We consider both to be a vast improvement over the EPA's previous positions. However, we believe that a number of serious problems still remain that must be addressed to ensure the implementation of Title V in a stream-lined and effective manner. I will address some of those issues in the remainder of my comments.

The key to successful implementation of any program is to establish clearly defined objectives. We believe that one of the problems in the implementation of Title V, is that there are currently many different understandings of the objectives of Title V. As a result there are many different views on the necessary procedural, application and permit content requirements. It is our understanding that, the objective of this program is to establish the applicability of already existing standards and regulatory programs to the emission units at a specific site, in the operating permit, not to create new requirements nor to delve into the underlying requirements of already existing regulatory programs.

EPA's July 10 White Paper contravenes that objective with the requirements outlined for NSR permits. It is important to remember that these NSR permits have been issued under New Source Review programs that have existed for over 20 years and serve a valuable but different function from operating permits. The two programs have fundamentally different objectives, scope of applicability, and substantive requirements. Because of the different nature of the two programs, we believe the close inter-relationship proposed in Part 70 and EPA's White Paper has significantly interfered with the effective implementation of Operating Permits Program. For example, in EPA's July 10 White Paper, the following areas are still major issues for the implementation of Title V in Texas:

1. Incorporation of Prior NSR Permit Terms and Conditions. EPA is requiring "environmentally significant" terms and conditions of NSR permits to be included in the Part 70 permit. In addition, EPA suggests that the States should do permit "clean-up" on existing NSR permits. This would involve reviewing each NSR permit term and condition to see which one should be revised, deleted, or added. This is very subjective and would require the agency to possibly revisit several thousand NSR permits causing unnecessary time delays.

2. Deletion of provisions unrelated to the purpose of the NSR Program. EPA is also encouraging the deletion of NSR permit provisions that they believe are "unrelated to the purpose of the NSR program" such as odor limitations and limitations on toxics that are not subject to 112 or a SIP requirement. In Texas, these types of provisions are critical to the credibility of the NSR program in the eyes of our citizens and we would be remiss to delete these types of provisions.

3. Compliance certification required for NSR terms and conditions. For those NSR terms and conditions that the applicant deems as federally enforceable, EPA requires the company to certify compliance. In other words, companies are now required to certify compliance with NSR permit provisions through the Part 70 process.

4. Addition of new terms and conditions to NSR permits. EPA is suggesting that the States add new terms and conditions to NSR permits where necessary to make the provisions federally enforceable from a practical standpoint or other various reasons. It would be very time-consuming and impractical to revisit each NSR permit

to ensure that each federally enforceable term and condition is enforceable as a practical matter.

All of these are examples of using the operating permit to create new requirements and delve into the underlying requirements of NSR. We do not believe that this is appropriate.

A question must be asked. That is, should the operating permit be the vehicle through which New Source Review related changes and authorizations are required to be approved, or should it be used to codify the requirement to obtain the appropriate New Source Review authorization under existing regulations? We believe it is the latter based on our understanding of the objectives of Title V. We believe that implementation of Title V should maintain the clear distinction between New Source Review programs and the Federal Operating Permits program, and rely on the existing New Source Review programs to assure compliance with New Source Review requirements.

Another area of different understanding of the objectives of Title V and how to accomplish such objectives is in the interpretation of 502(b)(6) which requires "adequate, stream-lined, and reasonable procedures" for processing, reviewing, and providing public notice. We support this goal; however, we believe that this determination of adequacy should be based on the significance of the change in the regulatory requirement, not on the quantity of emission increase or any other New Source Review related change. Again, we believe that EPA's draft proposal is vastly improved over previous proposals in this area; however, some issues still remain. The recent draft of Part 70 proposal contains a revision process for operating permits that establishes the adequacy of public review based on New Source Review activities such as certain netting calculations and potential to emit determinations. We do not believe that this is appropriate. For programs with underlying requirements, such as New Source Review, we believe that those programs have already addressed adequate, stream-lined, and reasonable procedures.

Finally, we believe that Part 70 should provide broad guidance rather than prescriptive requirements, so that States can create effective, stream-lined programs that meet the needs and resources in their States. The White Paper allows for more flexibility, but the States still have a legal responsibility to comply with Part 70. Consequently, the White Paper addresses the symptoms but has not cured the problem. Therefore, EPA should look to revise Part 70 to broadly reflect the requirements of Title V rather than writing guidance.

I would like to say that, in general, the TNRCC staff is encouraged by the progress made to date. However, it is clear based on their recent actions that EPA is still in the process of defining the elements of a minimum program that achieves the objectives of Title V. This uncertainty has caused Texas a great deal of difficulty in defining a program which meets the Federal requirements while integrating to the maximum extent possible existing programs and systems. In fact, as a result of this uncertainty, our State's operating permit program development is being revisited, by TNRCC staff in conjunction with the Regulated Community, in order to assure that a simplified and streamlined program will be implemented in Texas to satisfy Title V. We believe that is inappropriate for EPA to expect States to implement their programs while continually having to make changes to them because EPA has not finalized their program requirements.

We hope for satisfactory resolution of the remaining critical issues based on a clear and common understanding of the objectives of Title V and what is needed to satisfy those objectives. I would like to re-emphasize that Part 70 needs to provide States and local jurisdictions maximum flexibility to develop Title V programs which both complement their existing air programs, as well as, promote streamlined and efficient implementation of Title V.

Again, I appreciate the opportunity to provide these comments on a subject that is very important to the State of Texas.

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STATEMENT OF ROBERT HODANBOSI, CHIEF, DIVISION OF AIR POLLUTION CONTROL,  
OHIO ENVIRONMENTAL PROTECTION AGENCY

Mr. Chairman, members of the subcommittee, thank you for the opportunity to testify today concerning the implementation of Title V of the Clean Air Act. My name is Robert Hodanbosi and I am Chief of the Division of Air Pollution Control at the Ohio Environmental Protection Agency (Ohio EPA). In addition, I am Chairman of the State and Territorial Air Pollution Program Administrator's (STAPPA) Permitting Committee. Today, I would like to cover the following items: background of Ohio's plan for implementation of the Title V program; potential difficulties with Title V; and Ohio's assessment of U.S. EPA's response to these issues.

The State of Ohio instituted a Permit-to-Operate program in 1972 that covers a wide range of air pollution sources both large and small. Since 1972, Ohio EPA has identified more than 80,000 individual air pollution operations at 20,000 separate facilities that are required to apply for state permits. The Ohio Permit-to-Operate program has been the cornerstone of the air pollution effort for obtaining compliance with the state and Federal emission limits. For the past 20 years, Ohio has operated a permit program that contains similar requirements to Title V. That is, a permit is needed in order to operate an air contaminant source in the state, and the permittee must demonstrate compliance with state and Federal emission limitations before Ohio EPA can issue the permit. When the Clean Air Act, including the Title V permit program, was passed by Congress in 1990, Ohio EPA recognized that, as a large industrial state, we needed to employ the latest in data management technology to be successful. The Division of Air Pollution Control has spent more than \$1 million in contractor costs to develop a computerized "paperless" Title V permit application and permit issuance system. This program, scheduled for release in September of this year, will represent one of the most advanced permit issuance programs in the country.

With any new system, there is a certain degree of apprehension on the part of the users. Ohio EPA is committed to developing a Title V system that is user-friendly and efficient in data handling for both the regulated community and the agency. To achieve this, Ohio EPA will offer industry "hands on" instruction in operation of the new program. The Ohio program was developed with input from the regulated community to ensure a final product that meets the needs of the agency while being efficient and workable for industry.

On April 13, 1995, U.S. EPA proposed full approval of Ohio's Title V program (Attachment A) with final approval expected within the next few weeks. The effective date of program approval will be October 1, 1995. We expect approximately one thousand Title V applications to be filed. Ohio EPA will receive the first Title V applications in November of 1995 with the remainder through September of 1996.

The Clean Air Act specifies that the Title V permit program be self supporting. That is, emission fees from the Title V facilities must cover all of the costs associated with the program. The fee charged in Ohio for 1995 emissions is the presumptive acceptable \$25 per ton adjusted for inflation. The operating budget of Ohio EPA's Division of Air Pollution Control is comprised not only of Title V emission fees, but also non-Title V permit fees, state general revenue funds, Federal grant moneys and penalty moneys. In the state fiscal year beginning July 1, 1995, the total operating budget of the Division is \$14 million with Title V moneys representing approximately 48 percent of the operating budget of the program (Table 1). Title V fee revenues represent the single largest source of funding for the air program in Ohio.

Table 1—Ohio EPA Division of Air Pollution Control State Fiscal Year 1996-97 Budget

| Category                          | 1996                | Per-<br>cent | 1997                | Per-<br>cent |
|-----------------------------------|---------------------|--------------|---------------------|--------------|
| Title V Emission Fees .....       | \$6,803,749         | 48.5         | \$7,881,938         | 48.3         |
| Non-Title V Permit Fees .....     | \$1,458,607         | 10.4         | \$2,619,564         | 16.0         |
| State General Revenue Funds ..... | \$2,203,162         | 15.7         | \$2,264,757         | 13.9         |
| Federal Grant Moneys * .....      | \$3,118,659         | 22.3         | \$3,118,659         | 19.1         |
| Penalty Moneys .....              | \$435,610           | 3.1          | \$435,610           | 2.7          |
| <b>Total .....</b>                | <b>\$14,019,787</b> |              | <b>\$16,320,528</b> |              |

\* Projected Funding Levels

The basic premise behind Title V is to assemble, in one document, all of the air pollution control requirements applicable to a major source and to require the applicant to certify whether it is in compliance with those requirements. The permit would provide the entity with the specifications necessary for the facility to operate in compliance with all of the appropriate state and Federal emission limitations. This concept is relatively simple in theory and has merit, but in practice, has been more difficult.

Approximately one year ago, the U.S. EPA began expanding the scope and detail of the Title V program. U.S. EPA had proposed onerous and expensive enhanced monitoring requirements that were high on implementation costs but would produce few benefits (Attachment B—Ohio EPA comments). In August of 1994, U.S. EPA proposed complicated and confusing regulations for making revisions to a Title V permit that would have required Federal review for small changes at Title V sources (Attachment C—Ohio EPA comments). Throughout 1994, U.S. EPA heard from

states and the regulated community about the problems with the Title V program as envisioned by U.S. EPA. Beginning this year, there has been a willingness on the part of U.S. EPA to work with states and listen to our concerns with the implementation of the Title V program.

In January of 1995, at a meeting initiated by the National Governors' Association (NGA) and the Environmental Council of States (ECOS), the states had an opportunity to meet with upper

management from U.S. EPA to discuss Clean Air Act issues. The NGA/ECOS group identified five principles that should be followed in the Title V program. These principles are:

1. U.S. EPA should strive for simplicity, not complexity.
2. U.S. EPA should develop a stable, workable system that covers a minimum of sources.
3. U.S. EPA should provide the minimum framework for a Title V program with maximum state flexibility.
4. States recognize the need for opportunity for public input on major issues.
5. U.S. EPA should treat states as partners.

Some 65 individual issues were raised related to the Clean Air Act with Title V accounting for 13 items (Attachment D—NGA/ECOS Title V Issues). In response, U.S. EPA committed to accommodate these Title V principles and issues, except where clearly contrary to Federal law.

As chairman of the State and Territorial Air Pollution Program Administrators (STAPPA) Permitting Committee, I have had the opportunity to work with U.S. EPA on the development of the rules for making revisions of Title V permits and the EPA "White Paper" in streamlining implementation of Title V. In each case, U.S. EPA has provided draft documents and brought together stakeholders to obtain comments prior to the formal release of the documents. This consensus building approach is much more effective than having endless rounds of litigation that take years to finally resolve. STAPPA and its sister association, the Association of Local Air Pollution Control Officials (ALAPCO) have commended U.S. EPA on the involvement of state and local air directors in these activities (Attachment E).

Although U.S. EPA has eased the burden on the regulated community through the issuance of the "White Paper", there still will be significant work and cost on the part of the regulated community to determine all of the applicable requirements for a source. This is primarily due to the complexity of air pollution control requirements and the fact that not all state rules are approved as part of State Implementation Plans (SIP). This can lead to facilities having to comply with one set of emission limits for the Federal Government and another set for the state agency. So, although U.S. EPA's actions have helped, both states and the regulated community will assume a significant workload in Title V and will need to work together for successful implementation of Title V.

U.S. EPA has decided to re-examine the proposed enhanced monitoring rules and has committed to consult with states in the development of any future proposals. We are encouraged that U.S. EPA has taken this first step and hope that any subsequent proposals more consistent with the principles of the NGA/ECOS workgroup.

In summary, Ohio is prepared to move forward with Title V implementation over the next 15 months. U.S. EPA's recent actions and commitments to simplify the program and allow increased flexibility can lead to a better Title V program. Given the planned changes to the Title V program, it is imperative for U.S. EPA to continue working closely with states to ensure an efficient and effective Title V program.

Again, thank you for the opportunity to present these views.

## Attachment A

Testimony of R. Hodanbosi  
Implementation of Title V  
of the Clean Air Act

18790 Federal Register / Vol. 60, No. 71 / Thursday, April 13, 1995 / Proposed Rules

- 212.510 Lowest Achievable Emission Rate (LAER) (Adopted 9/25/92)
- 212.600 Source Specific New Source Review Requirements (Adopted 9/25/92)
- 212.700 Source Reclassification (Adopted 9/25/92)
- 256.100 Declaration and Intent (Adopted 11/30/94)
- 256.200 Definitions (Adopted 11/30/94)
- 256.300 Prohibitions (Adopted 11/30/94)
- 256.450 Open Burning Allowed (Adopted 8/27/91)
- 256.600 Industrial, Commercial, Municipal and Research Open Burning (Adopted 8/28/87)
- 256.700 Open Burning Allowed (Adopted 11/30/94)
- 272.100 Purpose and Scope (Adopted 11/23/94)
- 272.200 Definitions (Adopted 11/23/94)
- 272.300 Ambient Air Quality Standards (Adopted 11/23/94)
- 272.500 Maximum Allowable Increases (Prevention of Significant Deterioration) (Adopted 11/23/94)
- 272.750 DER Ambient Test Methods (Adopted 9/25/92)
- 273.200 Definitions (Adopted 9/25/92)
- 273.300 Air Pollution Episodes (Adopted 9/25/92)
- 273.400 Air Alert (Adopted 9/25/92)
- 273.500 Air Warning (Adopted 9/25/92)
- 273.800 Air Emergency (Adopted 9/25/92)
- 296.100 Purpose and Scope (Adopted 11/23/94)
- 296.200 Definitions (Adopted 11/23/94)
- 296.310 General Particulate Emission Limiting Standards (Adopted 11/23/94)
- 296.320 General Pollutant Emission Limiting Standards, except (2) (Adopted 2/2/93)
- 296.330 Best Available Control Technology (BACT) (Adopted 11/23/94)
- 296.400 Specific Emission Limiting and Performance Standards (Adopted 11/23/94)
- 296.500 Reasonably Available Control Technology (RACT)—Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) Emitting Facilities (Adopted 11/23/94)
- 296.570 Reasonably Available Control Technology (RACT)—Requirements for Major VOC- and NO<sub>x</sub>-Emitting Facilities (Adopted 11/23/94)
- 296.600 Reasonably Available Control Technology (RACT)—Lead (Adopted 8/8/94)
- 296.601 Lead Processing Operations in General (Adopted 8/8/94)
- 296.700 Reasonably Available Control Technology (RACT)—Particulate Matter, except (2)(f) (Adopted 11/23/94)
- 296.800 Standards of Performance for New Stationary Sources (NSPS) (Adopted 11/23/94)
- 296.810 National Emission Standards for Hazardous Air Pollutants (NESHAP)—Part 61 (Adopted 11/23/94)
- 296.820 National Emission Standards for Hazardous Air Pollutants (NESHAP)—Part 62 (Adopted 11/23/94)
- 297.100 Purpose and Scope (Adopted 11/23/94)
- 297.200 Definitions (Adopted 11/23/94)
- 297.310 General Test Requirements (Adopted 11/23/94)
- 297.320 Applicable Test Procedures (Adopted 11/23/94)
- 297.340 Frequency of Compliance Tests (Adopted 11/23/94)
- 297.345 Stack Sampling Facilities Provided by the Owner of an Air Pollution Point Source (Adopted 11/23/94)
- 297.350 Determination of Process Variables (Adopted 11/23/94)
- 297.400 EPA Methods Adopted by Reference (Adopted 11/23/94)
- 297.401 EPA Test Procedures (Adopted 11/23/94)
- 297.411 DER Method 1 (Adopted 11/23/94)
- 297.412 DER Method 2 (Adopted 11/23/94)
- 297.413 DER Method 3 (Adopted 11/23/94)
- 297.414 DER Method 4 (Adopted 11/23/94)
- 297.415 DER Method 5 (Adopted 11/23/94)
- 297.416 DER Method 5A (Adopted 11/23/94)
- 297.417 DER Method 6 (Adopted 11/23/94)
- 297.418 DER Method 7 (Adopted 11/23/94)
- 297.419 DER Method 8 (Adopted 11/23/94)
- 297.420 DER Method 9 (Adopted 11/23/94)
- 297.421 DER Method 10 (Adopted 11/23/94)
- 297.422 DER Method 11 (Adopted 11/23/94)
- 297.423 DER Method 12—Determination of Inorganic Lead Emissions from Stationary Sources (Adopted 11/23/94)
- 297.424 DER Method 13 (Adopted 11/23/94)
- 297.440 Supplementary Test Procedures (Adopted 11/23/94)
- 297.450 EPA VOC Capture Efficiency Test Procedures (Adopted 11/23/94)
- 297.520 EPA Performance Specifications (Adopted 11/23/94)
- 297.570 Test Report (Adopted 11/23/94)
- 297.620 Exceptions and Approval of Alternate Procedures and Requirements (Adopted 11/23/94)
- information used in developing the proposed full approval are available for inspection during normal business hours at the following location: EPA Region 5, Air and Radiation Division (AE-177), 77 West Jackson Boulevard, Chicago, Illinois 60604.
- FOR FURTHER INFORMATION CONTACT: Steven Pak, EPA Region 5, Air and Radiation Division (AE-177), 77 West Jackson Boulevard, Chicago, Illinois 60604. (312) 886-1497.
- SUPPLEMENTARY INFORMATION:
- I. Background and Purpose
- As required under title V of the Clean Air Act ("the Act") as amended by the 1990 Clean Air Act Amendments, EPA promulgated rules on July 21, 1992 (57 FR 32250), which define the minimum elements of an approvable State operating permit program and the corresponding standards and procedures by which EPA will approve, oversee, and withdraw approval of State operating permit programs. These rules are codified at 40 Code of Federal Regulations (CFR) part 70, Title V and part 70 require that States develop, and submit to EPA, programs for issuing operating permits to all major stationary sources and to certain other sources.
- The Act requires that States develop and submit these programs to EPA by November 15, 1993, and that EPA act to approve or disapprove each program within one year after receiving the submission. If the State's submission is materially changed during the one-year review period, 40 CFR 70.4(e)(2) allows EPA to extend the review period for no more than one year following receipt of the additional materials. Because Ohio provided EPA with additional materials that materially changed the State's Title V program submitted on September 12, 1994, November 21, 1994, December 9, 1994, and January 3, 1995, EPA has extended the review period and will work expeditiously to promulgate a final decision on the State's program.
- EPA reviews State operating permit programs pursuant to section 502 of the Act and 40 CFR part 70, which together outline criteria for approval or disapproval. When a program substantially, but not fully, meets the requirements of 40 CFR part 70, EPA may grant the program interim approval for a period of up to two years. If EPA has not fully approved a program by November 15, 1995, or by the end of an interim program, it must establish and implement a Federal operating permit program for that State.

[FR Doc. 95-9060 Filed 4-12-95; 8:45 am]

BILLING CODE 6560-50-0

## 40-CFR Part 70

[CH001; FRL-6189-6]

## Clean Air Act Proposed Approval of Operating Permit Program; Ohio

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed full approval.

**SUMMARY:** The EPA proposes full approval of the operating permit program submitted by the State of Ohio for the purpose of complying with Federal requirements which mandate that States develop, and submit to EPA, programs for issuing operating permits to all major stationary sources and to certain other sources.

**DATES:** Comments on this proposed action must be received in writing by May 15, 1995.

**ADDRESSES:** Comments should be addressed to Steven Pak at the Region 5 address. Copies of the State's submission and other supporting

## II. Proposed Action and Implications

### A. Analysis of State Submission

EPA has concluded that the operating permit program submitted by Ohio meets the requirements of title V and part 70 and is proposing to grant full approval to the program. For more detailed information on the analysis of the State's submission, please refer to the technical support document (TSD) included in the docket at the address noted above.

#### 1. Support Materials

Donald Schregardus, Director of the Ohio Environmental Protection Agency and the Governor of Ohio's designee, submitted Ohio's title V operating permit program to EPA on July 22, 1994. The State supplemented the submission on September 12, 1994, November 21, 1994, December 9, 1994, and January 5, 1995. The submittal contains all required elements of 40 CFR 70.4, including a description of Ohio's operating permit program, relevant permitting program documentation, and the Attorney General's legal opinion that the laws of the State provide adequate authority to carry out all aspects of the program.

#### 2. Regulations and Program Implementation

EPA has determined that the Ohio operating permit program, including State statutes (Ohio Revised Code (ORC) 3704.035, 3704.036, 3704.05, 3704.06, 3704.99, 3745.11, and 3745.112) and regulations (Ohio Administrative Code (OAC) 3745-77 and 3745-78), meets the requirements of 40 CFR 70.2 and 70.3 for applicability; 40 CFR 70.3 for criteria which define insignificant activities;<sup>1</sup> and for complete application forms; 40 CFR 70.4, 70.5, and 70.8 for permit

content (including operational flexibility); 40 CFR 70.7 and 70.8 for permit processing requirements (including public participation and minor permit modifications); and 40 CFR 70.11 for requirements for enforcement authority. The TSD contains a detailed analysis of Ohio's program and describes the manner in which the State's program meets all the operating permit program requirements of 40 CFR Part 70.

#### 3. Permit Fee Demonstration

EPA has determined that the Ohio operating permit program meets the fee requirements of 40 CFR 70.9. Ohio is adopting the presumptive minimum approach to fees outlined in 40 CFR 70.9(b)(2).

#### 4. Provisions Implementing the Requirements of Other Titles of the Act

**a. Authority for Section 112 Implementation.** In its program submittal, Ohio demonstrates adequate legal authority to implement and enforce all section 112 requirements through the Title V permit. This legal authority is contained in Ohio's enabling legislation and in regulatory provisions defining "applicable requirements" and stating that permits must incorporate all applicable requirements. EPA has determined that this legal authority is sufficient to allow the State to issue permits that assure compliance with all section 112 requirements.

EPA is interpreting the above legal authority to mean that Ohio is able to carry out all section 112 activities with respect to part 70 sources. For further rationale on this interpretation, please refer to the TSD.

**b. Implementation of 112(g).** EPA issued an interpretive notice on February 14, 1995 (60 FR 8333), which outlines EPA's revised interpretation of 112(g) applicability. The notice postpones the effective date of 112(g) until after EPA has promulgated a rule addressing that provision. The notice sets forth in detail the rationale for the revised interpretation.

The section 112(g) interpretive notice explains that EPA is still considering whether the effective date of section 112(g) should be delayed beyond the date of promulgation of the Federal rule so as to allow States time to adopt rules implementing the Federal rule and that EPA will provide for any such additional delay in the final section 112(g) rulemaking. Unless and until EPA provides for such an additional postponement of section 112(g), Ohio must have a federally enforceable mechanism for implementing section

112(g) during the period between promulgation of the Federal section 112(g) rule and adoption of implementing Federal regulations.

EPA is aware that Ohio lacks a program designed specifically to implement section 112(g). However, Ohio does have a preconstruction review program (OAC 3745-31) that can serve as an adequate implementation vehicle during the transition period because it would allow Ohio to select control measures that would meet MACT, as defined in section 112, and incorporate these measures into a federally enforceable preconstruction permit.

EPA is approving Ohio's preconstruction permitting program (OAC 3745-31) under the authority of Title V and Part 70 solely for the purpose of implementing section 112(g) to the extent necessary during the transition period between 112(g) promulgation and adoption of a State rule implementing EPA's section 112(g) regulations. Although section 112(g) generally provides authority for approval of State air programs to implement section 112(g), Title V and section 112(g) provide for this limited approval because of the direct linkage between the implementation of section 112(g) and Title V. The scope of this approval is narrowly limited to section 112(g) and does not confer or imply approval for purposes of any other provision under the Act (e.g., section 110). This approval will be without effect if EPA decides in the final section 112(g) rule that sources are not subject to the requirements of the rule until State regulations are adopted. The duration of this approval is limited to 18 months following promulgation by EPA of the 112(g) rule to provide adequate time for the State to adopt regulations consistent with the Federal requirements.

**c. Program for delegation of Section 112 Standards as Promulgated.** The requirements for program approval, specified in 40 CFR 70.4(b), encompass section 112(f)(5) requirements for approval of a State program for delegation of section 112 standards, as promulgated by EPA, as they apply to part 70 sources. Section 112(f)(5) requires that the State's program contain adequate authorities, adequate resources for implementation, and an expeditious compliance schedule, which are also requirements under 40 CFR part 70. Therefore, EPA is also proposing to grant approval under section 112(f)(5) and 40 CFR 63.91, of Ohio's program for receiving delegation of section 112 standards that are unchanged from the Federal standards as promulgated.

<sup>1</sup> Ohio includes research and development (RAD) units, as defined in Ohio Revised Code (ORC) 3704.07(A), as an insignificant activity. However, this definition of all RAD units as insignificant activities is limited in effect because an RAD unit is not exempt from the State's permit application requirements if the unit's emissions exceed one ton per year of total hazardous air pollutants or has a potential to emit more than five tons per year or twenty percent of an applicable major source threshold under the Act for any regulated air pollutant other than a HAP (OAC 3743-77-02(G)). In addition, Ohio's general provisions governing insignificant activities and emissions levels apply to RAD units. Ohio regulations provide that insignificant activities and emissions levels that are exempted because of size or production rate must be listed in the permit application and do not affect the determination of whether a stationary source is a major source (OAC 3743-77-02(G)). In addition, an applicant may not omit information including the emissions levels for insignificant activities, that is necessary to determine the applicability of any applicable requirement, or to evaluate any fee amount (OAC 3743-77-03(A)).

Because Ohio has historically accepted delegation of section 112 standards through automatic delegation, EPA proposes to approve the delegation of section 112 standards and requirements through automatic delegation. The details of this delegation mechanism will be set forth in a Memorandum of Agreement between Ohio and EPA. This approval applies to both existing and future standards but is limited to sources covered by the part 70 operating permit program.

d. *Limiting HAP Emissions Through a FESOP Program.* On October 25, 1994, EPA conditionally approved OAC 3745-35-07 for establishing a mechanism for creating federally enforceable limits on a source potential to emit (59 FR 33586). This rulemaking, which became effective on December 27, 1994, authorizes the State to issue federally enforceable State operating permits addressing both criteria pollutants and HAPs.

e. *Title IV.* Ohio's program contains adequate authority to issue permits which reflect the requirements of Title IV and its implementing regulations. Further, Ohio provided a commitment on January 3, 1995, to incorporate by reference the Federal Acid Rain Program regulations (40 CFR part 72) by October 31, 1995.

#### B. Potential Interim Approval Issue

Ohio's definition of "title I modification" does not include changes reviewed under a minor source preconstruction review program. On August 29, 1994, EPA solicited public comment on whether the phrase "modification under any provision of title I of the Act" in 40 CFR 70.7(e)(2)(i)(A)(5) should be interpreted to mean literally any change at a source that would trigger permitting authority review under regulations approved or promulgated under Title I of the Act (59 FR 44573). EPA is currently reviewing the public comments on this issue and is in the process of determining the proper definition of that phrase. EPA does not believe that it is appropriate to determine whether this is a program deficiency for Ohio until EPA completes its rulemaking on this issue. For a more complete discussion of this issue see the November 9, 1994, approval of the operating permit program for the State of Washington (59 FR 55813).

#### C. Proposed Action

EPA is proposing to grant full approval of the operating permit program submitted by Ohio on July 22, 1994, and amended on September 12, 1994, November 21, 1994, December 9, 1994, and January 5, 1995. Among other

things, Ohio has demonstrated that the program meets the minimum elements of an approvable State operating permit program as specified in 40 CFR part 70.

The scope of the Ohio program that EPA proposes to approve in this notice would apply to all part 70 sources (as defined in the approved program) within the State of Ohio.

As outlined in I.L.A. 4.c., EPA is also proposing to grant approval under section 112(i)(5) and 40 CFR 63.91 of the State's program for receiving delegation of section 112 standards that are unchanged from Federal standards as promulgated. This program for delegations only applies to sources covered by the part 70 program.

### III. Administrative Requirements

#### A. Request for Public Comments

EPA is requesting comments on all aspects of this proposed full approval. Copies of the State's submittal and other information relied upon for the proposed full approval are contained in a docket maintained at the EPA Regional Office. The docket is an organized and complete file of all the information submitted to, or otherwise considered by, EPA in the development of this proposed full approval. The principal purposes of the docket are:

- (1) To allow interested parties a means to identify and locate documents so that they can effectively participate in the approval process; and
- (2) To serve as the record in case of judicial review. EPA will consider any comments received by May 15, 1995.

#### B. Executive Order 12866

The Office of Management and Budget has exempted this action from Executive Order 12866 review.

#### C. Regulatory Flexibility Act

EPA's actions under section 302 of the Act do not create any new requirements, but simply address operating permit programs submitted to satisfy the requirements of 40 CFR part 70. Because this action does not impose any new requirements, it does not have a significant impact on a substantial number of small entities.

#### List of Subjects in 40 CFR Part 70

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Operating permits, Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 1901-1971.

Dated: March 29, 1995.

Valdas V. Adamkus,

Regional Administrator.

(FR Doc. 95-9059 Filed 4-12-95; 9:45 am)

BILLING CODE 6660-02-P

#### 40 CFR Part 76

(AD-FRL-6186-9)

RIN 2060-AD-45

#### Acid Rain Program; Nitrogen Oxides Emission Reduction Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule; Response to Court remand.

**SUMMARY:** The EPA is today issuing a proposed rule in response to a remand by a U.S. Court of Appeals. The rule reinstates emission limitations for nitrogen oxides (NO<sub>x</sub>) from coal-fired utility units under section 407 of the Clean Air Act ("the Act"). The emission limitations for NO<sub>x</sub>, along with emission limitations for sulfur dioxide from utility plants, will reduce acidic deposition and prevent serious adverse effects on natural resources, ecosystems, materials, visibility, and public health.

On March 22, 1994, EPA promulgated a rule establishing NO<sub>x</sub> emission limitations. This rule established emission limits generally achievable using "low NO<sub>x</sub> burner technology" and established a procedure for obtaining an alternative emission limitation if a unit could not achieve the prescribed limit using such technology. On November 29, 1994, the U.S. Court of Appeals for the District of Columbia Circuit ruled that the definition of "low NO<sub>x</sub> burner technology" in the March 22, 1994 rule exceeded EPA's statutory authority. The Court vacated the rule and remanded it to the Agency for further proceedings. On March 28, 1995, EPA and environmental and utility-industry parties signed an agreement addressing the March 22, 1994 regulations, including issues raised by the Court's remand.

Based on the Court's decision and a review of the record, the Agency is now revising the March 22, 1994 regulations. The low-NO<sub>x</sub> burner-technology definition is revised to comply with the Court's decision. Other provisions concerning the compliance date for Phase I NO<sub>x</sub> emission limitations, AELs, and plans for averaging NO<sub>x</sub> emissions of two or more units are also revised. Because the rule revisions are consistent with the Court's decision and the Agency does not expect to receive adverse comments, the provisions are



Attachment B



State of Ohio Environmental Protection Agency

P.O. Box 1048, 1800 WestMark Dr.  
Columbus, Ohio 43268-0148  
(614) 644-3020  
FAX (614) 644-2329

Testimony of R. Hodanbosi  
Implementation of Title V  
of the Clean Air Act

George V. Voinovich  
Governor  
Donald R. Schregardus  
Director

January 31, 1994

Ms. Carol Browner, Administrator  
United States Environmental  
Protection Agency  
Waterside Mall  
401 M Street S.W.  
Washington, DC 20460

Dear Ms. Browner:

Attached are detailed comments prepared by Ohio EPA in response to U.S. EPA's proposed enhanced monitoring requirements published at 58 Federal Register 54648 (October 22, 1993). After a careful review of these requirements, we believe that this proposal, if adopted, would represent a substantial cost to the regulated community and to the state air programs required to implement these rules. We estimate that, nationwide, the cost for compliance with these rules may be as high as \$4.5 billion dollars. This is a sizeable cost for a proposal that would only measure emissions. This program does not require the reduction of one pound of air pollution.

The proposal also covers many small sources of air pollution that have insignificant contribution to overall emissions. We have conducted an air analysis for the source distribution in Ohio. As an example, based on actual emissions, sources of greater than 1000 tons per year of sulfur dioxide represent 75% of all sources that will be required to monitor. Yet, those sources represent 96.6% of the emissions of sulfur dioxide. The result is requiring monitors on 75% of the sources that only emit 3.4% of the pollution. This is not a cost effective approach to monitoring emissions.

In the Wall Street Journal on November 29, 1993 in reference to the Amoco Refinery U.S. EPA special regulatory initiative you were quoted as saying: "When I worked at the state level I was constantly faced with rigid rules that made doing something 100 times more difficult and expensive than it needed to be. It makes no sense to have a program that raises costs and while doing nothing to reduce environmental threat." Your words exactly describe the proposed enhanced monitoring requirements; a costly program that does not require the reduction in emissions. If these rules provide the states more latitude in the development of the enhanced monitoring program, we can accomplish the same basic goal at a fraction of the cost.

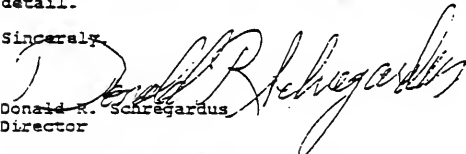
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EPA 1613 (12/85)

Ms. Carol Browner, Administrator  
United States Environmental  
Protection Agency  
Page 2.

Please call me if you would like to discuss this issue in more detail.

Sincerely,

  
Donald R. Schregardus  
Director

cc: U.S. EPA Docket No. A-91-52

**OHIO ENVIRONMENTAL PROTECTION AGENCY**

Comments on Enhanced Monitoring Program Proposal  
EPA Air Docket (LE-131)  
Docket No. A-91-52

Ohio EPA has reviewed U.S. EPA's Enhanced Monitoring Rule proposed on October 22, 1993 (58 Federal Register 54648). Overall, we believe that the proposal is overly burdensome in that it does not recognize the distribution of the number of sources covered by the rules to total emissions and fails to adequately estimate the workload on the states to implement this program. Our detailed comments are below:

Issue 1. U.S. EPA has set the level of monitoring to be so low (30% of a major source) that many insignificant sources of air pollution will be required to be brought into the enhanced monitoring program. This will result in resources (dollars and personnel) being directed to activities that will have little or no environmental benefit. U.S. EPA further compounds this problem by basing the applicability on potential emissions instead of what is actually emitted from a source.

Ohio EPA has conducted an extensive analysis of the distribution of sources in Ohio. Attached is a copy of this study. Some important highlights of the analysis are described below in more detail.

A. Sulfur dioxide—Based upon our emission inventory, we estimate that 511 sources in Ohio would be required to install some type of monitoring, if U.S. EPA used actual emissions instead of potential emissions. A further examination of the distribution illustrates that 129 of those sources represent 96.6% of the SO<sub>2</sub> emissions from all the Title V sources in the state. Therefore, the state will be requiring 75% of all the monitors to be installed on sources that represent only 3.4% of the SO<sub>2</sub> emissions. We do not believe that it is cost effective to require the smaller size sources (less than 1000 tons per year in the case of SO<sub>2</sub>) to implement an enhanced monitoring program.

One of the reasons that there are a large number of sources covered by this rule is the use of potential emissions to determine applicability. Changing the applicability of the rule from potential emissions to actual emissions will reduce the number of facilities affected in Ohio by 43%.

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B. Carbon Monoxide A total of 733 sources would be covered by the proposed rule. Of those 733 individual sources, 129 have the potential to emit greater than 1000 tons per year. Those larger sources represent 98.3% of CO emissions, the remaining 82.5% of the sources represent 1.7% of the emissions. Yet, under the U.S. EPA proposal, the vast majority of our time and effort would be directed toward sources that represent only a minor fraction of emissions. Again, U.S. EPA could not have accurately concluded that it is cost-effective to initiate an elaborate monitoring scheme for sources with such small emissions potential.

C. Particulate, Nitrogen Oxides, Volatile Organic Compounds--

See attached diagrams.

**Recommendation:**

U.S. EPA should revise the applicability threshold on a pollutant-by-pollutant basis to monitor facilities that have a significant impact. As an example, a 1000 ton per year threshold for sulfur dioxide and carbon monoxide would cover the vast majority of emissions of those pollutants. Also, the basis for monitoring should be actual emissions, not potential emissions.

Issue 2. Ohio EPA has required a number of facilities in the state to install continuous emissions monitors (CEMs) Although U.S. EPA's proposal does not mandate CEMs, any enhanced monitoring technique will require the same type of certification and quality assurance procedures. Based on our experience, in order to maintain the comprehensive program that has been developed in the past 15 years, as currently proposed, we estimate that a minimum of 20 full time personnel would be needed just to witness and review certifications. This does not include the time to review the compliance reports. Ohio EPA has not programmed this large of an effort for emissions monitoring.

**Recommendation:**

U.S. EPA should fully fund the positions necessary to implement the program.

Issue 3. The proposed rule acknowledges the burden will be on the States and not on the U.S. EPA to implement this program. Our experience has been that the siting, certification, and quality assurance components

3.

of the CEM program are critical to ensure the validity of the data. U.S. EPA proposes to put the responsibility on the company, yet experience indicates that the "self-monitoring" approach fails to account for the above activities of the state agencies in this program.

For example, the state audit program for continuous opacity monitoring systems discovered computerized data acquisition systems programmed to edit the data. There have been cases of U.S. EPA officials "approving" designs of opacity monitors based on a technical presentation without ever visiting a site installation.

Only after Ohio EPA pointed out design problems and provided five (5) years of audit data, did U.S. EPA confirm that the statements in the certification reports were in error. However, U.S. EPA did not caution the vendors against false advertising or issue a CFR notice of the deficiencies to allow the public the opportunity to be alerted to the problems with certain equipment. This is just one example of how the state has had to expend considerable resources because of the lack of U.S. EPA support related to emissions or parameter monitoring.

**Recommendation:**

U.S. EPA should provide separate funding for the state for the operation of the enhanced monitoring program.

Issue 4. U.S. EPA has severely underestimated the economic impact of the proposed rulemaking.

U.S. EPA indicated that the proposed rule would cost in excess of \$100 million and nationwide estimates exceed \$2 billion. Ohio has estimated that over 3700 sources would have to install and certify CEMS if this rule is promulgated as proposed. Figures supplied by Enviroplan, Inc. to U.S. EPA for the purposes of the enhanced monitoring show that for two pollutants (one stack) the total capital costs would be \$123,323 with an annualized operating cost of \$24,321. For the 3700 individual source pollutants that would be covered by the proposed rule, the cost to the regulated community in Ohio would exceed \$227,550,000 in capital costs and \$44,000,000 in operating costs. U.S. EPA indicates that the EM Reference Document will allow flexibility in monitoring selection and allow some sources to rely on existing monitoring systems with little or no modifications. "The EPA has thus reduced the overall societal cost and any adverse economic impact associated with meeting the environmental objectives of section 114". However, only 127

4.

facilities (364 sources) in Ohio are currently required to monitor for any pollutant, therefore the 3300+ sources that do not have an "established monitoring program" would be required to spend the initial capital and annual operating dollars.

**Recommendation:**

U.S. EPA must conduct an accurate assessment of the number of sources covered and the capital and operating costs of the rules in order to evaluate the cost-effectiveness of these rules. This must include an examination of the benefits for covering the small emission sources within the scope of these regulations.

- Issue 5. U.S. EPA has indicated that the proposed rule does not change the stringency of the underlying standards or limitations and therefore "any costs associated with coming into compliance with these emissions limitations or standards by sources are not considered costs associated with this rule." Although USEPA has only proposed the enhanced monitoring rule, it has indicated that by February 15, 1994, it shall issue a SIP call to "correct any deficiencies in State regulations." U.S. EPA should not play a "shell game" and hide the true cost of these actions since U.S. EPA has stated that the SIP calls and enhanced monitoring requirements are related.

**Recommendation:**

Include the costs of compliance with all the SIP calls as part of the cost of these rules.

- Issue 6. U.S. EPA has called for implementation of the enhanced monitoring rules to be included with Title V permit applications. However, sources in Ohio and other states will be filing applications before the end of 1994. In some cases, applications may be filed prior to the final promulgation of the rules by U.S. EPA. Most of the applications will be filed prior to Ohio EPA being capable of completing state enhanced monitoring rules. If Ohio EPA must ask for revised application, the result will be further confusion introduced into an already unfamiliar system. U.S. EPA should be encouraging simplified approaches instead of requiring procedures that maximizes regulatory confusion.

5.

Recommendation:

The approval of the enhanced monitoring rules and any SIP calls should not be tied to approval of the Title V permit program and should not be tied to issuance of a Title V permit.

Issue 7.

Because U.S. EPA suspects some sources may not be in compliance every hour of every day, these proposed rules mandate that all sources would have to monitor to prove they are in compliance every hour of the year. These proposed rules cover far more than the minimum sources anticipated by Congress when the Act was signed in 1990. Ohio EPA agrees that for those sites that have already been required by Title IV (Acid Rain), NSPS, or other state rule (or permit condition) to install, certify and operate CEMS, the data based upon the judgment of the state, can be used for compliance determinations for applicable emissions standards. It makes sense to put to good use the data from CEMS already installed. Depending upon the situation, this can mean using the information for the purpose of demonstrating compliance. However, to make all sources spend over \$100,000 on equipment to show that they are in compliance all the time is the old "command and control" attitude that is the most inefficient approach to regulate industry. If states are provided flexibility in the selection of facilities for enhanced monitoring, nearly the same benefits can be obtained at a fraction of the cost.

The historic rulemaking under NSPS did not allow the use of CEMS for direct compliance every hour of every day. In fact with very few exceptions, USEPA only requires a compliance demonstration once after construction and would rely on Section 114 Orders to obtain any subsequent testing.

Recommendation:

U.S. EPA should target those sources that account for the majority of the emissions that are not already required to have CEMS and allow the states to determine through the permit process whether or not specific sources would need additional CEMS. This would allow the states the ability to target major sources in nonattainment areas for enhanced monitoring since the Title VII itself does not allow for the discrimination of attainment versus nonattainment prioritization.

6.

- Issue 8. The proposal ignores the presidential order to fund mandatory programs. U.S. EPA has indicated that funding under the Title V program should be used for the enhanced monitoring; however, the emission fees that were passed by the legislature did not include supporting an enhanced monitoring program of the scope and breath proposed by U.S. EPA.

**Recommendation:**

U.S. EPA should comply with the Executive Order and provide additional funding to states and municipalities for this mandate including the cost of state and local sources to comply with the requirements.

- Issue 9. The rules are proposed to be applied along with the review of Title V applications. The timing of the initiation of these rules, along with the new Title V, permit program will cause a significant increased workload when the states can least afford the time to implement a new complex regulatory program.

**Recommendation:**

U.S. EPA should "stage" the implementation of this over a period of years. As an example, for the sources required under Title IV to install monitors would be the only sources covered by these rules for the first round of Title V permits.

- Issue 10. The entire enhanced monitoring program is a solution in search of a problem. That is, U.S. EPA has implied that states do not have the authority to require the information needed to determine compliance.

Ohio EPA does not have this problem. Depending upon the facility, compliance demonstrations may be a stack test every three years, annually, monthly, or at the frequency deemed necessary by the Director. In other situations we have required the use of CEMS (127 facilities, 364 sources) and in special situations, we have required the use of telemetry to allow us to review the data on a real-time basis. For those sites that do have CEMS, we have used data to establish preventive maintenance malfunction abatement plans for the source and its associated air pollution control equipment, to require the need for redundant control equipment, or more frequent stack tests. Through use of the enforcement "trigger levels" we have shown that by comparing like sources with like control equipment an expected norm of excess emissions related to malfunctions, start-ups, etc. can



7.

be used to identify the problem facilities. The state is capable of identifying the "bad guys" and thus makes the most effective use of our resources and yet ensures that the state has the data to pursue enforcement, when needed.

Recommendation:

See Recommendations under Issue 1 and Issue 7.

A separate attachment is included that delineates specific technical comments related to the proposed Performance Specification Tests 101 and 102.



State of Ohio Environmental Protection Agency

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Columbus, Ohio 43256-0149  
(614) 644-3020  
FAX (614) 644-2329

George V. Voinovich  
Governor

July 12, 1994

Ms. Mary Nichols  
Assistant Administrator  
U.S. EPA, Region V  
401 M St. SW  
Washington, DC 20460

Dear Ms. Nichols:

I am writing to you concerning the enhanced monitoring requirements recently proposed by U.S. EPA. I understand that U.S. EPA may be close to deciding the scope of these requirements. As you proceed, please closely evaluate the comments of the Ohio EPA as the final regulation is prepared. I have enclosed a copy for your information.

As you know, the Clean Air Act places many requirements on the states to develop new regulatory programs, and, for the most part, states have met those requirements. U.S. EPA should seriously consider the resources that will be necessary on the state and local level to implement these rules along with all the others that are required by the Clean Air Act. In the development of our overall air program budget (including Title V), we did not anticipate the amount of personnel that would be needed to staff an enhanced monitoring program as large as the program proposed by U.S. EPA.

Basically, we believe that U.S. EPA can reduce the scope of the sources covered by the rule and still ensure that at least 90% of the regulated pollutants are being measured. Please contact me at 614/644-2270 with questions.

Sincerely,

Robert Hodanbosi, Chief  
Division of Air Pollution Control

RH/mb



Printed on recycled paper  
EPA 1613 (1/91)

Attachment C

Testimony of R. Hodanbosi  
Implementation of Title V  
of the Clean Air Act



State of Ohio Environmental Protection Agency

P. O. Box 163668, 1800 WaterMark Dr.  
Columbus, Ohio 43216-3668  
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George V. Voinovich  
Governor

January 26, 1995

Ms. Carol Browner, Administrator  
United States Environmental  
Protection Agency  
Westside Mall  
401 M Street  
Washington D.C. 20460

**OHIO'S COMMENTS TO THE PROPOSED REVISIONS TO 40 CFR  
PART 70 AS PUBLISHED IN THE AUGUST 29, 1994 FEDERAL  
REGISTER PAGES 44460 THROUGH 44539.**

These comments were prepared by Ohio EPA in response to U.S. EPA's proposed Operating Permits Program Rule Revisions (40 CFR Part 70). We believe that this proposal is too complex, promotes unnecessary federal intrusion of traditional state programs, requires more paperwork with no corresponding environmental benefit, and represents a change in rules to a major new Clean Air Act program before any of these programs throughout the country have had an opportunity to be implemented. Provided below are Ohio EPA's detailed comments that support these conclusions.

**A. Too Complex.**

Practically, the most serious problem with the proposed changes is their complexity. By creating a four-tiered permit revision system, with "gatekeepers" and each with its own notification requirements, the U.S. EPA proposal has made actual implementation in a consistent manner extremely difficult.

A basic objective of the Congress and U.S. EPA in enacting a federally mandated permit system for major sources was that such sources be permitted in a consistent manner nationwide. The new proposal places that objective in serious jeopardy. It is important for U.S. EPA to realize the practicalities of how any system it proposes will be implemented. Thousands of facilities across the country are subject to Title V permitting. At each of these facilities, there will be an individual(s) who is responsible for compliance with the Title V rules and who will be expected to understand these rules. Understanding and completing the initial Title V permit will be difficult enough, but in Ohio, and presumably other states whose programs U.S. EPA approves, the deadlines for application, permit content and notice and comment requirements are spelled out in state rules. Since significant permit modifications are subject to the same rules, individuals currently have to master only one basic system. The new



Ohio's Comments  
Proposed Revisions 40 CFR Part 70  
Page 2

proposal, with its differing requirements for each tier of modifications that do not reach a significant level, is virtually certain to lead to tremendous confusion and consequently inconsistent application of those rules throughout the country.

To comply with the original intent of the Clean Air Act that it is important that U. S. EPA develop rules will result in consistent application. The regulations must be clear enough to be understood by the thousands of individuals who are in the state and local air pollution control agencies and at the regulated facilities. It is not good regulatory practice to develop overly complicated rules that can only be understood and explained by the authors of the rules.

If the revised rule is promulgated as proposed, there will likely be large numbers of facilities that will not comply, not because of willful neglect, but because the facility contact and state agency personnel did not properly characterize a change at a plant. U.S. EPA must be aware that if there are widespread violations of the rules because the requirements can only be understood by a select few, the operation of the state Title V programs throughout the country will be in chaos. As the director of the state agency that has the primary role for the implementation of the Title V rules, I believe the complexity of the current proposal will cause insurmountable problems in the application of these changes.

Notwithstanding the problems with complexity, there are significant other problems with the proposal. U.S. EPA should withdraw this proposal and work with states that have substantial permitting experience toward a proposal that can be understood by the regulated community and state/local regulatory programs.

#### B. Federal Intrusion.

The proposed changes represent a new degree of federal intrusion into an area that has historically been handled by the states. Over the years, U.S. EPA has not been involved with most of the minor changes that occur at a facility, but under this proposal, that would change. U.S. EPA would have the opportunity to review the many small changes at a plant. Although U.S. EPA acknowledges that it does not have the resources to review but a fraction of the proposed changes, nevertheless, the permitting authorities will have to review all of the thousands of changes. Prior to the new proposal, only modifications that could not be characterized as one of several types of lesser modifications (i.e., administrative amendments, "off permit" changes, etc.) were subject to a full Title V application process, including public notice and comment and the opportunity for a public hearing. Because a full Title V permit revision could take years

Ohio's Comments  
Proposed Revisions 40 CFR Part 70  
Page 3

to complete and a "significant change" cannot be made until the revision is final, few businesses can afford to have their production changes characterized as significant. Therefore, the scope and coverage of the streamlined mechanisms in the existing rules is of vital importance in keeping the operational flexibility necessary to compete in world markets.

This proposal is directly contrary to the expressed desire of the President to simplify the workings of the federal government and reduce the burden on states and local government. This "one size fits all" concept does not provide the states the flexibility needed to efficiently operate both the Title V program and the state new source review program.

Title V of the Clean Air Act envisions a system of operating permits for large emitting facilities, not a permitting scheme that allows for federal review of each little change at a plant. This proposal does not have a foundation in the Clean Air Act, but represents U.S. EPA's attempt to expand its authority into the micromanagement of the industrial operations of the country. Based on the fact that both the states and U.S. EPA operate with limited resources, we can't afford this micromanagement. These limited resources need to be utilized wisely so that we obtain the most environmental benefit from them.

U.S. EPA has attempted to rationalize its action by stating that some states are presently not providing adequate review and/or public notice in the new source review program that covers minor changes (small emission units). If this is indeed the case, it is entirely illogical to develop a convoluted, complicated, bureaucratic maze to correct a simple problem. U.S. EPA should work with the individual states to correct those deficiencies with their respective new source review programs. U.S. EPA needs to recognize that many states, such as Ohio, have very sound new source review programs that effectively ensure that small changes do not cause any environmental problems. For example, Ohio's new source review program has been very instrumental with the State's improving air quality. In Ohio, small installations or changes are required to obtain a permit to install and employ "best available technology." Further, all these small installations or changes are public noticed at the time of receiving a permit to install application and again public noticed at the time that a permit to install is issued. The public has time to express their concerns prior to any action on a permit and it also has the right to appeal a final permit action to Ohio's Environmental Board of Review if they believe that an error has been made by the Agency. In conclusion, we believe that many states, including Ohio, already accomplish the objectives of this proposal to review small installations or minor changes that will take place at a Title V facility and

Ohio's Comments  
Proposed Revisions 40 CFR Part 70  
Page 4

allow for public participation prior to the installation or change. For those states that don't have this capability, U.S. EPA should work directly with those states to improve their new source programs. We believe that direct federal oversight is not warranted for these minor changes at a Title V facility.

#### C. More Paperwork/No Benefit

One of the most frustrating aspects of the proposal is the tremendous increase in regulatory burden being placed on the state and local regulatory agencies and the regulated community without any apparent concern by U.S. EPA. U.S. EPA will not have to review and process the thousands of minor permit modification applications. This will take precious state and local regulatory agencies resources away from programs that result in environmental improvements and direct them towards meaningless paper pushing activities. Note, Ohio's current state new source review program issues approximately 2,000 small installation permits annually.

It has been published on numerous occasions that Title V permitting does not intend to create any new basic requirements. The goal of Title V permits is to clearly identify all the federal air pollution control requirements in the permit. However, the end result of this proposal is new basic requirements in the form of more paperwork and more bureaucracy. Ironically, no environmental benefit will result from these new requirements.

Further, we should also give careful consideration to the regulated community's concern for reasonable operational flexibility. The ability to make minor changes in operation without triggering a complex and time-consuming permitting procedure is imperative for the modern day business. We have found, in Ohio, that industry has been willing to ensure that new installations or changes regardless of size are accomplished in an environmentally beneficial manner (i.e., employing "best available technology"). However, Ohio industry has stressed the importance of streamlining the permitting process in order to reduce the time it takes to receive authorization. Clearly, this proposal runs counter to all the improvements Ohio has made to reduce this processing time period while continuing to ensure a quality permit that requires the new installation or change to be environmentally acceptable.

#### D. Changing Rules

States have spent the last two years lobbying to obtain authorizing legislation and working with all interested parties (regulated community, environmental community, and regulators) on

Ohio's Comments  
Proposed Revisions 40 CFR Part 70  
Page 5

promulgating implementation regulations that are consistent with the 40 CFR Part 70 (Title V federal requirements). This task that was placed on the states clearly represents one of the most progressive new environmental programs to be implemented in our history. The existing complex and comprehensive Title V permit program requirements have already stretched the level of sophistication and complexity that this new program can reasonably handle to be successful. In Ohio, we felt that in order to be successful we needed to take advantage of technology. Therefore, Ohio's new permit system is planned to be implemented through the use of a totally automated system. Ohio EPA has spent over one million dollars on a contractor and countless hours of agency staff time in designing the original Title V permit program which we hope to obtain approval to implement by October 1995. Requiring electronic data management from both the regulators and the regulated community appears to be the only means for an industrial state to be successful with handling the voluminous amount of data that the current Title V permitting program already requires. Before the first Title V permit is issued in the county, U.S. EPA is proposing an even more complex set of rule changes. U.S. EPA could not have realistically evaluated the additional burden on states. This will likely result in hundreds of thousands of dollars of additional contractor costs and a huge amount of additional Ohio EPA staff time to modify the data base structure to accommodate changes to the original system. The states will be challenged to conform with the performance standards within the existing rules, much less the thousands of proposed minor modifications that would be part of this proposal.

## E. Summary

After a review of the comments, it should be apparent to U.S. EPA that their proposal cannot be understood, applied, or used in the current form. We strongly recommend that U.S. EPA withdraw this proposal and begin to meet with the states, like Ohio, that have experience in permit issuance for a large number of sources. The current proposal is unworkable and must not be adopted. This proposal threatens the credibility of the entire Title V program by placing this incredibly burdensome procedure on this already complicated system. We strongly encourage U.S. EPA to reevaluate the necessity to revise the already complex Title V permitting program requirements before they are initially implemented. It seems obvious that any proposed changes should be considered after implementation and thorough evaluation of the initial programs. Further, it is imperative that any proposed procedures be logical and understandable. Otherwise, the Title V permitting system will be doomed for failure throughout the country.

Ohio's Comments  
Proposed Revisions 40 CFR Part 70  
Page 6

We thank you for the opportunity to comment and appreciate your consideration of these comments.

Respectfully submitted,



Donald R. Schregardus  
Director,  
Ohio Environmental Protection Agency

cc: EPA Air Docket [LE-111]  
Docket No. A-93-50  
Room M-1500  
Waterside Mall  
401 M Street SW  
Washington D.C. 20460  
(2 copies)





State of Ohio Environmental Protection Agency

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George V. Voinovich  
Governor

January 31, 1995

U.S. EPA  
Waterside Mall  
U.S. EPA Air Docket (LE-131)  
Docket No. A-93-50  
Room M-1500  
Washington D.C. 20460

Dear Sir or Madam:

This letter is a supplement to the comments filed by Ohio EPA in a letter dated January 26, 1995. One of the principles outlined in our comments was that any system for modification be straight forward and simple. Attached you will find an outline of a proposal prepared by Ohio EPA to accomplish Title V modifications in a relatively easy manner. This is just one example of the procedures that can be used to accomplish this goal. There will be others that propose examples that can also effectively accomplish the same objective.

Thank you for the opportunity to comment.

Sincerely,

Robert Hodanbosi, Chief  
Division of Air Pollution Control

Attachment

OHIO EPA PROPOSAL  
Title V Modification Process

A. Goals

1. Workable for state and local agencies
2. Understandable for regulated community
3. Provides for meaningful public participation
4. Preserves integrity of the states' minor new source review (NSR) process
5. "Fixes" NSR public participation process

B. U.S. EPA develop public participation rules for NSR programs

1. Independent of Title V
2. Comprehensive and address major and minor sources
  - a) PSD and offset permits--
    - i. Notice of receipt of application
    - ii. Notice of issuance of draft permit w/30 day comment period
    - iii. Notice of issuance of final action
    - iv. Appeal rights on state level
  - b) Netting and synthetic minor permits
    - i. Notice of issuance of draft permits w/30 day comment period
    - ii. Notice of issuance of final action
    - iii. Appeal rights on state level.
  - c) Minor source permits
    - i. Notice of issuance of final action
    - ii. Appeal rights on state level
3. All notices contain identification of whether activity is at a Title V facility

C. U.S. EPA develops Title V Permit modification public participation requirement

1. If activity has gone through either "2a" or "2b," handled as a routine administrative matter with a 10 day notice to feds, public. Shield for entity.
2. If activity has gone through "2c," handled as a routine administrative matter with a 10 day notice to feds, public. No shield for entity.
3. If activity does not fall under state NSR program then entity and state determine appropriate process
  - a) If activity follows procedure in "2a" or "2b," with 30 day notice, shield for entity
  - b) If activity follows procedures in "2c," 10 day notice to feds, public. No shield for entity.
  - c) Types of activity under three (3) covered include changes in test methods, frequency of reporting, add new state/federal emission limit

## Attachment D

Testimony of R. Hodanbosi  
Implementation of Title V  
of the Clean Air ActIssue: Title V Operating Permits

## Proposed Solution:

36. In order to determine whether or not a facility must apply for a Title V permit, sources should be allowed flexibility to use the physical or operational restrictions inherent in the operation of a source. States should be given the authority to exercise technical judgment on the adequacy of the source's application. States' operating permits or administrative orders that limit the source's operation to less than the major source threshold should be sufficient for U. S. EPA's needs.

*EPA Response:*

*EPA generally agrees, but believes that federally enforceable restrictions are ultimately needed to limit a source's potential emissions for purposes of avoiding title V requirements. In guidance EPA issued on January 25, 1995, EPA announced a two-year transition period that would allow time for States to develop and sources to secure federally enforceable limits on potential to emit. The January memorandum also recognizes the authority of the States to make judgments about inherent limitations on a source's physical or operational capacity. EPA will also provide guidance to States on ways to assess potential emissions of several categories of small sources. The transition period should provide sufficient time for States to put in place the appropriate permits or mechanisms to limit the potential to emit for small sources.*

*Action:*

*EPA will be working in the coming months to develop additional technical guidance for specific source categories, and possibly, general criteria on the type of real world constraints that are appropriate for consideration when estimating the potential to emit for small sources. The EPA plans to consult with States and local agencies on this endeavor.*

Contact: Tim Smith (919) 541-4718

## Proposed Solution:

37. EPA regulations should focus on major new source review and let the States handle minor new source review without federal involvement.

*EPA Response:*

*EPA generally agrees with the concerns raised and will address this in the permit revision process in the new rule.*

*Action:*

*EPA plans to streamline the Part 70 permit revision process in a rulemaking action with proposal targeted for the end of March or early April. This action will build on States' existing preconstruction permit programs and allow administrative amendments to Title V permits, if adequate public review opportunities were provided through a prior process, such as a minor*

source review preconstruction program. States have been and will continue to be consulted in the drafting of this effort. EPA generally agrees that it should only involve itself in the most environmentally significant minor NSR changes.

Contact: Michael Truna (919) 541-5345

Proposed Solution:

38. EPA should develop performance criteria for the approval of Title V programs rather than requiring exact conformance with its prescriptive regulations (e.g., regulation, source test procedures, monitoring, and recordkeeping requirements).

EPA Response:

EPA is trying to be more general and less specific in its revisions to the operation permit rule.

Action:

As stated, EPA intends to propose a supplementary rulemaking on the permit revision process that will provide greater flexibility to States in designing their operating permit revision process. In addition, EPA plans to issue guidance during the next two months indicating where the operating permit rule currently provides implementation flexibility, and clarifying ambiguous provisions. States will be consulted in all of these efforts.

Contact: Michael Truna (919) 541-5345

Proposed Solution:

39. The permit term should be longer than five years unless a State determines that the permit needs to be reopened as a result of a new requirement and allow States up to five years to issue the first round of permits.

EPA Response:

The Act says permit terms should be five years, but EPA agrees that the process for reopening permits should be streamlined. This specifically applies to permit renewals.

Action:

EPA will consider, in further revisions to the permit rule, ways to significantly reduce permit processing requirements for permit renewals, where there have been no significant changes since permit issuance. States will be consulted in this effort.

Contact: Michael Truna (919) 541-5345

Proposed Solution:

40. EPA, in conjunction with the States, should develop a list of insignificant air contaminant sources that could be approved automatically and additional insignificant sources approved in accordance with federal criteria.

**EPA Response:**

*EPA agrees to develop a list of approvable insignificant activities for State response. Specifically, EPA will explore this in policy, but it may ultimately require rulemaking.*

**Action:**

*EPA will work with the States to develop an acceptable list of insignificant activities and will issue guidance on this issue by April 15.*

**Contact:** Michael Truma (919) 541-5345

**Proposed Solution:**

41. The initial requirement for risk management programs should be a good faith effort from sources to the States and EPA. States would only have to certify that a risk management plan, covering all known significant emissions, has been submitted.

**EPA Response:**

*EPA has been working with States to make the rule more workable for State air programs. A supplemental proposal will be available in March. EPA believes that §112(r) is an applicable requirement for title V permits. For title V sources, EPA has suggested that permit authorities should review plans for completeness rather than engage in detailed technical review. EPA plans to work with States to develop a completeness checklist that will facilitate plan reviews.*

**Action:**

*A supplemental proposed rulemaking will be issued in March, which will ask for comments on alternative ways states, and more specifically, state air permitting authorities would be involved in the implementation of §112(r). States will continue to be involved in this effort and are encouraged to comment on the supplemental proposed rulemaking when it becomes available.*

**Contact:** Ray Vogel (919) 541-3153  
Craig Mathiessen (202) 260-9781

**Proposed Solution:**

42. The review of the section 112(r) submittal is a responsibility of the federal government. Title V moneys should be used for Title V permit issuance and not emergency response programs. If the federal government would like States to review §112(r) submittal, then additional funding to States should be provided.

**EPA Response:**

*In its supplemental §112(r) proposal, EPA intends to propose that State air permitting agencies review risk management plans for completeness and that the implementing agencies, which may well be other State agencies, review plans for adequacy. EPA believes this approach would not by itself create a significant need for additional title V funding, and the Agency is committed to*

limiting additional administrative costs to permitting agencies. For non-rule V sources, EPA agrees that additional funding is necessary, and is exploring several options for securing this funding. EPA's view is that Congress intended states to be involved with the §112(r) program since the statutory language indicates that sources must submit their risk management plans to states. EPA would also like to clarify that §112(r) is intended to prevent accidental air releases and is not solely an emergency response program.

**Action:**

EPA will issue a supplemental proposed rulemaking in March on this issue, to which States are encouraged to comment. EPA will continue dialogue with States with respect to options identified for funding, keeping in mind that the "default" implementing agency would be EPA, if states do not seek delegation of the program.

**Contact:** Craig Mathiessen (202) 260-9781  
Ray Vogel (919) 541-3153

**Proposed Solution:**

43. EPA should scale back its proposed enhanced monitoring requirements that are major based on criteria pollutants. U. S. EPA should utilize the NSPS as guidelines for methods of meeting enhanced monitoring requirements for source categories covered by an NSPS. Finally, U. S. EPA should allow the States to prescribe the methods of compliance, averaging time and frequency of reporting for sources regulated by the SIP.

**EPA Response:**

In a series of stakeholder meetings involving several representatives of state and local governments, EPA has already announced its intention to scale back the proposed enhanced monitoring program to apply primarily to emissions units that are at the major source size threshold. Further EPA has committed to use and build upon NSPS and other established monitoring techniques to develop and issue example enhanced monitoring protocols for numerous types of sources and pollutants. Finally, states currently may prescribe in SIP's the methods of compliance and averaging times which will be applied under the enhanced monitoring program. Regarding reporting frequency, EPA is reducing the reporting to be required under the enhanced monitoring rule, in response to discussions with states.

**Action:**

EPA is required by a court order to promulgate the enhanced monitoring rule by April 30, 1995.

**Contact:** Scott Thrope (202) 564-7013

**Proposed Solution:**

44. EPA must allow funds received through the operating permit program to be used as match money for 105 grant purposes.

**EPA Response:**

*The January 4, 1995 interim final rule, effective immediately, waives the cost sharing match for up to three years for State 105 grant recipients that apply for a waiver once their Title V Program is implemented. After three years, another amendments to the match rules may be necessary. EPA's legal position based on the Act, decisions of the Comptroller General and current regulations, is that title V fees cannot be used for the match.*

**Action:**

*After implementing the interim final rule, state and local officials should inform EPA of any significant problems that occur with respect to the rule's implementation.*

**Contact:** Peggy Anthony (202) 260-2949

**Proposed Solution:**

45. Title V should be limited to major sources as defined under Title V (criteria pollutants) and significant sources of toxic pollutants under Title III.

**EPA Response:**

*EPA believes that use of the mechanisms identified in the January 25, 1995 memorandum on potential to emit will greatly reduce the number of sources which would be considered major, and thus subject to title V. EPA believes that in some instances title V permits are appropriate for small sources, such as those emitting very potent hazardous air pollutants (e.g., electroplating). In those cases, ways can be identified to minimize administrative costs, such as through the use of general permits. In most cases, however, EPA believes that title V permits will not be necessary (e.g., degreasing facilities).*

**Action:**

*EPA will work with states to ensure that cost effective federally enforceable mechanisms are available and in place such as to exclude small sources from the title V program. Within the next six months, EPA expects to have completed technical guidance on how to calculate the potential to emit, using real world operational characteristics, for a variety of categories of small source types. EPA will solicit State and local input as this initiative progresses. With respect to title V, EPA will be preparing another rulemaking (referred to as Phase II) to address issues raised by the litigants not addressed in the August 1994 proposed rulemaking, such as the requirement for permits for area sources. The timeframe for this proposal is October. States will be also be consulted during the development of this rulemaking. Finally, with respect to hazardous air pollutants, EPA will consider the necessity of requiring permits for small sources during the development of emission standards for specific kinds of sources.*

**Contact:** Tim Smith (919) 541-4718 (potential to emit)  
Michael Truma (919) 541-5345 (Phase II rule)

**Proposed Solution:**

46. U. S. EPA can also improve its working relationship with States in the Title V program by carrying out the following recommendations:



- A. Improve communication between various groups in U. S. EPA in order to avoid conflicting information on interpretation of federal requirements (e.g., Title III vs. Title V).

*EPA Response:*

*EPA agrees and has several activities underway to improve the integration of requirements across rules. One example is the establishment of an interoffice workgroup focussing on the integration of titles III and V. Another example is an effort ongoing with members of the Clean Air Act Advisory Committee Sub-committee on permits/toxics/new source review integration. All the members of the sub-committee, which includes state representation, were asked to submit to EPA examples of overlapping or conflicting requirements.*

*Action:*

*Ongoing activities will continue. EPA will work with States as solutions are developed to address problems identified in the integration area. EPA encourages the State and local agencies to help identify additional areas of overlapping or conflicting requirements that need to be addressed.*

*Contact: Karen Blanchard (919) 541-5503*

- B. Respond promptly to formal requests for interpretations of federal requirements (e.g., request regarding field application of pesticides).

*EPA Response:*

*EPA agrees, and will focus its attention on those issues assigned highest priority by States. The ability of EPA to respond quickly to all requests may be limited by the resources available, and the many competing needs for guidance, revisions to rulemakings, and review of permit program submittals.*

*Action:*

*EPA will give highest priority to those issues deemed the most important by States.*

*Contact: Steve Hine (919) 541-0886*

- C. Review and approve local/State prohibitory rules for inclusion into the State Implementation Plan (SIP) as quickly as possible. This would avoid the need to put outdated SIP requirements in Title V permits.

*EPA Response:*

*Agrees. EPA will try to expedite.*

*Action:*

*Regions have the lead in processing SIPs, like exclusionary rules, and are working expeditiously to process SIP revisions due to the impact on Title V permits. EPA Headquarters will intervene if necessary to help facilitate this process.*

*Contact: Steve Hine (919) 541-0886*

- D. Minimize the administrative burden on local/State permitting authorities (e.g., reporting requirements and data submittal).

*EPA Response:*

*EPA agrees and is committed to minimizing the reporting and record keeping for implementing the title V permitting program. EPA is concerned that many people have the perception that more information is required in permit applications and permit contents than EPA believes is necessary under the current rule.*

*Action:*

*EPA will be issuing guidance in April to clarify what EPA believes is the appropriate level of information with respect to reporting and record keeping. In addition, the Phase II rulemaking described above (see # 45) will provide further clarification on permit content.*

*Contact: Michael Truina (919) 541-5345*

**Proposed Solution:**

47. A Compliance Advisory Panel should be optional in States that already have an effective small business assistance program.

*EPA Response:*

*EPA will take another look at the legislation to see what flexibility is available.*

*Action:*

*EPA has provided flexibility to States on the composition of Compliance Advisory Panels (CAP) when their governmental structure did not lend itself to establishing a CAP meeting with the exact criteria outlined in the legislation. However, we will address any remaining state specific problems, in cooperation with the EPA Small Business Ombudsman.*

*Contact: Deborah Elmore (919) 541-5437*

**Proposed Solution:**

48. Federal requirements to implement U. S. EPA regulations prior to their final promulgation should be eliminated. If implementation is required by federal law, accept the State actions taken in these undefined areas.

**EPA Response:**

*EPA agrees that this is a goal that needs to be attained. For example, a Federal Register notice was published on February 14, 1995, indicating that States do not have to carry out the provisions of section 112(g) before the rule is final (expected in September 1995).*

**Action:**

*EPA will coordinate with legal counsel to discuss how to reduce the probability of situations such as this happening in the future, and determine whether a more general policy statement is needed.*

**Issue: Employee Commute Option Program****Proposed Solution:**

49. The ECO Program should be made voluntary.

**Response:**

*Although EPA is not able to issue formal waivers for the ECO program, it will continue to be extremely flexible. The Clean Air Act requires that states with the most serious air pollution adopt an ECO program in the polluted metropolitan areas. Thus, the state, rather than EPA, must decide questions of program implementation and enforcement. EPA has an oversight role and expects states and affected large employers to make a good faith effort to achieve the goals of the program.*

**Action:**

*EPA encourages states to discuss with the Agency ideas for greater flexibility and program efficiency.*

*Contact: Corrie Rush (313) 741-7815*

**Issue: Inadequate Resources Devoted to the Development of MACT Standards****Proposed Solution:**

50. EPA should allocate adequate resources to develop the MACT standards as mandated by the Act so that states will not be forced to develop individual standards for all hazardous air pollutants.

**EPA Response:**

*EPA has taken budget cuts, but intends to keep up with the workload and intends to meet the MACT deadlines in the Act.*

**Action:**

*EPA will continue to use creative methods of extending available resources, such as working with states to develop standards when appropriate through adopt-a-MACT, share-A-MACT, etc.*

STAPPA / ALAPCO

Attachment E

Testimony of R. Hodanbosi  
Implementation of Title V  
of the Clean Air Act

STATE AND TERRITORIAL  
AIR POLLUTION PROGRAM  
ADMINISTRATORS

ASSOCIATION OF  
LOCAL AIR POLLUTION  
CONTROL OFFICIALS

June 30, 1995

WILLIAM BECKER  
EXECUTIVE DIRECTOR

Mary D. Nichols  
Assistant Administrator  
Office of Air and Radiation  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D. C. 20460

Dear Ms. Nichols:

On behalf of the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO), we wish to strongly commend you for your recent actions to remedy potential problems related to implementation of the Title V operating permits program under the Clean Air Act. Your responsiveness to the multitude of potential implementation problems goes a long way toward showing EPA's commitment to developing a truly workable permits program for all interested parties.

State and local air agency representatives have attended many EPA meetings on the Part 70 Supplemental Rulemaking and "White Paper." We appreciate these opportunities to learn about EPA's developing positions and to express our concerns and recommendations. In addition, we have read Congressman John Dingell's letter to EPA dated June 14, 1995, as well as your June 20 response, regarding Title V issues needing regulatory remedies. We believe that the steps you have committed to take will greatly increase the ease of implementing the Title V operating permits program.

Thank you for your efforts in streamlining Title V implementation and we look forward to working with EPA to make the program a success.

Sincerely,

Darryl Tyler  
President  
STAPPA

Robert Colby  
President  
ALAPCO

cc: Congressman John D. Dingell  
Congressman Henry A. Waxman

STATEMENT OF MARY NICHOLS, ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION,  
ENVIRONMENTAL PROTECTION AGENCY

Good afternoon. We are pleased to be here today to discuss the U.S. Environmental Protection Agency's (EPA's) efforts to implement the operating permits provisions of the Clean Air Act. Over the past 5 years States, local agencies and industry have made great progress in implementing these provisions. Due to the progress being made, the public will receive the benefits intended under the Clean Air Act, including improved air quality, and public information and participation opportunities.

Known as Title V, the permit provisions were originally proposed by the Bush Administration as part of what became the Clean Air Act Amendments of 1990. The Bush Administration and the Congress added the operating permit program to the Act in order to better ensure compliance with pollution control requirements by having a single permit for individual sources that includes all of a company's applicable air pollution control requirements. This allows better accountability for compliance and, ultimately, an improved environment.

We would like to take a few moments to describe some of the specific benefits of the permits program, discuss the status of our operating permits rule, and then describe the many steps EPA is taking to significantly streamline and simplify the operating permits program.

The operating permit program provides for the first time that the Federal and State air pollution control requirements be incorporated into a single document. The owner of the facility must then certify that it is in compliance with the requirements in the permit. By requiring certification by a corporate official, the program gives company officials the opportunity to be fully knowledgeable about their compliance obligations and creates strong incentives for assuring that compliance is maintained. At the time the operating permit program was included in the Clean Air Act, EPA data showed that some State rules were achieving no more than, and in some cases less than, 80 percent of the expected reductions in emissions; we believe this shortfall was due to non-compliance. The operating permit program will substantially improve compliance with existing regulations, which in turn will result in improved air quality for the public. These improvements mean that States will not have to adopt new regulations to meet air quality standards to make up for non-compliance with existing rules.

Our preliminary experience with permit applications has indeed shown that compliance is being improved at many facilities. Many States have reported to us that in going through the process of developing permit applications, companies have discovered new uncontrolled emission points or air pollution requirements that applied to them but of which they were not previously aware. As a result, these facilities are taking steps to comply with those requirements.

Another important benefit of the permit program is public information and participation: it provides opportunities for the public to be informed about decisions concerning emissions from factories in their neighborhoods and communities. It allows the public to know what requirements a facility must meet, and allows the public a meaningful opportunity to comment on significant changes to the permit of a nearby major facility.

Also, by identifying all the requirements a facility must comply with, permits will avoid unnecessary controversy as to whether a given requirement applies to that facility. This benefits industry by avoiding the need for costly litigation to resolve such controversies.

As being developed by EPA, the permit program also offers benefits to industry by providing a vehicle for flexibility by fashioning permits that create plant-wide caps, include alternate operating scenarios, or provide advance approval of new units or modifications. This kind of permit design can potentially save substantial time and money over the previous system where many process changes had to be individually approved through lengthy changes to State implementation plans. One example of facility-wide limits is a permit that has been developed cooperatively among EPA, the State of Oregon, and Intel Corporation for a facility in Aloha, Oregon. The facility wide permit, which has been proposed and submitted to EPA, will allow the plant to make numerous changes to its processes without having to obtain a new permit. We believe this kind of flexibility will be the hallmark of the permit of the future and we are actively marketing this concept with State and local air pollution control agencies. As part of Administrator Browner's Common Sense Initiative, EPA has established a Permits Improvement Team that is holding meetings with stakeholders across the nation to discuss permit-related issues. From those meetings it is clear that many industry representatives strongly support the concept of a single cross-media permit that would incorporate all of a source's environ-

mental-obligations into a single document. This idea of a single, multi-media permit is also an important part of President Clinton's regulatory reinvention initiative. The consolidated permit for air regulations that we are discussing today is an essential step toward meeting that goal.

The operating permit program also provides a way to facilitate implementation of market-based trading programs by aiding facilities to use trading as a means of compliance and eliminating the need for sources to go through time-consuming amendments to their State implementation plans to make a trade.

In fact, another major reason the permit provisions were included in the 1990 Clean Air Act was to eliminate many of the time-consuming, administratively burdensome processes that a business is oftentimes subjected to if it wants to make a process change that would alter its emissions. Under the current State implementation plan system, the business in question would have to go through a State regulatory process with public comment and review, and then through a similar approval process at the Federal level. Each of these processes can take months and sometimes even years. However, once they are up and running and State plans are modified appropriately, State and local permit programs will greatly accelerate this process business will only need to go through a single significantly streamlined permit revision process at the State level.

The permit program is designed as an integral part of the Clean Air Act in that it provides a uniform vehicle for State and local agencies to administer other titles of the Act, such as the substantially revised provisions to protect the public from harmful hazardous air pollutants. In fact, the permit provisions were included in the 1990 Clean Air Act to bring it up to date with other national environmental legislation, such as the Clean Water Act, that had successfully used permits as an administrative mechanism for determining compliance.

A final benefit of the operating permits program is that, unlike some Federal laws, it provides States and local governments with a specific mechanism for funding their compliance activities. This common sense funding approach based on the "polluter pays" principle will provide sufficient funding to operate the State or local permit program. This, in turn, enhances the ability of the State and local agencies to be more responsive to the public and business.

#### STATUS OF EPA OPERATING PERMIT RULE

In July 1992, EPA issued its regulation outlining the minimum requirements State and local agencies must meet in designing their operating permit programs. Upon promulgation of this rule, EPA was immediately sued by environmental groups, industry, and States over certain provisions. The chief area of controversy concerned the process for revising permits not the procedures for initially issuing permits. Industry concerns include delays caused by the revision process. States and industry were concerned about costs and the additional-paperwork burden associated with a revision process that potentially duplicated existing State programs. Environmental groups and some States contended that the rule failed to provide adequate opportunities for public participation in the permit revision process. While no final settlement was reached with the almost 20 litigants, in August 1994, EPA issued a proposed rule describing a new revision procedure that attempted to accommodate the litigants' varying concerns. The result, however, was a proposal that was criticized as being more complicated and administratively burdensome.

After further discussions with a broad group of stakeholders, EPA agreed with many of the criticisms of the proposed rule. We have committed to issue a supplemental proposed rule that will significantly simplify and streamline the operating permits revision process, while providing an adequate opportunity for public review of permit revisions that have a significant environmental impact. In fact, simplifying the operating permits revision process was one of the commitments made by President Clinton in his March 1995 regulatory reinvention announcement. We expect to issue our supplemental proposed rule this month.

In developing this supplemental proposal, EPA has worked closely with a number of individual States, as well as the National Governors Association, the Environmental Council of States, and State and local air pollution control administrators to develop a common sense proposal that builds on existing successful State permit programs. We have also worked with industry representatives and environmental groups to attempt to achieve a balance between the need for public participation and the need for flexibility for industry. We have held a series of detailed discussions with all key stakeholders and shared a draft of the rule with them. We have received detailed comments from many of those stakeholders and have worked very hard to respond to them in our supplemental proposal.

In addition to our meetings with stakeholders on the supplemental proposed rule, we have also held a series of stakeholder meetings to discuss two other issues which have been an immediate concern: streamlining permit applications and reducing the burden of compliance certifications. Before discussing the changes to the proposed rule, I would like to describe our progress on these two issues.

#### STREAMLINING PERMIT APPLICATIONS

Once EPA has approved a State or local program, the next step in the process is for industry or other affected sources to submit permit applications to the State or local agency for review. The agency then issues the permit to the source. We are now at the stage where the various sources are compiling and beginning to submit their permit applications. As this occurred, EPA became aware of reports about the burdens and costs associated with preparing certain permit applications. In one respect, it is important to remember that these are one-time costs that are akin to switching from a manual to an electronic record-keeping system. However, having said that, we were very concerned about the size and costs of some of the applications we had heard about. While large facilities with hundreds of emissions points, such as chemical plants or refineries, could be expected to have sizeable applications, EPA considered some of the applications we had heard about to be unacceptably costly and complicated. We found that some of the information being requested in the permit applications was going far beyond Federal requirements.

In response, on July 10 EPA issued a "white paper" designed to enable industry and State and local agencies to take immediate steps to reduce the cost and size of permit applications. In developing the white paper, EPA worked extensively with industry, State and other stakeholders, providing them several opportunities for review and comment. Among other things, the white paper gives guidance to States by clarifying EPA's intent and encouraging the use of:

- Emissions descriptions, not estimates, for emissions not regulated at the source;
- Checklists, rather than, emission descriptions, for insignificant activities;
- Exclusions for trivial and short-term activities; and
- "Batch" or generalized treatment of certain activities (e.g., space heaters) subject to certain generally applicable requirements.

In addition, EPA's white paper gives encourages the elimination of environmentally insignificant, obsolete, and irrelevant terms from existing State permits, \$0 they will not be included in Title V operating permits.

To date EPA has received very positive feedback about the white paper from representatives from State and local government and industry.

#### SIMPLIFYING THE BURDEN OF COMPLIANCE CERTIFICATIONS

As I stated earlier, we have found that the permit application process is serving as an incentive for companies to identify and come into compliance with requirements that they failed to meet in the past. We have also become aware, however, that there has been some confusion on the part of many in industry as to the nature and extent of compliance certification requirements.

As a result, on July 3 we issued a guidance memorandum to the EPA Regional Offices clarifying the requirements with which companies must certify compliance for their initial permit applications. Under that policy, in determining which requirements should be addressed in the permit applications, sources will be required to review current major and minor new source review permits and other permits containing Federal requirements, State implementation plans and other documents, and other Federal requirements. However, EPA will not require companies to reconsider previous applicability determinations as part of their inquiry in preparing the operating permit applications. The policy makes it clear that EPA does expect companies to rectify past noncompliance as it is discovered. Also, companies will remain subject to enforcement actions for any failure to comply with requirements to obtain a permit or meet air pollution control obligations;

The reaction from industry to this policy has been very positive and we believe it will greatly help to get permit programs up and running around the country.

#### STREAMLINING AND SIMPLIFYING THE OPERATING PERMITS RULE

I have already discussed how we intend to issue our supplemental proposed permits rule this month. The supplemental proposal will include a greatly simplified system for permit revisions. It will give States much greater flexibility to decide the amount of public review for the vast majority of permits revisions by matching the

level of review to the environmental significance of the change. A State would not be required to provide any review for changes that it can show to be de minimis.

The proposal will include a series of other common sense provisions to streamline the permits process. For example, it will interpret the key concept of title modifications in a manner that will allow companies to design their operating permits to make small changes subject to minor source preconstruction programs without a Title V permit revision. By interpreting Title I modifications to cover only changes that are major modifications, and not smaller changes that are covered by a minor new source review program, companies will have much greater opportunity to take advantage of the operational flexibility provided by section 502(b)(10) of the statute.

The supplemental proposal will also clarify that EPA will restrict its opportunity to apply its veto of permit revisions to only the most environmentally significant changes, such as major emission increases. The proposal will include a waiver of EPA's veto opportunity for less environmentally significant changes, which constitute the vast majority of changes at facilities, for a five-year period, during which EPA will audit how well State programs are working. EPA would exercise its veto authority during the five-year period if a petition were received from a citizen and there is evidence that a proposed revision would have a significant adverse environmental effect.

In order to ensure that States have greater flexibility to make use of their existing operating permit programs and avoid duplication of State and Federal programs, we will clarify in our supplemental rule that States can use their current minor source review programs to process most permit changes and then automatically incorporate those changes into Title V permits. We will revise our rules for minor new source review programs to clarify that States have discretion to match the amount of public review to the environmental significance of a change. To the extent that States need to change the public review provisions of their minor source review programs to meet Title V requirements, States will have flexibility to make those changes as part of either their Title V or minor source review programs and will have up to 5 years to implement those changes.

Finally, we will include regulatory language in our supplemental proposal that will recognize and promote the flexible "emissions cap" approach that has been successfully developed for the Intel facility in Aloha, Oregon.

EPA continues to work with stakeholders on a number of other fronts as well. Industry and States have raised several concerns about any enhanced monitoring that may be required in association with the operating permit program. They were concerned that EPA's enhanced monitoring rule would have added costly and unnecessary additional monitoring burdens for affected facilities and make existing rules more stringent. EPA concluded the controversy surrounding the rule would make it impossible to implement as proposed and has decided to pursue a different approach from that set out in its proposed rule. We are working very closely with industry, States and other stakeholders to develop a more cost-effective approach to assure compliance by building on the requirements of existing rules.

As we continue to work with States, industry and other stakeholders to address issues they raise, it is important that we not lose sight of the tremendous progress being made at the State and local levels in implementing the operating permit provisions of the Clean Air Act. The litigation and controversy relate to a relatively small part of the overall rule; State and local agencies have moved forward to submit their programs and EPA is reviewing and approving those programs. To date, EPA has received programs from 53 State and territorial agencies and 59 local agencies. EPA has published approval notices for 14 State programs and formally proposed approval for 13 more. EPA has also approved 35 local permitting programs and proposed approval for 11 more. EPA has published a disapproval notice for only one State. We fully expect almost every remaining State and local agency to submit a permit program by November of this year and we will continue to make progress in approving the program submissions we receive.

In summary, despite the difficulties that are always experienced when setting up a new program of this magnitude, real progress is being made in implementing the programs in the States. We believe these programs will benefit the public by significantly enhancing compliance with air pollution regulations across the Nation, improving air quality and increasing the effectiveness of existing air pollution control programs. EPA is committed to continue working with States and industry to streamline and simplify the requirements associated with the operating permits program and develop a common sense program that works for everyone.

In addition to the extensive efforts being made to implement the operating permits program, EPA has made progress in reducing the burden of this and other environmental requirements on small businesses. During the last year, EPA has issued two enforcement policies that are intended to promote environmental compli-



ance among small businesses by providing incentives for their participation in compliance assistance programs and prompt correction of violations. On August 12, 1994, EPA issued its policy for Clean Air Act Section 507 Small Business Assistance Programs. On June 13, 1995, we issued a broader policy that sets forth the way in which EPA expects to handle violations in all media programs by small businesses who participated in compliance assistance programs. This policy will be used to eliminate or reduce a civil penalty for first-time violators that employ 100 or fewer employees, who promptly correct violations.

Mr. Chairman, on July 5 you sent us a letter asking a series of 175 questions about some very complex policy issues related to implementation of the Clean Air Act. You asked that we provide answers to those questions by July 20. As agreed with your staff we responded to the questions pertaining to operating permits by that date and we intend to respond to the remaining questions in writing by August 10.

Mr. Chairman, this concludes our written statement. We would be happy to answer any questions you may have.

JOHN H. CHAFFEE RHODE ISLAND CHAIRMAN

JOHN W. WARNER VIRGINIA  
ROBERT SMITH NEW HAMPSHIRE  
LAUCH FAIRCLOTH NORTH CAROLINA  
DIRK KEMP THORNE IDAHO  
JAMES M. INHOFE OKLAHOMA  
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HARRY REID NEVADA  
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JOSEPH I. LIEBERMAN CONNECTICUT  
BARBARA BOXER CALIFORNIASTEVEN J. SHIMBERG STAFF DIRECTOR AND CHIEF COUNSEL  
J. THOMAS SUTER MINORITY STAFF DIRECTOR

## United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
WASHINGTON, DC 20510-6175

July 5, 1995

VIA HAND DELIVERYMs. Carol M. Browner  
Administrator  
Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C. 20460

Dear Ms. Browner:

As you know, the Subcommittee on Clean Air, Wetlands, Private Property and Nuclear Safety of the Senate Committee on the Environment and Public Works has begun a series of oversight hearings on the Clean Air Act Amendments of 1990. The next hearing, on Title V, is tentatively scheduled for August 2, 1995.

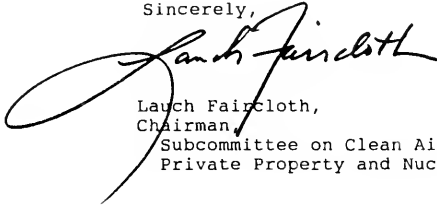
In preparation for the remaining hearings, the Subcommittee has been reviewing EPA's regulatory implementation of the Clean Air Act Amendments of 1990. As part of our review, we have developed a series of questions the answers to which we hope will better inform the Subcommittee as to EPA's legal interpretations of specific statutory requirements as well as the assumptions EPA has established in developing models and risk criteria.

Please submit your written answers to the enclosed questions to Sean Callinicos, the staff director of my Subcommittee (407 Hart Senate Office Building; phone (202) 224-3783), on or before Thursday, July 20, 1995. Please be advised that because the Title V hearing will be held soon thereafter, we will not be able to grant an extension to this deadline.

Ms. Carol M. Browner,  
July 5, 1995  
page 2

Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Lauch Faircloth". The signature is written in a cursive style with a large, looping initial "L".

Lauch Faircloth,  
Chairman,  
Subcommittee on Clean Air, Wetlands,  
Private Property and Nuclear Safety

cc: Sean Callinicos (with enclosure)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 10 1995

OFFICE OF  
AIR AND RADIATION

Senator Lauch Faircloth  
United States Senate  
Washington, DC 20510

Dear Senator Faircloth:

In response to your July 5, 1995 letter, I am submitting the enclosed material. The questions and our answers are numbered as they were in your letter. Note that answers to questions on enforcement and monitoring, and on permits, were sent to you on July 20, 1995. I trust this material is fully responsive to your inquiry.

Sincerely yours

A handwritten signature in cursive script, appearing to read "Mary D. Nichols".

Mary D. Nichols  
Assistant Administrator  
for Air and Radiation

Enclosures



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EPA RESPONSE TO JULY 5, 1995 LETTER FROM  
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKSI. NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) AND  
NONATTAINMENT (TITLE I OF THE 1990 CLEAN AIR ACT AMENDMENTS)

## A. How are the NAAQS established?

1. Are they based on risk; that is, a finding of increased risk of death, incidence of disease, disability, etc.?

## EPA RESPONSE:

The NAAQS are based on risk. The EPA has found that elevated particulate matter levels lead to early death and increased lung disease. The EPA has also found that elevated ozone levels cause increased hospital admissions and respiratory illnesses. The primary (health-based) NAAQS are intended to protect the public health with an adequate margin of safety. In selecting primary standards that provide an adequate margin of safety, the Administrator is seeking to prevent pollution levels that pose an unacceptable risk of harm. In selecting standards which provide an adequate margin of safety, EPA considers such factors as the nature and severity of the health effects involved, the size of the sensitive population(s) at risk, and the kind and nature of uncertainties that must be addressed. The health endpoints of concern vary from one NAAQS to another because of different characteristics of each pollutant and how they affect the human body. For example, the ozone NAAQS is intended to protect against changes in pulmonary functions that can lead to chronic respiratory problems, while the particulate matter NAAQS is to protect against excess mortality, increased respiratory illness in adults and children, and aggravation of bronchitis.

2. Do the NAAQS set a zero risk standard as risk would be measured or projected by other EPA pollution control programs? Does EPA set NAAQS at a level intended to avoid all premature death or serious, irreversible illness, or at a more protective level; that is, at a level intended to avoid any incidence of adverse effects short of death or serious illness?

## EPA RESPONSE:

The EPA does not set zero risk-based NAAQS. As discussed in response to question A.1. above, NAAQS are set at a level which provides an adequate margin of safety to protect against pollution levels that may pose an unacceptable risk of harm. In doing so, EPA has recognized that some risk may remain. For example, in

establishing the lead NAAQS in 1978, EPA clearly indicated that the standard level was based on preventing "most children" in the United States from exceeding the target blood lead level (43 FR 46246, October 5, 1978). One key component in setting a NAAQS is the determination of what constitutes an adverse effect. Clearly, premature death and irreversible illness are adverse. Based on the structure and legislative history of the 1970 Clean Air Act Amendments, EPA believes Congress intended the NAAQS to protect against reversible effects as well, if they are of such medical significance that they should be regarded as adverse. Some reversible effects vary in degree, depending on the magnitude of exposure or other factors. Determining at what point reversible effects become so significant that they should be regarded as adverse within the meaning of the Act is a matter of informed judgment that must be exercised by the Administrator. To help inform such judgments, EPA seeks the advice and recommendations of the Clean Air Scientific Advisory Committee as well as other medical experts. In determining an appropriate standard, the Administrator takes into account the nature and severity of the effect, size of the sensitive population, and the likelihood and magnitude of exposure and associated health risk.

3. What kinds of health or other biological or physiological effects form the basis of a finding of "adverse" effect? If the effect is reversible, how does that affect the setting of the NAAQS?

**EPA RESPONSE:**

The nature of effects that have been determined to be "adverse" vary from one criteria pollutant to another because each pollutant affects the human body in a different manner. They range from excess mortality to reversible changes in pulmonary function accompanied by respiratory symptoms. For example, for short-term ozone exposures, there is a gradation of physiological responses that range from normal to mild, to moderate to severe. In the moderate to severe range, individuals report marked discomfort in taking a deep breath, frequent and uncontrollable cough, and decrease in lung function ranging from 10 to 20 percent or greater that may persist for several days. These effects may result in curtailment of normal activities. In the mild range, the lung function decrements and symptoms may not be perceptible to an individual. As discussed in question A.2. above, the Administrator must make an informed decision at what point, if any, reversible effects become adverse, and then take into account the likelihood of exposure and the associated public health risk. All of these factors are considered in setting a NAAQS.

4. What assumptions or data does EPA use regarding duration of exposure and effects from exposure?

**EPA RESPONSE:**

In setting NAAQS for the different criteria pollutants, EPA uses the scientific data in the air quality criteria document, an EPA compilation and evaluation of the latest health and welfare information for the pollutant of concern. In assessing the health effects associated with different levels of exposure and durations, EPA draws from animal studies, controlled human studies and/or studies that evaluate pollutant effects across broad populations using statistical approaches (so-called epidemiological studies). Data on human activity patterns (e.g., time spent outdoors exercising or walking) is also used. Key assumptions on emission inventories, meteorological conditions, and economic growth and its impact on emissions and increases in vehicle use are then used to project ambient pollution levels. These levels are combined with human activity patterns to estimate exposures and durations. This type of analysis is the basis of the overall risk and effects estimates for setting of NAAQS.

5. What role do sensitive populations play in establishing the NAAQS? Is the ability of particularly sensitive populations to curtail heavy exercise at times taken into account? Is the role of personal behavior choices, particularly smoking, taken into account?

**EPA RESPONSE:**

The EPA believes it is sound public health policy to consider sensitive population groups in setting NAAQS. As a result, EPA, in preparing the air quality criteria under section 108, seeks to identify those groups that may be at higher risk if exposed to the pollutant of concern, either because they are more likely to be exposed, or because they are more susceptible to the effects of the pollutant, or both. Although different pollutants may involve different sensitive populations, typical sensitive populations include young children, pregnant women, outdoor workers, individuals with preexisting respiratory disease (e.g., asthmatic individuals), and the elderly. In general, mitigating behavior such as curtailing normal activities should not be taken into account in setting NAAQS. However, since elevated breathing rates produce an health effect of concern, EPA does take that into consideration when estimating the size of the population exposed and the associated public health risk. Finally, personal behavior choices, such as smoking, are taken into account as appropriate. For example, in assessing the exposure/risk associated with carbon monoxide (CO), smokers were excluded from

the analysis because smoking itself results in CO exposure levels considerably greater than those observed in the ambient air. On the other hand, people engaged in activities like exercise or

working outdoors are included in the exposure analyses because they reflect normal activities that individuals undertake.

- B. To what degree does the Clean Air Act limit EPA's ability to take attainment costs or restrictions on growth or lifestyles into account when determining the level of NAAQS?

**EPA RESPONSE:**

The principle underlying the CAA is that every American deserves to breath healthy air. The NAAQS define what healthy air is, and therefore are based on health effects data, not costs. Costs are taken into account in the length of time Congress has provided for attaining healthy air, and in devising emission control strategies aimed at achieving the NAAQS.

In upholding EPA's establishment of NAAQS for lead in 1978, the reviewing court concluded that the Act does not permit EPA to consider either the economic impact or the technological feasibility of attaining NAAQS in establishing them. Lead Industries Ass'n v. EPA, 647 F.2d 1130, 1148-51 (D.C. Cir.), cert. denied, 449 U.S. 1042 (1980). Subsequent judicial decisions have reaffirmed this conclusion for the other criteria pollutants. For the PM NAAQS: Natural Resources Defense Council v. Administrator, 902 F.2d 962, 972-73 (D.C. Cir. 1990), vacated, in part, dismissed, 921 F.2d 326 (D.C. Cir.), certs. dismissed, 498 U.S. 1075, cert. denied, 498 U.S. 1082 (1991). For the ozone NAAQS: American Petroleum Institute v. Costle, 665 F.2d 1176, 1185-86 (D.C. Cir. 1981), cert. denied, 455 U.S. 1034 (1982). See also Natural Resources Defense Council v. EPA, 824 F.2d 1146, 1157-59 (D.C. Cir. 1987) [section 112 standard for vinyl chloride]. This appears to preclude consideration not only of "direct" attainment costs - such as those associated with installing and operating pollution control equipment - but also of related economic costs such as restrictions on growth. See Natural Resources Defense Council v. Administrator, 902 F.2d at 972-73 (potential health risks from unemployment).

On the other hand, these decisions do not preclude consideration of economic and technical feasibility in implementation of the NAAQS to the extent permitted by other provisions of the Act. The EPA believes it has the authority to fashion implementation strategies that minimize the costs of meeting NAAQS. For example, EPA has been developing an open market emissions trading rule to help facilitate the use of emissions trading to reduce costs of compliance with pollution control requirements.

Moreover, EPA believes it has discretion to consider lifestyle factors (i.e., exercising/nonexercising, smoking/nonsmoking, etc.) in establishing NAAQS, in that how people live may affect the likelihood of their actually being



exposed to harmful pollutant concentrations, which in turn may influence decisions on the "margin of safety" required by section 109. Over a period of years, EPA has developed techniques of accounting for such factors quantitatively and has been attempting to do so for some time in exposure and risk analyses prepared for NAAQS reviews.

- C. To what degree does the Clean Air Act limit EPA's ability to determine the test procedures, averaging periods or number and duration of acceptable exceedances of a NAAQS?

**EPA RESPONSE:**

The EPA is not constrained by the Clean Air Act when determining the test procedures, averaging periods, number and duration of acceptable exceedances and levels of a NAAQS as long as the resulting combination is based on sound scientific and technical information and results in a NAAQS that provides the requisite degree of public health and welfare protection.

- D. The Clean Air Act seems to require EPA to force states to meet the NAAQS; that is, to eliminate nonattainment.

1. To what degree does the Act permit EPA to consider the achievability of attainment, irrespective of cost, when setting a NAAQS, a related test procedure, the acceptable rate of exceedance, etc.? Does the CAA restrict EPA's consideration of such factors? Would EPA like the discretion to consider such factors?

**EPA RESPONSE:**

As indicated in response to question I.B., EPA may consider relevant scientific and technical factors in establishing elements of a standard such as the appropriate test procedures, the number of allowable exceedances, averaging times, acceptable levels and so forth, so long as the resulting combination of elements in the NAAQS provides the requisite degree of health or welfare protection. In fact, EPA is giving close consideration to such factors in its current reviews of the NAAQS for ozone and particulate matter. The EPA believes it has adequate discretion to consider relevant scientific and technical factors in this respect. In addition, as noted above, we believe we have substantial discretion in developing implementation strategies for standards. Because of the discretion EPA has in determining

the number of allowable exceedances, for example, and in developing implementation strategies, EPA does not believe it needs the discretion to consider the cost of attainment when

determining the level of the NAAQS necessary to protect public health or welfare.

2. Under the Act, can EPA avoid imposing sanctions against states if they fall short of attainment, but show progress for attainment, albeit later than the Act's deadlines?

**EPA RESPONSE:**

The Act does not provide for the imposition of sanctions when areas fail to attain. However, EPA would require that any nonattainment area that does not attain the standard by the applicable attainment date implement contingency measures pursuant to section 172(c)(9) of the Act. In addition, the nonattainment area may be bumped up to a higher classification which would require additional control measures. Another option for the State is to request an extension of the attainment date in order to provide more time to attain the standard. Nonattainment areas are allowed to request two 1-year extensions if the State meets certain requirements.

3. What would the Act require EPA to do if naturally occurring levels of pollutants preclude attainment? What would be the ambient levels of ozone in ozone nonattainment zones if human activity is excluded? What fraction of health risks are derived from biogenics?

**EPA RESPONSE:**

In general, the Act does not address the situation where naturally-occurring levels of pollutants interfere with attainment. With the exception of PM-10, EPA is unaware of any nonattainment situation where natural emissions preclude attainment of the NAAQS. In the case of PM-10, section 188(f) of the Act authorizes EPA to waive attainment dates for moderate nonattainment areas where EPA determines that nonanthropogenic sources of PM-10 contribute significantly to a violation of the PM-10 NAAQS. Therefore, States with nonattainment areas where significant contributions of PM-10 emissions come from sources not caused by humans directly or indirectly may request an attainment date waiver. The State must, however, continue to implement control measures to control those PM-10 emissions which are anthropogenic in nature.

Concerning the natural background levels of ozone if human activity is excluded, a reasonable estimate would be 0.02 to 0.035 ppm, annual average. It has also been estimated that

maximum daily 1-hour values could range from 0.03 to 0.05 ppm. In assessing ozone health risks, EPA does not do an explicit assessment of the health risks from biogenic ozone levels because those levels are well below the level at which ozone health effects are observed. However, when EPA does assess ozone health risks, the ozone levels considered do include the natural, biogenic contribution.

- E. In the case of the ozone standard, what is the legal basis and scientific rationale for using the fourth highest exceedance in three consecutive years at a single monitor as the "design value"?

**EPA RESPONSE:**

In 1979, EPA promulgated the national ambient air quality standard (NAAQS) for ozone at a level of 0.12 ppm that is attained "when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 part per million is equal to or less than 1 as determined by Appendix H" (40 CFR 50.9). (The "expected number" can be thought of as the long-term average.) The attainment test specified in Appendix H to 40 CFR 50.9 states that the "expected number" of days with concentrations above 0.12 ppm is to be estimated by calculating the average number of exceedances during the most recent three years. For areas with multiple monitoring sites, all sites within the nonattainment area must meet the standard for the area to be designated in attainment of the ozone NAAQS.

Compliance with the ozone NAAQS is judged on the basis of expected exceedances, and becomes a "yes/no" decision. However, once it is established that an area exceeds the standard, the next logical question to ask is, "By how much?" The air quality design value is intended to answer this question and provide a measure of how far concentrations must be reduced to achieve attainment. In this respect, the design value can be viewed as an air quality indicator for a given location. The design value has been defined as the fourth highest daily maximum 1-hour concentration measured during any 3-year period. If the fourth highest day is reduced to the level of the standard, then there will be one day per year above the level of the standard with three years of data. This methodology is unchanged from the State implementation plan (SIP) guidance issued in 1981, is consistent with section 181(a) of the Act, and is the method that was used for all of the annual design value lists issued by EPA and the initial ozone area classifications (40 CFR 81).

1. What is the basis of applying a single monitor's reading to an entire airshed. Is one reading from one instrument of such a highly variable factor reliable

enough to base billion-dollar classification and control programs?

**EPA RESPONSE:**

It is true that for an area to be in compliance with the air quality standard, each monitor in the area must meet the standard. However, it is highly unlikely that any single monitor could result in a billion dollar control program. EPA has issued national monitoring regulations establishing minimum monitor requirements and criteria for uniform monitor siting and quality assurance procedures (40 CFR 58). (Although some monitors are sited to determine the maximum concentrations in a city, there is still a possibility that the maximum concentration in a city can go undetected.) Only data meeting the monitor siting and quality control requirements are used in regulatory decisions. The minimum monitoring requirement is two monitors in cities with populations of at least 200,000. However, most cities operate more than this minimum network, with some operating as many as 10 to 20 sites. All of this information is used in coming to decisions regarding classification and control. Moreover, the decisions regarding control are also guided by modeling and other studies. In summary, although it is true that each monitor in an area must be below the standard, it is inaccurate to state that one reading at a single monitor drives the entire process. What is driving the process is the fact that, for many cities (and more wide-spread areas) there are multiple monitors recording frequent exceedances.

2. What difference would the public experience if the number of permitting exceedances of ozone NAAQS was increased to two, three, four, five, or even ten per year? What would the answer to this question be if the standard were averaged over a longer period, e.g., eight, twelve, or twenty-four hours?

**EPA RESPONSE:**

If the level of the NAAQS and the averaging time were held the same but the number of exceedances were increased, the risk that there would be adverse effects to the public health would also increase. If the averaging time and level were also changed in conjunction with the number of exceedances, it is possible that equivalent protection could be achieved. In fact, longer averaging times, lower levels and more allowable exceedances may actually be more effective at reducing the public's risk to adverse health effects. As part of the ongoing review of the ozone NAAQS, the issue of alternative averaging times and whether to permit more than one expected exceedance is being examined.

3. What difference would the public experience if the most recent data, rather than data based on 1988-90 were used to determine attainment? Does EPA interpret the CAA (specifically sections 107 and 181) to allow reclassification/redesignation based on recent ozone data, as opposed to data based on 1988-90?

**EPA RESPONSE:**

The classifications under the 1990 Clean Air Act were based on the most recent data available (1988-1990). Based on these initial designations and classifications, State and local areas have developed and implemented control strategies to improve their air quality.

The most recent, quality assured data for evaluating the air quality status of urban areas is from 1991-93. Twenty-six of those areas have already been redesignated to attainment, and 27 additional areas currently have pending redesignation requests. The EPA bases decisions regarding redesignations to attainment under section 107(d)(3)(E) on current air quality data (most recent 3 years), not on data from the 1988-90 period. In addition, for pending redesignation requests, EPA must consider air quality data for 1993-95.

4. EPA recently announced it would suspend certain requirements for areas with air quality data indicating attainment. Why should this not be automatic; that is, not requiring further EPA approval? Should three years of complying data presumptively suspend the development or imposition of SIPs or sanctions?

**EPA RESPONSE:**

In May 1995, EPA issued a policy which permits the States to not submit SIPs for certain requirements if they meet the ozone air quality standard. The SIPs concern the Act's requirements for reasonable further progress and attainment demonstrations. The policy does not require EPA approval of any State submissions for the requirements to be effectively suspended. The EPA, however, must fulfill its obligations under the Administrative Procedure Act. Therefore it is necessary to engage in notice and comment rulemaking to make the determinations that monitoring data from a particular area demonstrates attainment of the standard and that the requirements are effectively suspended. The EPA has engaged in such rulemaking in an expeditious manner.

Recently, it took final action with respect to several nonattainment areas and stopped sanctions clocks on the basis of the determinations. At this writing, EPA has approved

redesignation of 26 areas and has redesignations pending for another 27 areas under review.

The EPA does not believe that 3 years of clean monitoring data should presumptively suspend the development of all SIPs or imposition of sanctions. Achieving 3 years of clean air quality is certainly a significant accomplishment. However, it is important that the area have sufficient permanent and enforceable measures in the SIP to provide for clean air into the future. Additional control measures may be needed to offset growth in emissions.

A State can determine whether or not additional measures are needed to maintain the clean air by developing a maintenance plan. The maintenance plan is one of the required elements for redesignation to attainment. The EPA approval of a State's redesignation request and maintenance plan will relieve the applicable area of additional control requirements that the maintenance plan shows will not be needed. Furthermore, any control measures that a State has adopted but did not help bring the area to attainment and are not needed for maintenance may be placed in the contingency portion of the maintenance plan. These measures would not need to be implemented unless the area lapsed back into nonattainment. The approval of the redesignation will also turn off existing sanctions clocks for control requirements that came due before or after the area submitted its redesignation request.

As soon as an area has 3 years of clean data, the State may begin pursuing redesignation to attainment. The EPA has been working closely with States to assist them in developing approvable maintenance plans for their areas that have achieved clean air. Once a State submits its complete approvable maintenance plan and redesignation request, EPA will move forward to redesignate the areas as quickly as possible.

- F. What efforts are under way that might lead to a tightening of the standards for SO<sub>2</sub>, particulate matter or ozone?
1. Is there a plan, commitment or court order that could force a change in any of these standards in the next two years?

**EPA RESPONSE:**

A court order in American Lung Association v. Browner, CV-92-5316 (ERK) (E.D.N.Y. July 31, 1993), requires a final decision

on revision of the primary NAAQS for SO<sub>2</sub> by April 14, 1996. Another court order in American Lung Association v. Browner, CIV 93-643 TUC-ACM (D.Ariz. Oct. 6, 1994), requires a final decision on revision of the NAAQS for particulate matter by January 31, 1997. Separately, EPA has also announced that it intends to reach a final decision on revision of the NAAQS for ozone by mid-1997 (59 FR 5164, Feb. 3, 1994).

The obligation or commitment in each case is only to reach a final decision taking into account relevant scientific information, advice rendered by the Clean Air Scientific Advisory Committee of EPA's Science Advisory Board, and public comments on any EPA proposal. In no case is EPA required to reach a particular result except that the standards must protect the public health with an adequate margin of safety.

2. **Which forthcoming or possible readjustments of the NAAQS will require an extension of the deadlines in the CAA?**

**EPA RESPONSE:**

None of the possible revisions to the NAAQS will require a legislative change to the deadlines provided in the CAA. Title I, parts A and D of the CAA, contemplate the possibility that national ambient air quality standards will be revised and establishes a framework for establishing appropriate requirements and deadlines that accommodates revisions to a NAAQS (see sections 107, 109, 110, 171-193).

3. **EPA recently announced a program to use its enforcement authorities to obtain reductions in SO<sub>2</sub> emissions in either pending or in lieu of changing the NAAQS. Please explain what the Agency is doing in this regard and its legal authority to take these actions.**

**EPA RESPONSE:**

As indicated in response to question I.F.1., EPA is required by court order to make a final decision by April 14, 1996, on revision of the primary NAAQS for SO<sub>2</sub>. To that end, EPA in November 1994 proposed not to revise the existing 24-hour and annual primary NAAQS (59 FR 58958, Nov. 15, 1994). At the same time, EPA solicited public comment on the possible need to provide further protection against health risks associated with short-term peak exposures to SO<sub>2</sub>. The EPA's basic concern is that at sufficient concentrations such exposures can cause bronchoconstriction and related symptoms that pose health concerns in asthmatic children, adolescents, and adults who are physically active outdoors. The EPA also sought comment on this concern in the late 1980's (53 FR 14926, April 26, 1988).

The Administrator also sought comment on three alternative regulatory approaches that might be adopted if additional protection were judged to be necessary. These included (1) setting a new 5-minute NAAQS; (2) establishing a new regulatory program under section 303 (emergency provisions) of the Act; and (3) augmenting implementation of the existing NAAQS by focusing on sources likely to produce high five-minute SO<sub>2</sub> concentrations. The second and third proposed alternatives are designed to avoid or reduce regulatory burdens for the States and the regulated community in the event EPA determines that additional control of short-term SO<sub>2</sub> peaks is needed. The EPA subsequently published a proposal soliciting public comment on how these alternatives might be implemented (59 FR 12492, March 7, 1995).

The legal authority for the first option is section 109 of the Act. The legal authority for the third option is sections 110 and 113 and part D and would depend largely on more targeted monitoring and more vigorous enforcement of existing regulatory provisions. The second option would be based on sections 303 and 110(a)(2)(G). As discussed in the proposal, past EPA interpretations of section 303, dating to 1983 and before, support this approach to addressing short-term SO<sub>2</sub> peaks. The approach would also be consistent with court interpretations of similar authorities in other EPA statutes (59 FR 58970).

A large number of comments were received on the November proposal. The EPA is currently considering whether and, if so, what further regulatory action may be appropriate, taking into account the comments received.

4. How might these changes affect localities presently in nonattainment of a specific NAAQS? What areas might be redesignated, or would their eligibility for a designation as attainment be jeopardized? What localities might first become nonattainment areas? What areas would be "bumped up" into more serious nonattainment categories requiring additional control measures?

**EPA RESPONSE:**

It is assumed that this question refers to F.1 above. As indicated in that response, EPA has NAAQS reviews in progress for SO<sub>2</sub>, particulate matter and ozone. Of these, only the SO<sub>2</sub> review has progressed sufficiently to permit estimates of potential nonattainment, etc. As discussed in the November 15, 1994

Federal Register notice (59 FR 58958), the issue is whether a new 5-minute NAAQS or other regulatory measure is needed to protect against short-term SO<sub>2</sub> exposures. The EPA proposed alternatives to a NAAQS because the available analyses indicate that this is an isolated point source problem. Therefore, EPA does not



foresee significant impacts with regard to nonattainment on localities if it determines, after reviewing the public comments on the November 15, 1994 proposal, that additional regulatory measures are needed. With respect to particulate matter and ozone, EPA is still in the scientific assessment phase of those reviews and is assessing appropriate forms, averaging times, and levels of alternatives for possible consideration. As discussed in response to question F.5 below, as part of the ozone assessment, some analyses of 8-hour alternatives have been performed. The potential effects on areas of the country will be analyzed for all of the alternatives finally considered in revising the particulate matter and ozone standards.

5. If, for example, an ozone standard of 0.06 ppm for eight hours were set, how many total and new nonattainment areas would be created? Which additional areas might be forced into controls to prevent transport of pollutants? How many people would live in nonattainment areas? What would these estimates be if a new eight-hour standard were set at 0.08 or 0.10 ppm?

**EPA RESPONSE:**

An 8-hour standard of 0.06 ppm is not within the range of options currently under consideration by EPA. The range of options analyzed was 0.07 to 0.09 ppm for alternatives with 8-hour averaging times and an average of one exceedance per year. Table I provides data from the February 1995 draft EPA Staff Paper on ozone and lists the number of counties for the range of standard levels evaluated. County populations were not calculated for the draft Staff Paper. It should be noted that additional options are under consideration for the concentration level of the standard, the form of the standard, and the exceedance level, any of which could increase, or decrease, the degree of nonattainment shown below. For example, the table also includes the number of counties and total population not meeting a 0.08 ppm 8-hour, 5 exceedance per year standard. The number of counties and population not meeting the current 1-hour 0.12 ppm, 1 exceedance per year standard is shown for comparison. Until an option is selected, and an implementation strategy is developed for that standard, the additional areas which might need controls and the extent of those controls cannot be determined.

TABLE I. ALTERNATIVE OZONE STANDARDS

| Ozone Standard Alternative | Number of Counties<br>(1990-92 Data) * |
|----------------------------|--|
|----------------------------|--|

|                                |     |
|--------------------------------|-----|
| current 0.12 ppm 1-hr 1 exc/yr | 107 |
| 0.09 ppm 8-hr 1 exc/yr         | 217 |
| 0.08 ppm 8-hr 1 exc/yr         | 379 |
| 0.07 ppm 8-hr 1 exc/yr         | 494 |
| 0.08 ppm 8-hr 5 exc/yr         | 199 |

\* Data taken from the external review draft EPA Staff Paper on ozone released February 1995. Staff Paper has been distributed to the public and the Clean Air Scientific Advisory Committee for review. These data are preliminary and are not to be considered peer reviewed. The Staff Paper is being revised at this time and the above estimates may change.

6. How would the total cost of compliance and the incremental cost be changed on a cost-per-ton basis of emission reduction under ozone standards of 0.06, 0.08, or 0.10, averaged over eight hours? Compare these costs to the cost-per-ton of reduction under the current standard.

**EPA RESPONSE:**

As discussed in question F.4 above, EPA is still in the scientific assessment phase of the ozone review. As a result, only preliminary work has been initiated to develop appropriate control strategies for possible new 8-hour standards. The costs and benefits associated with these strategies will be analyzed pursuant to Executive Order 12866 and the Unfunded Mandate and Regulatory Reform Act of 1995. These analyses will compare the costs associated with the current standard with those associated with 8-hour alternatives. Cost effectiveness of alternative control measures will also be addressed. Until these analyses are performed, costs are not available.

7. Please rank, in order of cost effectiveness, the mandatory and discretionary control measures required under Title I of the 1990 Clean Air Act Amendments.

**EPA RESPONSE:**

During the course of preparing the regulatory impact analyses discussed in response to question F.6 above, EPA will be updating information on the cost effectiveness of alternative

control measures. At this time, the most recently published information is presented in the EPA report, "The Clean Air Act Section 183(d) Guidance on Cost Effectiveness" (copy enclosed). It must be recognized that illustrative cost-effectiveness estimates contained in the report do not necessarily reflect the most recent improvements in control technology in terms of cost and removal efficiency and, therefore, cost-effectiveness estimates are likely to change when the new analyses are completed.

## II. STATE IMPLEMENTATION PLANS ("SIPs")

- A. What is the status of SIP submissions and approvals/disapprovals? Please respond with reference to ozone, carbon monoxide and particulates.

### EPA RESPONSE:

*[Part of this answer has changed based on latest data - will update response before it goes out.]*

Figure 1 provides the overall SIP submission status by the required pollutants status. There are a total of 2,045 plan elements required to be submitted by the States to EPA. Of the 2,045 required elements, 1,953 were due prior to August 4, 1995. States have submitted 1,694 plan elements to EPA to satisfy the CAA requirements.

Figure 1 also provides approval/disapproval status of the SIP's submitted to EPA. The EPA tracks the approval or disapproval action published in the Federal Register (FR). Of the 1,662 SIPs submitted, 766 have been approved and published as final actions in the FR. While there have been 52 disapprovals, only 38 have not satisfied the outstanding requirements, and have not been published as approved actions in the FR. The status information was taken from EPA's tracking system on August 4, 1995.

1. What areas are facing mandatory sanctions this year? Within 2 years? In how many areas is the ability to meet attainment deadlines in doubt?

### EPA RESPONSE:

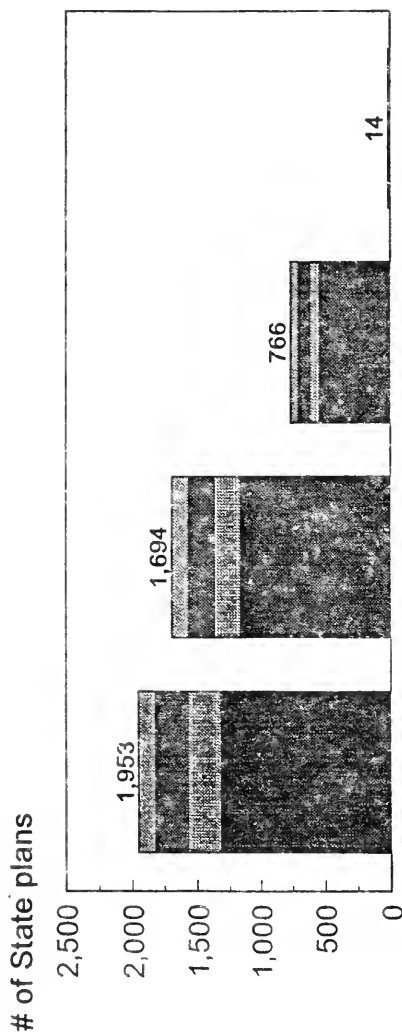
The following status information was taken from EPA's tracking system on July 31, 1995.

Table II provides the list of the areas with 18-month sanction clocks expiring before December 31, 1995. Currently, there are 3 areas with 2-to-1 emission offset sanction in place. The EPA Regional Offices have been working with States and expect that no other areas listed in this table will require sanctions. Since October 1991, EPA has sent "findings letters" to the States who failed to submit approximately 800 plan revisions on time, starting "sanction clocks." The end of the 18-month sanction clock column provided in the table is the date the 2-to-1 offsets would begin.

Table III provides a list of areas with 18-month sanction clocks expiring over the next 2 years (before August 1, 1997).

# Figure 1 - SIP Submission Status

## State Plans Required



**Table II- Current sanction clocks that end prior to December 31, 1995**

| State | Nonattainment Area (as specified in Part 81)                           | Required CAA element         | Pollutant or MSA | End of 18 month sanction clock |
|-------|--|------------------------------|------------------|--------------------------------|
| CA    | Los Angeles-South Coast Air Basin Area                                 | RACT Fbr-ups (CA Rule 1130)  | Ozone            | 11/12/95                       |
| CA    | Los Angeles-South Coast Air Basin Area                                 | RACT Fbr-ups (CA Rule 1136)  | Ozone            | 11/14/95                       |
| LA    | Baton Rouge Area   | Enhanced I/M                 | Ozone            | 08/22/95                       |
| MO    | Iron County (part); Within boundaries of Liberty and Arcadia Townships | Lead SIP                     | Lead             | 02/02/95                       |
| MT    | East Helena Area   | SO2 SIP - secondary standard | SO2              | 07/19/95                       |
| MT    | Lewis & Clark County (part); City of East Helena and vicinity          | Lead SIP                     | Lead             | 02/02/95                       |
| OH    | Cuyahoga County  | PM-10 SIP                    | PM-10            | 11/27/95                       |
| OH    | Jefferson County; (part)   | PM-10 SIP                    | PM-10            | 11/27/95                       |
| TN    | Nashville Area   | VOC 15% Plan                 | Ozone            | 10/01/95                       |
| VT    | Burlington MSA   | Enhanced I/M                 | Ozone            | 07/15/94                       |
| WA    | Portland-Vancouver Area  | Basic I/M                    | CO               | 11/09/95                       |
| WA    | Seattle-Tacoma Area  | Enhanced I/M                 | CO               | 11/09/95                       |
| WA    | Spokane Area   | Enhanced I/M                 | CO               | 11/09/95                       |

**Table 11- Current sanction clocks that end prior to December 31, 1997**

| State | Nonattainment Area (as specified in Part 81)                           | Required CAA element         | Pollutant or MSA | End of 18 month sanction clock |
|-------|--|------------------------------|------------------|--------------------------------|
| CA    | Los Angeles-South Coast Air Basin Area                                 | RACT Fix-ups (CA 1130)       | Ozone            | 11/12/95                       |
| CA    | Los Angeles-South Coast Air Basin Area                                 | RACT Fix-ups (CA 1136)       | Ozone            | 11/14/95                       |
| DE    | Philadelphia-Wilmington-Trenton Area                                   | Clean fuel fleets            | Ozone            | 02/16/96                       |
| IL    | Chicago-Gary-Lake County Area  | Clean fuel fleets            | Ozone            | 01/22/96                       |
| IL    | Chicago-Gary-Lake County Area  | NOX RACT                     | Ozone            | 01/08/96                       |
| IL    | St. Louis Area   | NOX RACT                     | Ozone            | 01/08/96                       |
| IN    | Chicago-Gary-Lake County Area  | Clean fuel fleets            | Ozone            | 01/22/96                       |
| IN    | Chicago-Gary-Lake County Area  | NOX RACT                     | Ozone            | 01/08/96                       |
| IN    | Louisville Area  | NOX RACT                     | Ozone            | 01/08/96                       |
| LA    | Baton Rouge Area   | Enhanced I/M                 | Ozone            | 08/22/95                       |
| LA    | Baton Rouge Area   | NOX RACT                     | Ozone            | 01/01/96                       |
| MI    | Grand Rapids Area  | NOX RACT                     | Ozone            | 01/08/96                       |
| MI    | Muskegon Area  | NOX RACT                     | Ozone            | 01/08/96                       |
| MO    | Iron County (part); Within boundaries of Liberty and Arcadia Townships | Lead SIP                     | Lead             | 02/02/95                       |
| MO    | St. Louis Area   | NOX RACT                     | Ozone            | 01/06/96                       |
| MO    | St. Louis Area   | Ozone Attainment Plan UAM    | Ozone            | 12/22/96                       |
| MT    | East Helena Area   | SO2 SIP - secondary standard | SO2              | 07/19/95                       |
| MT    | Laurel / Billings  | SO2 SIP                      | SO2              | 03/19/96                       |
| MT    | Lewis & Clark County (part), City of East Helena and vicinity          | Lead SIP                     | Lead             | 02/02/95                       |
| OH    | Clinton County Area  | Ozone NSR rules              | Ozone            | 03/21/96                       |
| OH    | Columbiana County Area   | Ozone NSR rules              | Ozone            | 03/21/96                       |
| OH    | Columbus Area  | Ozone NSR rules              | Ozone            | 03/21/96                       |
| OH    | Cuyahoga County  | PM-10 NSR                    | PM-10            | 03/21/96                       |
| OH    | Cuyahoga County  | PM-10 SIP                    | PM-10            | 11/27/95                       |
| OH    | Dayton-Springfield Area  | Ozone NSR rules              | Ozone            | 03/21/96                       |
| OH    | Jefferson County, (part)   | PM-10 NSR                    | PM-10            | 03/21/96                       |
| OH    | Jefferson County, (part)   | PM-10 SIP                    | PM-10            | 11/27/95                       |
| OH    | Prestle County Area  | Ozone NSR rules              | Ozone            | 03/21/96                       |
| OH    | Stuebenville Area  | Ozone NSR rules              | Ozone            | 03/21/96                       |
| OH    | Toledo Area  | Ozone NSR rules              | Ozone            | 03/21/96                       |
| OH    | Youngstown-Warren-Sharon Area  | Ozone NSR rules              | Ozone            | 03/21/96                       |
| PA    | Philadelphia-Wilmington-Trenton Area                                   | Clean fuel fleets            | Ozone            | 02/16/96                       |
| TN    | Nashville Area   | VOC 15% Plan                 | Ozone            | 10/01/95                       |
| VA    | Washington Area  | Clean fuel fleets            | Ozone            | 01/08/96                       |
| VT    | Burlington MSA   | Enhanced I/M                 | Ozone            | 07/15/94                       |
| WA    | Portland-Vancouver Area  | Basic I/M                    | CO               | 11/09/95                       |
| WA    | Seattle-Tacoma Area  | Enhanced I/M                 | CO               | 11/09/95                       |
| WA    | Spokane Area   | Enhanced I/M                 | CO               | 11/09/95                       |
| WI    | Kewaunee County Area   | NOX RACT                     | Ozone            | 03/06/96                       |
| WI    | Manitowoc County Area  | NOX RACT                     | Ozone            | 03/06/96                       |
| WI    | Milwaukee-Racine Area  | NOX RACT                     | Ozone            | 03/06/96                       |
| WI    | Sheboygan Area   | NOX RACT                     | Ozone            | 03/06/96                       |

For ozone attainment dates, EPA is providing flexibility for the November 1994 attainment demonstration submittals through a two-phased ozone attainment process. The approach is discussed at length in response to question II.A.4 below.

For carbon monoxide, the current data shows that a majority of areas have clean air quality data at present and are expected to attain the national air quality standards by the required attainment date. Only 4 of the 39 moderate areas are in jeopardy of not attaining the standards by the December 31, 1995 attainment date. The EPA will not be able to give an accurate and official determination concerning the areas which have attained or failed to attain for carbon monoxide until after monitoring data for calendar year 1995 is submitted.

The attainment date for PM-10 moderate nonattainment areas was December 31, 1994. A review of the air quality data indicated that 11 areas failed to attain the national air quality standards by the attainment date, but qualified for a 1-year extension of the attainment date. Five areas failed to attain the standards by the required attainment date and, according to the CAA, should be reclassified as serious.

**2. What are the mandatory elements required for SIPs in each category of nonattainment?**

**EPA RESPONSE:**

The mandatory elements are listed below for each category of nonattainment. For ozone, PM-10 and CO, requirements for each category include the items listed for the less stringent categories shown above it:

SIP Requirements for Ozone NAAQS

Marginal (0.121 up to 0.138 ppm)

Emission inventory  
Emission statements  
Periodic inventories  
Reasonably available control technology (RACT) "Fixups"  
I/M corrections  
New source review program (including corrections)

Moderate (0.138 up to 0.160 ppm)

Plan for 15% VOC reductions within 6 years  
RACT "Catchups", RACT on major sources  
Stage II gasoline vapor recovery (this requirement was removed for moderate areas by the adoption by EPA of a requirement for on-board carbon canisters (59 FR 16262, April 6, 1994))



## NOx RACT

Basic I/M (if not already required)

RACT on non-CTG sources

Demonstration that SIP controls provide for emission reductions as necessary to attain

Serious (0.160 up to 0.180 ppm)

Plan for 3% annual average reductions

Demonstration of attainment

Enhanced I/M

Enhanced ambient air monitoring

Vehicle miles traveled (VMT) demonstration (and transportation control measures (TCM) if needed)

Specific new source review (NSR) requirements for existing source modifications

Contingency measures if "milestone" missed

Severe (0.180 up to .280 ppm)

Employee trip reduction program

Measures to offset VMT growth

Requirement for fees for major sources if area fails to attain

Extreme (0.280 ppm and above)

No waivers from 15% or 3% reduction requirement

Clean fuels requirement for boilers

Traffic controls during congestion

SIP Requirements for PM-10 moderate and serious nonattainment areas:

The following SIP components must be included in the SIP on the statutory submittal date.

Moderate area SIP requirements:

1. Emissions inventory
2. RACM/RACT control measures
3. Attainment demonstration (Dispersion modeling)
4. Contingency measures
5. Compliance and enforcement schedules
6. New Source Review
7. Quantitative Milestones
8. RFP report

Serious area SIP Requirements:

1. An updated emissions inventory
2. BACM/BACT control measures
3. Revised attainment demonstration (due 4 years after the submittal of the BACM/BACT submittal)
4. Enhanced contingency measures
5. Revised compliance and enforcement schedules
6. Revised quantitative milestone report

SIP Requirements for CO moderate and serious nonattainment areas:Moderate CO area SIP requirements:Moderate = (9.1 up to 12.7 ppm)

1. Emissions inventory
2. Inspection/maintenance corrections
3. Submittal of periodic inventories
4. Attainment demonstrations
5. Use of oxygenated fuels
6. New source review
7. Contingency measures

Moderate = (12.7 up to 16.4 ppm)

1. Forecast of vehicle miles traveled
2. Enhanced inspection/maintenance

Serious CO area requirements:

Serious CO areas include all of the requirements listed above in addition to the following requirements:

Serious areas = (16.5 ppm and above)

1. Transportation control measures (TCM)
2. Clean fuel vehicle fleet program
3. Milestone and attainment failures (economic incentive programs)

SIP Requirements for lead, SO<sub>2</sub> and NO<sub>2</sub> NAAQS:

1. Emission inventory
2. Attainment demonstration
3. RACT
4. New source review
5. Contingency measures
6. Reasonable further progress

3. What are the grounds for (SIP) disapproval?

**EPA RESPONSE:**

States determine the most appropriate methods of attaining the ambient air quality standards for that State while EPA assures States follow the minimum statutory planning requirements. These minimum requirements are found in section 110 and part D of the Act and in EPA regulations at 40 CFR part 51. The EPA would disapprove a SIP submittal only if the submittal does not meet certain minimum requirements. These requirements include:

- demonstrating attainment of the ambient air quality standards;
  - ensuring requirements are enforceable by the State and/or EPA;
  - containing all the required elements of section 110 and part D for nonattainment areas (i.e., SIP technical elements, including emissions inventories; attainment demonstrations; control measures, including RACT and I/M; rate-of-progress plans; contingency measures, etc.); and
  - providing an opportunity for the public to comment on SIP revisions at the State level, prior to adoption.
4. How many states are submitting approvable programs for (a) demonstrating attainment, or (b) meeting the requirements for set percentages reductions of VOCs or NOx in ozone nonattainment areas? What kinds of measures are they intending or proposing to impose? Will attainment plans, 15% plans, and reasonable further progress plans, in general, require a second round of controls for sources already meeting BACT, RACT, or LAER requirements?

**EPA RESPONSE:**

(a) Some States have submitted attainment demonstrations in a timely manner, particularly in the West. However, because of ozone transport and the complex, technical issues associated with characterizing that transport, EPA issued a policy in March 1995 on the November 1994 ozone attainment demonstrations. The policy provides the States flexibility in attaining the ozone standard through a two-phased submittal of the attainment demonstration. Seventeen States plus the District of Columbia have indicated that they intend to use the policy's approach, have submitted letters committing to do so, and are making progress on the first phase of the submittal. The second phase is a consultative process in which the States affected by ozone

transport collectively develop regional control strategies and complete associated technical studies. The March policy provides flexibility primarily for the serious and higher classified areas.

Forty-three ozone nonattainment areas were required to submit attainment demonstrations on November 15, 1994. Twenty-one were classified moderate and twenty-two were classified serious, severe, or extreme. Those classified as serious or higher were also required to submit post-1996 rate-of-progress plans on November 15, 1994.

Under the March policy, the first 9 percent of the post-1996 rate-of-progress reductions must be adopted and submitted with the first phase of the submittal. Some areas are also required to complete additional rate-of-progress requirements for phase one. Two areas in New England have already submitted post-1996 rate-of-progress plans and EPA has determined them to be complete.

The 21 moderate ozone nonattainment areas required to submit their attainment demonstrations this past November are making progress on their modeling submittals. Of the 21 areas, 6 areas have submitted complete redesignation requests, 2 areas have been redesignated to attainment, and 5 areas have requested redesignation.

(b) Fifty-two nonattainment areas were required to submit 15 percent rate-of-progress plans. All of the plans have been received except in those cases where an area has just been redesignated to attainment or has a redesignation request pending (6 areas). Most of the plans have been found to be complete. The remaining plans are expected to be found complete in the next several months, thereby, removing any threat of sanctions. The EPA cannot make a judgment at this time on how many of the submittals are approvable. The EPA has to follow rulemaking procedures to approve or disapprove the plans.

Examples of the types of measures the States have already promulgated or are intending to promulgate are the use of transportation control measures, stage II controls on gasoline service stations, use of reformulated gasoline, and vehicular inspection/maintenance programs. National measures include VOC content requirements for architectural maintenance coatings and consumer/commercial products, emission limits for autobody refinishing, and surface coatings.

Regarding sources meeting BACT, RACT or LAER, EPA would not expect States with 15 percent plans or attainment demonstrations to require another round of controls on those sources.

5. What sanctions must EPA apply if States fail to submit a plan (SIP) demonstrating attainment? What sanctions must EPA apply if a State fails to meet an attainment deadline? When will these sanctions begin to be imposed? Please specify whether the sanctions are discretionary or required by the CAA, and the process by which they would be imposed.

**EPA RESPONSE:**

The questions present two different scenarios: (1) a State failing to submit an attainment demonstration or submitting an attainment demonstration that is unapprovable, and (2) a State failing to attain by the Clean Air Act deadline.

Regarding the first scenario, under the Clean Air Act, two sanctions can apply to States for failure to submit an attainment demonstration or submittal of an unapprovable attainment demonstration:

- The offset sanction is a 2-to-1 emissions offset for newly constructed or modified "major" sources seeking permits through the Act's new source review program to reduce emissions from other sources equal to twice the amount they project to emit. The 2-to-1 emission offset would become a condition of the new source permit.
- The highway sanction is a restriction on funding for certain highway projects. The Clean Air Act provides exceptions to the sanction for projects related to highway safety, air pollution reduction, and public transportation programs. This sanction would be implemented by the U.S. Department of Transportation, which makes the decision of which projects would be eligible for Federal funding.

Under the Act, these sanctions must apply in certain timeframes when EPA makes a finding that a State has failed to submit a complete SIP or EPA disapproves a SIP. EPA is required to select one of the two available sanctions to apply automatically 18 months after one of these findings, if the State does not correct the SIP problem. The second sanction would apply automatically six months later, if the problem is still not corrected. To implement this requirement, in August 1994, EPA issued a rule stating that following these findings the offset sanction will apply at 18 months, and the highway sanction 6 months later, unless EPA makes a case-by-case exception to reverse the sequence. Thus, whenever EPA issues a finding, sanction clocks will start and sanctions will automatically apply in that area unless EPA determines that the State has corrected the deficiency.

As to the second scenario, an area would not be sanctioned for failure to attain the standard by its attainment date. If an area fails to meet the statutory attainment date, the Clean Air Act generally requires that the area be reclassified to a higher classification. Such reclassification would trigger additional planning requirements. Moreover, in certain cases the Clean Air Act provides that EPA may extend the statutory attainment date by one year if the State has met certain criteria.

6. **What are/would be the practical effects of the sanctions and degree to which the adverse effects are directed at, or experienced by, the sources of the State's failure to demonstrate attainment or to attain?**

**EPA RESPONSE:**

As noted in response to question I.D.2, under the Act, sanctions do not apply for failure to attain or demonstrate attainment. Rather, sanctions apply to situations where the State has failed to plan. Between 1990 and 1995, the Act required States to submit over 1900 SIPs to EPA, covering various requirements for nonattainment areas. Since October 1991, EPA has sent "findings letters" to the States who failed to submit approximately 800 plan revisions on time, starting "sanctions clocks." As of July 1994, over 96 percent of the required submissions had been made and deemed "complete" by EPA, stopping the mandatory sanctions process. Only 3 areas are currently under sanctions as of July 31, 1995.

Concerning the targeting of the sanctions to sources of the State's failures, it is important again to remember that sanctions apply in cases where the State has failed to plan and the consequences are directed at sources that would aggravate the air quality problem before a plan is complete and in place (primarily new sources or increases in motor vehicles on the road). The EPA has the flexibility to base the sanctions on stationary or mobile sources depending on which type is more likely to aggravate the problem in a given area.

- B. **To what degree are States asking for and obtaining credit for emission reductions that will be imposed under section 112 or Title IV of the Act?**

**EPA RESPONSE:**

The EPA does not know how often States are asking for credit in the SIP program for emission reductions required under section 112 or title IV. However, the Act and EPA policy allow States to credit emissions reductions obtained from another program in rate of progress determinations and attainment demonstrations for the SIP, if the reductions are verifiable, enforceable and necessary to attain the NAAQS. In particular, if the emissions are

obtained from an EPA rule, then they will, by definition, meet the criteria in EPA's policy (i.e., be enforceable). For instance, the reduced emission levels of section 112 hazardous air pollutants that are in the form of a particulate or VOC can be used in the attainment plan or for the RFP SIP for PM-10 or ozone nonattainment areas, respectively.

C. If EPA and a state disagree as to the projected adequacy and effectiveness of control measures designed to achieve attainment, what happens? Can or would EPA defer sanctions until the effectiveness of control measures is demonstrated in practice? How is EPA's model in this regard derived? If flaws in the model are perceived by a stakeholder, how are these perceived flaws addressed? Generally, how are stakeholders involved in the development and application of the model?

**EPA RESPONSE:**

The EPA has invested considerable time and resources in avoiding the situation described in this question. EPA works with the States and the stakeholders to reach a common understanding of what various control measures will achieve. However, it is possible in some cases that a common understanding may not be reached. In such a case, the State makes the initial determination as to the adequacy and effectiveness of particular control measures, e.g., the amount of emissions reductions that the measures will achieve and submits its plan to EPA as a SIP revision. The EPA must approve or disapprove the SIP revision through notice-and-comment rulemaking. If EPA proposes the position that the control measures achieve less reductions than the State believes, the State may participate in the regulatory process by commenting on EPA's initial position. If EPA promulgates a final rule concluding that measures achieve less reductions than the State believes and that therefore the state attainment plan is disapproved, the State may challenge EPA's decision in court. However, it is EPA's policy to work with the States to avoid such situations.

In addition, if a control measure is not specifically required by the Act and is included as part of the State's rate-of-progress plan or part of its attainment demonstration, the State may substitute other measures which get the same amount of emission reductions. If the control measure is one that is specifically required by the Act, the State is required to implement that control measure following EPA guidance. In some cases, EPA provides flexibility in how the control measures must be structured.

If EPA disapproves a SIP submittal because it contains a control measure that is inadequate, an 18-month sanctions clock begins to run. If the State corrects the error within the 18-

month period, no sanctions would be imposed. However, EPA cannot defer starting the sanctions clock or imposing sanctions until the effectiveness of a control measure is demonstrated.

Many components contribute to the modeling analysis used to assess the adequacy of a control strategy including emission estimates, dispersive capabilities of the atmosphere and characterization of atmospheric chemistry. Development of the models has been an evolutionary process since the 1970's with various versions of models peer-reviewed by the scientific community and tested against laboratory and measured data. For a model to be included in EPA's modeling guidelines, it must go through notice and comment rulemaking. The stakeholders provide emission estimates and economic/population growth factors and participate in technical review committees. Moreover, the States in their application of these models have sought wide involvement of stakeholders, affording local industry and citizen groups early participation in the SIP process. Finally, when EPA proposes action (such as approval of an attainment demonstration) based on a model, stakeholders can participate in this phase of the regulatory process by commenting on the application of the model.

**D. What discretion does EPA have to grant extensions or waivers of control requirements listed in Part D of Title I of the Act? For example, could EPA waive employee trip reductions or other requirements in severe areas?**

**EPA RESPONSE:**

Certain control requirements in title I, part D, are intended to be minimum requirements applicable to nonattainment areas, so that waivers are not authorized; for other of the control requirements, the statutory provisions, as interpreted by EPA, authorize waiver or relaxation under certain circumstances. An example of a provision that specifically authorizes a waiver is section 182(f), which authorizes EPA to issue waivers from otherwise applicable NOx requirements provided certain criteria are met. The EPA has employed this provision to authorize waivers from control requirements for stationary sources in numerous areas, including Chicago and Houston.

Another example of a provision that provides EPA the authority to waive certain control requirements for PM-10 nonattainment areas is section 188(f). Under that provision, EPA may waive any serious area requirement (including control measures) for serious PM-10 nonattainment areas where EPA determines that anthropogenic sources of PM-10 do not contribute significantly to a violation of the PM-10 NAAQS. Therefore, States with serious nonattainment areas where significant



contributions of PM-10 emissions do not come from sources caused by humans directly or indirectly may request a waiver. Section 188(f) does not specify such waivers for any of the other pollutants.

In addition, the vehicle miles traveled (VMT) offset provision in section 182(d)(1)(A) requires transportation control measures (TCM) to offset growth in emissions from VMT increases and to reduce motor vehicle emissions as necessary to demonstrate reasonable further progress and attainment. If there are no emissions increases from VMT growth and an area can demonstrate reasonable further progress and attainment without any additional TCM, then no control measures would be required by this section. This provision, technically, is not a waiver, but it functions in the same manner.

Among the specific severe area requirements, the NOx waiver and the VMT offset are the two principal provisions that authorize EPA to grant waivers. The existence of these specific waiver authorities, combined with the lack of any statutory language granting EPA general waiver authority, indicates that EPA has no such general authority.

The employee trip reduction requirements in section 182(d)(1)(B) require a program to reduce commute trips by employees of major employers by a specified amount. While EPA cannot simply waive the employee trip reduction requirement on its implementation, EPA has asked the Clean Air Act Advisory Committee (CAAAC) to explore ways EPA could provide additional flexibility and to recommend a range of model employee trip reduction programs that could be adapted to local areas. The CAAAC made five recommendations, which EPA strongly endorses, including allowing employers to substitute equivalent emission reductions in lieu of submitting a plan to increase vehicle ridership.

1. How is that discretion or authority affected if a state fails to adopt, impose or enforce one of the specified nonattainment control measures, but can nevertheless:  
(a) find alternative equivalent reductions, or (b) demonstrate attainment?

**EPA RESPONSE:**

The EPA's authority regarding extensions or waivers is not affected by a state's ability to provide equivalent emission reductions or demonstrate attainment without a given control requirement. The terms of a given control requirement may allow it to be satisfied through the provision of equivalent emission reductions or a demonstration of attainment absent the otherwise required measure. The VMT provision is an example of this. In addition, for certain requirements such as the 15 percent and

additional rate-of-progress requirements and attainment demonstrations, States have considerable flexibility. States may choose the control measures that are needed as long as the overall percent reduction requirements and attainment goals are met.

2. **Could EPA waive or reduce requirements for percentage reductions in emission inventories if they are shown to be unnecessary for attainment or counter-productive?**

**EPA RESPONSE:**

The EPA does not have the authority to waive the 15 percent rate-of-progress requirements for an area violating the ozone standard based on a demonstration that the reductions are not needed for attainment. However, for areas that currently have air quality data that show attainment, the EPA has recently interpreted the section 182(b)(1) rate-of-progress VOC emission reduction and section 182(c)(2)(B) and (C) rate of progress and attainment demonstration requirements as not requiring SIP submissions from these areas. This interpretation was based on the Act's definition of "reasonable further progress" in section 171(1), which states that reasonable further progress means emission reductions required for the purpose of achieving attainment. Although, technically, this interpretation is not a waiver, it achieves the same effect by interpreting these very significant requirements to be operative only if an area is not attaining the standard. In addition, for the rate-of-progress requirements after 1996, States are only required to adopt measures to achieve reductions needed for the area to attain the standard.

- E. **What are the effects on states and private business if EPA fails to meet one of the Act's deadlines for issuance of a rule or guidance? If so, has EPA lengthened deadlines or reduced sanctions?**

**EPA RESPONSE:**

If EPA fails to meet Act deadlines, States may adopt their own rules in the absence of Federal guidance. This could mean that multi-state companies could be subject to a variety of rules in different States which may create administrative difficulties or have compliance cost ramifications for businesses.

A failure of EPA to meet deadlines for issuance of a rule or guideline could have an effect on States' efforts to carry out the State programs. For example, if EPA fails to issue control technique guidelines (CTG), i.e. formal guidance which defines presumptive reasonably available control technology (RACT), States may have to rely on less formal guidance which contains

much of the information of a CTG, but which does not establish presumptive RACT.

1. Are there any instances in which the lateness or failure to issue such a federal rule or guidance will affect localities' ability to demonstrate attainment?

**EPA RESPONSE:**

If a State fails to adopt regulations for specific sources because EPA has not issued guidance, emission reductions for those sources may be delayed. This could delay attainment since emissions reductions may not be achieved quickly. However, States may choose to proceed with developing regulations using less formal guidance which EPA has issued or may use another State's regulations as an example to follow and go ahead and develop regulations. Several States have done this.

2. What enforcement jeopardy do private businesses face if they fail to meet the 1995 deadline for RACT in nonattainment areas, but have not been told what RACT is? Does that apply to: (a) state suits, (b) federal suits, or (c) citizen suits?

**EPA RESPONSE:**

Under the reasonably available control technology (RACT) provisions of the Clean Air Act, States were required to submit certain RACT rules to EPA and to require implementation of those RACT rules by no later than May 31, 1995. The Clean Air Act places this requirement on States rather than private businesses. Therefore, to the extent the State has not developed and adopted the rules that would apply RACT-level controls to private businesses, there would be no existing state-enforceable RACT requirements. Moreover, in such a situation, since the State had not adopted and submitted state-enforceable regulations for approval into its SIP, there would be no enforceable Federal rules. In the situation where a private source is not subject to a federally-approved or federally-promulgated rule, the source would not be subject to enforcement action or citizen suit under the Federal Clean Air Act. The source's vulnerability to State suit would be a matter of State law.

- F. How much of the emission inventory in nonattainment areas is attributable to new or modified stationary sources? How much reduction will be achieved by the Act's: (a) restrictions on "Netting," (b) offsets greater than one-to-one, and (c) incremental controls imposed on sources already meeting RACT, BACT, LAER or MACT?

**EPA RESPONSE:**

The EPA does not have the information to answer this question. Our nonattainment area emission inventory data for point sources do not identify which of the point sources are subject to the various emission reduction requirements of the Clean Air Act. We do have emissions data for all major point sources in a nonattainment area. The States may have some of the information requested. However, since this information is not required by statute or regulation, we have not asked the States to report it to EPA.

**G. How will EPA reconcile the different requirements of the Act if controls under section 112 increase NOx emission or otherwise hinder ozone attainment?****EPA RESPONSE:**

Section 112 requires the use of maximum achievable control technology (MACT) for a specific list of source categories emitting hazardous air pollutants (HAP). The MACT requirements can be based on combustion, especially where the HAP are also VOC. When this happens, NOx emissions are generated and require consideration because they contribute to ozone formation.

First, when MACT regulations are implemented and they result in additional NOx emissions affected by new source review (NSR), we have a policy that provides for such "pollution control projects." This exemption is part of a proposed NSR reform rulemaking now at OMB. This exemption allows sources to increase NOx emissions if they occur as a result of regulatory requirements, such as MACT standards. A key aspect of this exemption is that the increases in NOx emissions cannot contribute to a violation of an ambient air quality standard. All this is worked out by the permitting authority which is the State or local agency. We expect that few pollution control projects will fail this test because the MACT controls generally result in reductions in VOC that result in an environmental benefit when compared to any increases in NOx emissions. In some cases, the VOC decrease will substantially exceed the NOx increase (EPA report, Control of VOC Emissions and Reactor Processes and Distillation Operation Processes in Synthetic Organic Chemical Manufacturing Industry, August 1993, EPA-450/4-91-031).

Second, when MACT regulations are developed, we consider whether additional combustion is needed to address HAP emissions. We also estimate the NOx emissions along with the costs and other environmental impacts. The decision of whether to require combustion of HAP would follow a comparison of the impacts.

H. How does EPA determine the credits that are granted for each nonattainment area? What criteria are used to ensure the quality and representativeness of the data used to determine such credits? Are there different credits for mobile source emissions and stationary sources? What assumptions are made? Do these assumptions related to specific monitoring data in each locality? If so, how; if not, what not? What role do assumptions of vehicle miles traveled (VMT) play? What data are used to calculate VMT?

**EPA RESPONSE:**

*The following discussion assumes that the "emission reduction credits to which the question refers are the reductions in emissions States are credited with in calculating the Clean Air Act Reasonable Further Progress Requirements, as well as the reductions States may use in their attainment demonstrations.*

The amount of credit is based on a base year emission inventory (typically 1990), rules the State and EPA have adopted or promulgated to reduce emissions, and the expected economic growth within the area. The EPA has issued extensive written guidance on the development and quality assurance of emission inventories, including the calculation of emission reductions associated with various control measures and ways to estimate growth. (One example of such guidance is Procedures for Preparation of Emission Inventories for CO and Precursors of Ozone, Volume I: General Guidance for Stationary Sources.)

The amount of emission reductions available to a State is specific to the source category, type of control measure contemplated, and anticipated growth. In addition, since for some sources emissions are a function of local conditions such as temperature and type of fuel used, different localities may arrive at different estimates of emission reductions for the same source category, control measure, and growth rate assumed. As a result, different source categories and source types (e.g., stationary, mobile) will have different emission reduction credits associated with them.

For the most part, monitoring data are not used in calculating either the base year inventory or the available emission reductions. However, EPA commissioned a report to assess the adequacy of States' emission inventories based on ambient monitoring data. This is available as Evaluation of Ambient Species Profiles, Ambient Versus Modeled NMHC:NOx and CO:NOx Ratios, and Source-Receptor Analyses.

Mobile source emissions are the product of mobile source emission factors and vehicle miles traveled (VMT), information which is used as the basis for mobile source emission reduction credits. Historical VMT in nonattainment areas are based on the

Federal Highway Administration's Highway Performance Monitoring System (HPMS), which relies on actual vehicle counts. VMT projections are based on either a transportation model maintained by the local Metropolitan Planning Organization or a linear extrapolation of past HPMS data.

1. Looking at previous mobile models-those used in 1985, 1988, 1990, and 1992-how closely have they predicted emissions recorded by ambient monitors in the following cities: Chicago, San Francisco, Charlotte, Philadelphia, and Miami? Based on gasoline sales, how closely was VMT estimated?

**EPA RESPONSE:**

As stated above, ambient monitoring data has not generally been used to identify the ultimate source of emissions and therefore cannot be used directly to verify actual mobile source emissions. However, the report, Highway Vehicle Emission Estimates, II, May 1995, OMS, EPA, prepared in response to concerns about potential underestimation of highway emissions, discusses how well the EPA's mobile model estimates vehicle emissions and the changes in the model that the EPA is considering.

The MOBILE5 model itself only estimates emission factors, that is, pollution measured in grams per vehicle mile traveled. The total amount of pollution from motor vehicles, however, is the product of these emission factors and VMT. Historical VMT is based on the Federal Highway Administration's Highway Performance Monitoring System.

Unfortunately, for several reasons, it is difficult to estimate historical VMT from gasoline sales. One difficulty is that fuel use and fuel sales are not the same. Another difficulty is that vehicles of different vintage travel a different number of miles with different levels of fuel economy.

In general, over the last 10-15 years most analysts have underestimated the growth in VMT. This has led to underpredictions in both emissions and fuel use.

- I. What is the process for reclassifying nonattainment areas for specific NAAQS? What about changes in classification such as from a serious to a moderate designation? Who must supply relevant data? How is it reviewed?

**EPA RESPONSE:**Process for Reclassifying Nonattainment Areas

Section 107(d)(3) of the Act specifies the procedures and requirements for changing an area's designation. Subparagraphs (A), (B), and (C) describe the requirements and schedules for such changes when initiated by the Administrator, and subparagraph (D) describes the procedure when a request is initiated by the Governor. Generally, the Administrator may notify the Governor of any State that there is information available indicating that an area's designation should be changed, followed by a State submittal responding to EPA's notification.

Subparagraph (E) specifies five criteria that must be met in order for EPA to approve a Governor's request for redesignating an area from nonattainment to attainment:

- (1) The Administrator has determined that the NAAQS has been attained for the area;
- (2) The Administrator has fully approved the applicable implementation plan under section 110(k);
- (3) The Administrator has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementing specific measures in the SIP;
- (4) The Administrator has fully approved the maintenance plan for the area as specified in section 175A; and
- (5) The State has met all applicable requirements for the area under section 110 and part D of the Act.

Additional guidance for processing States' redesignation requests and maintenance plans is provided in a number of policy memoranda. Upon receipt of a request submitted by a State, the appropriate EPA Regional Office reviews each request for completeness (in accordance with 40 CFR Part 51, Appendix V) and approvability to ensure that it satisfies the five criteria in section 107(d)(3)(E). The Regional Office then publishes a notice in the Federal Register of EPA's proposed decision to approve or disapprove the request. After an opportunity for public comment, if the request has been approved, the area's redesignation is effective generally within 60 days of the publication date of the final approval.

Process for Reclassifications Downward, Data Requirements and Review Process

Under section 181, an area designated nonattainment for ozone is classified according to the severity of the problem, based on its air quality. Classification occurred at the time of designation (generally, for current nonattainment areas, shortly after the passage of the 1990 amendments), and generally was based on air quality during the 1987-89 timeframe. However, section 181(a) provides several mechanisms for changing the classification. A State may voluntarily reclassify an area upwards, under section 181(b)(3). Alternatively, section 181(a)(4) authorizes shifting the classification upwards or downwards, within 90 days of the original classification, if the area's air quality placed it within 5 percent of the higher or lower classification.

Section 181(a)(4) provides general guidelines in determining whether an area qualifies for a 5 percent classification adjustment. In making such adjustment, the Administrator may consider the number of exceedances of the ozone NAAQS in the area, the level of pollution transport between the area and other affected areas, and the mix of sources and air pollutants in the area.

In addition, EPA has developed more specific criteria in approving downshifts. These criteria are as follows: (1) EPA has requested that the State submit a request for a downshift (although EPA can initiate the reclassification on its own); (2) a 5 percent downshift must not create a "donut hole" where an area of one classification is surrounded by areas of higher classification; (3) the State should have evidence that the area would be able to attain by the earlier date specified by the lower classification; (4) the State should have evidence that the area will be able to achieve the appropriate emission reduction necessary to attain in the shorter time period; (5) data supporting a downshift should show a downward trend in emissions, air quality, and growth projections; and (6) for ozone, the 1987-1989 period is central to determining classification--years of data after 1989 can be used to corroborate the validity of a downshift, but later years of data should not be the sole basis for downshifts.

Since the 90-day window of opportunity for a 5-percent adjustment has passed, areas that now request a downshift in classification per section 181(a)(4) are required to satisfy the above guidelines and, in addition, demonstrate that (1) an error was made in the original classification under section 110(k)(6) of the Act by failing to reclassify downwards when such a reclassification would have been appropriate, and that (2) the area would attain the NAAQS by the earlier attainment deadline.



The State generally supplies the data required above to support the change in classification. The EPA reviews any request, including the supporting emissions and air quality data, for consistency with the Act requirements and the Agency guidance noted above. The EPA then publishes a notice in the Federal Register of EPA's decision to reclassify the area. This action is not subject to the notice and comment provisions of sections 553 through 557 of title V.

J. Since 1991, what areas have petitioned for attainment status and been granted that status? What areas have been denied? What areas have sought a change of designation from one level of nonattainment to a lower level? Which areas have been accepted or denied?

**EPA RESPONSE:**

Areas Requesting Redesignation to Attainment

Tables IV through XI show areas that have requested redesignation from nonattainment to attainment for the criteria pollutants since 1991, including areas whose redesignations have been approved or which are pending..

**TABLE IV. OZONE REDESIGNATIONS**

San Francisco, CA  
 Jacksonville, FL  
 Miami, FL  
 Jersey County, IL  
 Indianapolis, IN  
 South Bend/Elkhart, IN  
 Kansas City, KS-MO  
 Edmonson County, KY  
 Owensboro, KY  
 Paducah, KY  
 Detroit, MI  
 Charlotte-Gastonia, NC  
 Greensboro-Winston-Salem-High Point, NC  
 Raleigh, NC  
 Columbiana County, OH  
 Dayton-Springfield, OH  
 Jefferson County, OH  
 Preble County, OH  
 Toledo, OH  
 Cherokee, SC  
 Knoxville, TN  
 Memphis, TN  
 Victoria, TX  
 Charleston, WV  
 Huntington-Ashland, WV-KY  
 Parkersburg, WV

**TABLE V. CO REDESIGNATIONS**

Atlanta, GA  
 Chicago, IL  
 City of St. Cloud, MN  
 Duluth Area, MN  
 Winston-Salem Area, NC  
 Syracuse Area; Onondaga County, NY  
 Cleveland Area, OH  
 Eugene-Springfield Area, OR  
 Providence, RI  
 Memphis Area, TN  
 Oshkosh Area; Winnebago County (part); City of Oshkosh, WI

**TABLE VI. SO<sub>2</sub> REDESIGNATIONS**

Colbert County (part); TVA Colbert Plant, AL  
 Lauderdale County (part); TVA Colbert Plant, AL  
 Peoria County: Hollis twp, IL  
 Peoria County; Peoria, IL  
 Tazewell County: Groveland twp, IL  
 Morgan County: Center Township, OH  
 Washington County: Waterford Township, OH  
 AQCR 239: Milwaukee County: Milwaukee sub-city area, WI  
 AQCR 240: Dane County: Madison sub-city area, WI

**TABLE VII. LEAD REDESIGNATIONS**

Jefferson County (part), AL  
 Dakota County (part), MN

**TABLE VIII. PM-10 REDESIGNATIONS**

Olmsted County (part), MN

**TABLE IX. OZONE REDESIGNATION REQUESTS PENDING**

Birmingham, AL  
 Monterey, CA  
 Santa Barbara, CA  
 Evansville, IN  
 Tampa-St. Petersburg-Clearwater, FL  
 Lexington, KY  
 Grant Parish, LA  
 Lafayette Parish, LA  
 LaFourche Parish, LA  
 New Orleans, LA

St. James Parish, LA  
 St. Mary Parish, LA  
 Grand Rapids, MI  
 Muskegon, MI  
 Reno, NV  
 Canton, OH  
 Cincinnati, OH  
 Cleveland, OH  
 Clinton County, OH  
 Columbus, OH  
 Youngstown, OH  
 Pittsburgh, PA  
 Reading, PA  
 Nashville, TN  
 Salt Lake City, UT  
 Kewaunee, WI  
 Greenbrier, WV

**TABLE X. CO REDESIGNATION REQUESTS PENDING**

Charlotte Area, NC  
 Raleigh-Durham, NC  
 Albuquerque Area, NM

**TABLE XI. LEAD REDESIGNATION REQUESTS PENDING**

Muscogee County (part), GA  
 Fayette County (part), TN

Areas Requesting Downshift in Classification

Since 1991, 19 areas have requested a downshift in ozone classification. Of these requests, one (Philadelphia-Wilmington-Trent, PA-NJ-CT) is under review. Seven requests have been approved and 11 requests have been disapproved. These areas are listed in Tables XII, XIII and XIV. Note, as indicated in these tables, since these areas have been reclassified, some of these areas have either been redesignated to attainment or have requested redesignation to attainment (request under EPA review).

**TABLE XII. AREAS REQUESTING A 5 PERCENT DOWNSHIFT  
 IN OZONE CLASSIFICATION - UNDER REVIEW**

| AREA                                    | INITIAL CLASSIFICATION | REQUESTED CLASSIFICATION |
|---|------------------------|--------------------------|
| Philadelphia-Wilmington-Trent, PA-NJ-CT | Severe - 15            | Serious                  |

**TABLE XIII. AREAS REQUESTING A 5 PERCENT DOWNSHIFT**

## IN OZONE CLASSIFICATION--APPROVED

| AREA                        | INITIAL CLASSIFICATION | REQUESTED CLASSIFICATION |
|-----------------------------|------------------------|--------------------------|
| Muskegon, MI **             | Severe                 | Serious                  |
| Huntington MSA (KY,OH,WV) * | Serious                | Moderate                 |
| Manitowoc Co, WI            | Serious                | Moderate                 |
| Edmonson Co, KY *           | Moderate               | Marginal                 |
| Jefferson Co, NY            | Moderate               | Marginal                 |
| Memphis MSA, TN *           | Moderate               | Marginal                 |
| San Diego, CA               | Severe                 | Serious                  |

\* Area has been redesignated to attainment.

\*\* Area has requested redesignation to attainment; action to approve/disapprove is pending EPA review.

TABLE XIV. AREAS REQUESTING A 5 PERCENT DOWNSHIFT  
IN OZONE CLASSIFICATION--DISAPPROVED

| AREA                  | INITIAL CLASSIFICATION | REQUESTED CLASSIFICATION |
|-----------------------|------------------------|--------------------------|
| Milwaukee CMSA, WI    | Severe                 | Serious                  |
| Philadelphia CMSA, PA | Severe                 | Serious                  |
| Atlanta MSA, GA       | Serious                | Moderate                 |
| Beaumont MSA, TX      | Serious                | Moderate                 |
| Sheboygan Co, WI      | Serious                | Moderate                 |
| Dallas MSA, TX        | Moderate               | Marginal                 |
| Dayton, OH *          | Moderate               | Marginal                 |
| Grand Rapids, MI **   | Moderate               | Marginal                 |
| Nashville MSA, TN **  | Moderate               | Marginal                 |
| Reading MSA, PA **    | Moderate               | Marginal                 |
| Toledo, OH **         | Moderate               | Marginal                 |

\* Area has been redesignated to attainment.

\*\* Area has requested redesignation to attainment; action to approve/disapprove is pending EPA review.

- K. What effect does the 1988 data have on calculations for nonattainment? Is it a representative year for ozone or CO? How about 1989, 1990, and 1991?

**EPA RESPONSE:**

Except for a few cities that had data for 1988-90, the monitoring data available at the time of the original designations to nonattainment for 98 areas under the Clean Air Act Amendments of 1990 were from the years 1987-89. These data were also the basis for the classification of the nonattainment area, e.g., marginal, moderate, etc. The impact of 1988 ozone levels was to increase the number of areas not meeting the ozone standard from 64 areas in 1985-87 to 101 areas in 1986-88. Based on data from 1991-93, 55 of the 98 original nonattainment areas were meeting the ozone standard.

The EPA believes it is inappropriate and not protective of public health to base nonattainment calculations on 1 year because of changing national weather patterns and conditions. While CO has nationally shown a steady downward trend since the early 1980's, because of the changing weather patterns and conditions the recent trends for ozone are difficult to interpret. High ozone levels in 1988, and similarly in 1983, were attributed in part to the hot, dry summers in those years. Nationally, 1988 was the third hottest summer since 1931. In contrast, in the Eastern U.S., the summer of 1989 was among the wettest on record in nine states. The Southeastern States were unusually dry during 1990, while the East, and north-central regions were wetter than normal. During the summer of 1991, hot, dry conditions were found in the Northeastern and north-central State regions.

The dramatic improvement in air quality since 1988 is in part due to pollution control programs (like cleaner tailpipe standards on cars, lower volatility in gasoline, etc.) and in part due to meteorological conditions. However, the summer of 1995 is already proving to be very hot in some parts of the country and ozone levels are very high. Although, the 1995 ozone levels and the frequency of these high levels are somewhat lower than the severe ozone episodes that occurred in 1988, they are higher than levels in several previous years.

1. Should EPA or a State have discretion to use an alternative baseline for design values?

**EPA RESPONSE:**

The Clean Air Act Amendments of 1990 were designed explicitly to provide for a stable air quality management regime based on 3 years of the most recent data available when the Act became law. By basing planning decisions on these data, cities,

States and industry know exactly the kinds of controls that will be required and can plan accordingly. If we were to change cities' classifications every year or two as new air quality data comes along, cities, States and industry would be faced with a moving target -- they could not plan in any rational way. Moreover, while 1988 was a "bad" ozone year, it does not appear to be a rare event given the weather being experienced this summer.

2. **When comparing the statutory mandate of 1989-1991, or 1990-1992 for determining design values, is one set any more representative of actual exposure than another? If so, why? Do monitors accurately reflect actual exposure profile? What about office workers; children playing outside during the summer; drivers in air-conditioned vehicles, etc.? How much of the exposed population is considered in developing a SIP?**

**EPA RESPONSE:**

As discussed in EPA's response to question I.E above, design values are used to determine how much ozone concentrations need to be reduced to achieve attainment of the NAAQS. Monitors are sited to characterize ambient air quality in the area and to assess potential human exposure. The likelihood that individuals will be exposed is taken into account when EPA sets the NAAQS. In assessing exposure/risk, EPA takes into account the time people spend indoors as well as the amount of time children, workers, etc., spend outdoors at elevated ventilation. These factors are taken into account in selecting the appropriate number of exceedances to allow, the averaging time, and level of the standard necessary to protect public health. Therefore, since exposure considerations are taken into account in setting the NAAQS, EPA believes it is not necessary for each State to consider them in developing SIPs.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 20 1995

OFFICE OF  
AIR AND RADIATION

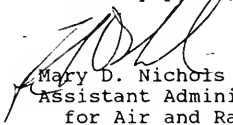
Honorable Lauch Faircloth  
Chairman, Subcommittee on  
Clean Air, Wetlands, Private Property  
and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D. C. 20510

Dear Mr. Chairman:

Enclosed is a partial response to your letter of July 5, 1995, concerning preparation for a series of oversight hearings on the Clean Air Act Amendments of 1990. This enclosure answers your questions on Part III Enforcement and Monitoring and Part IV Permits. The remainder of your request will be completed no later than August 10, 1995.

I hope this information is responsive to your request. Please feel free to call me if I can be of further assistance to you.

Sincerely yours,



Mary D. Nichols  
Assistant Administrator  
for Air and Radiation

Enclosure

## SENATE QUESTIONS

## III. ENFORCEMENT AND MONITORING

## QUESTION:

A. What is EPA requiring sources to do to certify compliance in permit applications and periodically thereafter?

## EPA RESPONSE:

For purposes of preparing permit applications, sources are required to review current major and minor new source review (NSR) permits and other permits containing Federal requirements, State implementation plans (SIP) and other documents, and other Federal requirements in order to determine applicable requirements for emission units. In accordance with the initial operating permit application compliance certification policy issued on July 3, 1995, sources are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing title V permit applications. Sources are then to provide and certify their compliance status with each of these applicable requirements.

Once the permit is issued, sources are required to certify compliance annually with the terms and conditions of the permit. This certification would be based on monitoring information required in the permit. In order to aid permitting authorities and sources in choosing a means for monitoring compliance, the Environmental Protection Agency (EPA) is developing a monitoring approach designed to satisfy both the periodic monitoring and enhanced monitoring requirements of the 1990 Amendments to the Clean Air Act (1990 Amendments) including compliance certifications. This approach is referred to as compliance assurance monitoring (CAM). CAM relies primarily on O & M monitoring to assure proper operation and maintenance of pollution control systems and processes and thereby prevent violations of emissions requirements. In particular, CAM will define how monitoring is to be conducted and how the data generated can be used to support annual certification of compliance with applicable requirements including permit conditions.

## QUESTION:

B. If a source took an action (changed or replaced equipment, materials, etc.) in the past, and EPA subsequently changed emission factors or other policies that made the action a "modification" or "major modification," what sanctions would the source face?

This question assumes that a change in emission factors or change in policy will affect the applicability of a requirement to the source. Generally a change in emission factors will not change the applicability of requirements, while a change in a policy may bring a previously unaffected source into the category of sources subject to a specific requirement. Another distinction must be drawn between a true change by EPA and a clarification; the latter would not generally alter the source's original obligation to comply with a requirement.

An example might help explain. A company modifies its major source such that it results in a significant increase in emissions. The company, however, erroneously determined prior to the modification that the increase was not going to be significant and therefore did not obtain a NSR or other required permit for the modification. Such an error could stem from a misapplication of an EPA policy or of an emission factor, among other possibilities. The



source then makes the change without the proper permit. The State or EPA may determine that, based on the proper application of the regulations and policies and/or emission factors in effect at the time of the modification, the source had triggered a NSR or other permitting requirement. The source must now obtain a proper permit for the modification, and is liable for a violation of the preconstruction permitting requirements of the Clean Air Act (Act).

The use of enforcement in this situation, whether by EPA or the State, depends on a case-by-case analysis and the exercise of enforcement discretion. The Agency has two major goals in taking such action: bringing the source into compliance with the Act (either permitting or installation of controls or both) and recovering from the source monetary penalties associated with its noncompliance. In the event an action is taken, EPA or the State might reduce the penalty sought to reflect a source's good faith efforts to timely comply with the requirements or to reflect that there was legitimate confusion regarding applicability of the requirement to that source. The Agency policy in taking an enforcement action is to recoup, at a minimum, any economic benefit that the source might have accrued by delaying compliance with the Act.

**QUESTION:**

C. What is an applicable requirement? If the Act specifies a technology level, particularly on a case-by-case basis (e.g. BACT, LAER, RACT, MACT), under federal law, is the source obligated to meet a standard expressed as an emission rate or is it required to install, maintain and properly operate the specified emission control equipment?

**EPA RESPONSE:**

Under EPA's rules for State operating permit programs, applicable requirement includes all standards or other requirements contained in State SIP's, terms and conditions of NSR preconstruction permits, standards of performance for new stationary sources, national emission standards for hazardous air pollutants, acid rain regulations, enhanced monitoring and compliance certification regulations, solid waste incineration rules, consumer or commercial product volatile organic compounds (VOC) reduction rules, tank vessel VOC reduction rules, outer continental shelf emissions reduction rules, stratospheric ozone protection regulations, and certain national ambient air quality standards or increment or visibility requirements under the prevention of significant deterioration program. Applicable requirement includes requirements that have been promulgated by EPA at the time of permit issuance, even if they have future-effective dates. EPA is proposing to modify the definition of applicable requirement by adding emission limits for the purpose of creating offsets or avoiding applicable requirements and deleting certain stratospheric ozone program requirements.

The Act almost never specifies a technology level in terms of a specific type of control equipment. It usually defines a goal such as MACT (generally, the average emission level achieved by the best performing 12 percent of existing sources) and leaves it to EPA to set more specific requirements through rulemaking. The EPA rules typically set emission standards, emission limits or other performance standards, but if development of an emission rate or performance standard is not feasible, EPA may establish a standard based on a specific type of technology. Even in these cases, however, EPA would allow alternative technologies if they can demonstrate equivalent results. The source is required to meet all conditions including limitations expressed as emissions rates as well as obligations to install, maintain and properly operate air pollution control equipment.

## QUESTION:

## D. What is EPA's definition of "stringency"?

1. If EPA changes testing or monitoring requirements and a source cannot meet previously imposed applicable requirements even if its equipment is properly installed, maintained and operated, is that an increase in stringency?

## EPA RESPONSE:

If a change in testing or monitoring requirements is followed by a violation by a source, there may or may not have been an increase in stringency, depending on the nature of the change and the reason for the violation. The EPA is prohibited from imposing a change in the stringency of existing applicable requirements, unless the EPA follows the appropriate procedure for revising such requirements. Accordingly, in developing and issuing new CAM requirements, the EPA will ensure that such requirements do not change the stringency of the underlying rules.

## QUESTION D2:

2. If the previously applicable requirement was a rate limit based on assumptions or calculations of what particular control equipment could achieve at a particular source, does the equipment have to be replaced or supplemented, or does the calculated value have to be changed to reflect the capability of the controls?

## EPA RESPONSE:

In virtually all situations, sources are able to meet applicable requirements using properly designed, installed, operated, and maintained control equipment. However, the CAM rule will, in some cases, result in the upgrading of previously inadequate source monitoring, as intended by Congress in the 1990 Amendments. It is possible that the improved monitoring may disclose previously unnoticed noncompliance. The CAM rule will focus on corrective actions to promote proper O&M practices, rather than enforcement in most situations. However, sources which correct their O&M practices and still do not comply with underlying emissions limitations will need to evaluate the reasons for their noncompliance and to take appropriate actions.

A change in monitoring requirements followed by noncompliance with an emission limit does not necessarily reflect an increase in the stringency of the emission limit. Rather, more information is needed to determine whether the noncompliance reflects a pre-existing, but undisclosed, problem at the source, in which case the owner or operator must take steps to achieve compliance, or whether the changed monitoring requirement has somehow increased the stringency of the applicable requirement, in which case some adjustment (to the monitoring provision or the underlying applicable requirement) may be appropriate.

## QUESTION:

E. Recently, EPA announced a program to assist small businesses and generally to forego sanctions if the businesses come to EPA for technical assistance. Why was this limited to other than major sources, when the definitions of major source, particularly under section 112 or the nonattainment programs, will include many small businesses? Why is the policy not based on the size, expertise, good faith, and need for assistance, rather than the business' potential to emit?

**EPA RESPONSE:**

EPA recently issued two policies regarding small business and enforcement actions. The first, "Enforcement Response Policy for Treatment of Information Obtained Through Clean Air Act Section 507 Small Business Assistance Programs," issued on August 12, 1994, applies to the Agency's approval of State programs under section 507 of the Act. The statute itself limits State small business assistance programs (SBAP's) in section 507(b). Under section 507(c), the assistance provided is available only to small business stationary sources that employ 100 or fewer individuals, are not major sources, emit no more 50 tons per year of any one regulated pollutant, and emit no more than 75 tons per year of all regulated pollutants. Thus, by statute, the policy regarding assistance provided by such SBAP's must be similarly restricted in its applicability.

EPA more recently adopted a broader "Interim Policy on Compliance Incentives for Small Businesses," dated June 13, 1995. This policy also applies to all businesses that employ 100 or fewer persons on a company-wide basis, but, unlike the section 507 policy, this policy does not restrict availability of the benefits of the policy any further. Accordingly, this policy applies to all sources --major and minor-- that qualify as small businesses under this definition.

**QUESTION:**

F. If a source makes a change that increases its potential to emit, but in fact never exceeds allowable emission levels, would it have a defense against an enforcement actions? Why should sanctions be applied?

**EPA RESPONSE:**

To answer this question, we must first clarify some underlying assumptions. First, if a source is changing the facility in a manner that would increase its potential to emit, such a change may require a major or minor NSR preconstruction permit. Second, we presume that in the situation set forth in your question, the permitting authority (local, State, or Federal) has issued a permit containing federally enforceable emission limits (the "allowable emission levels") on the facility, including limits on emissions from the unit that has been changed. If the source subsequently operates under the permitted emission levels, it would be operating in conformance with its permit and thus not subject to enforcement action for this manner.

If the source does not obtain a required major or minor NSR preconstruction permit before making the change, this failure to obtain a permit is a violation of the Act. The source might be subject to an enforcement action for violating the preconstruction permitting requirements. A claim that the source has not exceeded allowable emissions does not provide any defense to an action for the violation. The permitting requirement is an independent requirement, and the amount of actual emissions after the construction has taken place has no impact on this requirement. As mentioned above, if the source also exceeds allowable emissions, that would constitute an additional and distinct violation of the Act. An enforcement action for the failure to obtain a permit, if taken, would seek to have the source undergo proper air permitting for the changed unit and penalties for not complying with the Act.

## IV. PERMITS

## QUESTION:

A. Section 502(b)(10) requires EPA to in turn require States to provide operational flexibility (a "notice and go process") in their permit programs. However, it prohibits EPA from requiring States to include "title I modifications" or exceedances of allowable emission limit under such programs. Where does the Act require EPA to specify how States should deal with all other changes?

## EPA RESPONSE:

In addition to section 502(b)(10), four other statutory provisions address required procedures for State, a facility or EPA must follow when a permitted source makes a change. It is important to note at the outset that section 502(b)(10) addresses the situation where no permit revision is required. Section 502(b)(6), on the other hand, addresses the procedures a State must provide when a permit revision is required. Specifically, section 502(b)(6) requires a State title V program to provide for "adequate, streamlined, and reasonable" procedures for, among other things, "public notice, including offering an opportunity for public comments and a hearing, and for expeditious review of permit actions, including applications, renewals, or revisions." The need for permit revision procedures is also addressed by section 502(a), which prohibits a source with a title V permit from operating "except in compliance" with its permit.

Regarding EPA's opportunity to review permit actions, section 505(a) requires transmittal to EPA of "each permit application (and any application for a permit modification or renewal)," with notification of the same to any affected States. Finally, section 505(b) requires EPA to object to a permit if "it contains provisions that are determined by the Administrator as not in compliance with the applicable requirements of this Act."

## QUESTION:

B. Recently EPA promulgated rules that would govern a federally-operated permit program in States that fail to obtain approval for State-operated programs under part 70. The proposed part 71 rules seem to provide even less operational flexibility than the EPA's 1992 part 70 rule which EPA and the States apparently recognize is unworkable. How does that reflect on changes EPA has promised to make in the part 70 rule to give sources and States more flexibility?

## EPA RESPONSE:

In April 1995, EPA proposed part 71 regulations to cover situations where the Act requires the Agency to step in as the title V permitting authority. Note that these regulations have not yet been finally promulgated, and that EPA is currently in the process of developing a supplemental proposal concerning them. In developing the April notice, EPA sought to base the proposed part 71 on the aspects of the existing part 70 rule that the Agency believes should remain as currently promulgated, as well as on the August 1994 proposed revisions to part 70, which EPA believed at the time provided increased opportunities for streamlining and flexibility in the operating permit program. EPA's forthcoming supplemental proposal to the August 1994 and April 1995 proposals for parts 70 and 71 will represent even greater streamlining. In the final part 71 rule, EPA will provide as many opportunities for flexibility as possible consistent with the approach the Agency ultimately takes for part 70, although not all options for flexibility

under part 70 may be available for part 71 programs (e.g., State determination of de minimis levels below which no public review is required). In implementing part 71 programs, EPA will endeavor to work with host States to ensure that sources are afforded appropriate flexibility in both permit design and subsequent permit modifications. In this way, EPA's administration of part 71 will provide a smooth transition to State administration of approved part 70 programs.

**QUESTION:**

C. What authority does a State have to waive permit reviews, waiting periods for EPA, or other comments, etc., if it finds that such a review would impose a pointless cost and/or delay? For example, if the source were already meeting tighter control requirements?

**EPA RESPONSE:**

Your question asks what authority does a State have to waive certain permit review procedures. Because section 502(b) requires EPA to prescribe minimum requirements for State programs, it is left to EPA in the first instance to decide whether any required procedures can be waived. However, in the supplemental proposal discussed above, EPA intends to give States discretion to match the amount of public review for a large group of changes subject to minor source preconstruction programs to the environmental significance of the change. With this authority, States will be allowed to provide minimum public review, including providing public notice after the change has occurred, for the least significant changes. In addition, the supplemental rule will also grant States authority to determine following rulemaking that certain changes are de minimis meaning that providing for public or EPA review procedures would yield a gain of trivial or no value and the cost incurred for review would be "pointless." States will thus have authority to waive both public and EPA review for changes identified as de minimis.

**QUESTION:**

D. In light of the difficulties faced by the States and EPA in rationalizing the operating permit program and its failure to issue rules governing important elements (e.g., monitoring and section 112(g)), how would the EPA react to a suspension of Federal enforceability of title V for a few years, and why?

**EPA RESPONSE:**

EPA would firmly oppose any suspension of Federal enforceability of the title V program. A suspension of title V would forego the important benefits that this program provides, including ensuring that all parties know what requirements apply to a facility and improving compliance with those requirements in a very cost-effective manner, which should improve air quality. More details on the benefits of the title V program is provided in the response to Question F. While the title V program, as with any new program, has faced some start-up difficulties, EPA believes that vast majority of both State and local agencies understand and support the significant benefits of the program. The commitment of States and localities in implementing the title V program in a timely manner is evidenced in the fact that out of 56 State and 60 local agencies required to implement title V, all but four States and one local agency have submitted title V programs. To date (July 1995), EPA has approved or proposed to approve programs for 25 State and 36 local agencies. Only one State and four local programs have been disapproved or proposed to be disapproved. Some title V permits have already

been issued, while many more are in the process of being reviewed and issued. To suspend Federal enforceability now would send a signal of uncertainty as to the future of the program, would foster confusion for subject sources, and would create considerable disruption for State agencies that have already integrated title V into their air pollution control strategy. For example, RECLAIM, the innovative emissions trading program being instituted for the Los Angeles Basin, is structured around the existence of a federally enforceable title V program. Without title V, Los Angeles would have to revert to a command and control approach unless and until a different federally enforceable vehicle for program implementation could be established. Clearly, the program is being implemented by States, and it is in everyone's interest for that to continue in a stable and predictable manner.

Although the monitoring and section 112(g) requirements mentioned are important parts of the Act, they are independent requirements deriving from title I rather than title V. As such, they are not essential to the basic operation of the title V program. This is being proven in fact as title V is being implemented in at least 14 States and 30 local programs without these elements. When EPA completes its rulemakings on monitoring and section 112(g), these requirements can be phased into the on-going State title V programs without undue disruption.

**QUESTION:**

E. Recently EPA issued a set of proposed changes to the title V operating permit rule. Some of these changes are viewed as giving more flexibility to the States. With a number of other changes to the operating permit rule being considered, will States still be able to receive permit data which can aid in SIP submissions, etc.? Why continue to enforce a 1992 final permit rule when you accept that it is not as good as [the] proposed change? What measures have been implemented to assist States in managing the changes issued by EPA?

**EPA RESPONSE:**

Our proposed changes published last August were in response to litigation on the 1992 rule, and mainly involved procedures for permit revisions. The proposal should have no effect on the submittal of permit data or the extent to which that data might be helpful in SIP submissions. The proposal did not stay the current rule. The States are still subject to deadlines for program submittal and industry must submit applications according to deadlines established under approved State programs.

Although some parts of the current rule can be improved upon (e.g., permit revision procedures), most of the current rule is sound. Sufficiently flexible revision procedures will be essential to the long-term success of title V. However, permit revision procedures are of relatively minor importance over the next 2 years when the efforts of sources and States will be focussed on applications and initial permit issuances. Moreover, much of the current rule, especially those provisions dealing with content of State programs, was not challenged by litigants and was not proposed for change. Considering the amount of time States needed to seek legislative changes and to adopt rules to implement basic features of the program under the current rule, delaying the final rule until all parts of it are settled would needlessly postpone State action in adopting basic program elements. The EPA is also taking steps to make the current rule easier to implement. Many implementation problems raised to EPA about the current rule are being addressed through an EPA implementation policy paper known as the permit applications White Paper, which was distributed July 11. This paper points out areas of flexibility

that can be implemented by States under the current rule without waiting for EPA rulemaking, and will substantially simplify the process of preparing permit applications, which in some cases has proven overly burdensome and complex.

Both the August proposal and the supplemental proposal address the issue of how EPA is assisting States in managing rule changes issued by EPA. When EPA promulgates the revised procedures for permit revisions (expected early 1996), it will give States plenty of time to make changes to meet the new procedures. We proposed to allow States up to 2 years if legislative changes are needed, and we would allow even more time on a case-by-case basis. In the supplemental proposal, we will be taking comment on extending the deadline for States to submit program corrections to fix deficiencies EPA identified in an "interim approval." If we promulgate that deadline extension, States would be able to make one submittal combining corrections to fix deficiencies with changes needed to comply with the revised part 70. This would allow States to go through one State rulemaking action rather than two at the State level thereby simplifying the process for States.

**QUESTION:**

F. Prior to passage of the 1990 Amendments, how many States had air operating permit rules? How many had new source permit programs? How many had combined new source and at least some aspect of an operating permit program? Has any one in Government ever suggested that these permit programs were ineffective? What data are there to suggest that the benefits to the environment of establishing a Federal permit program exceed the costs? What environmental benefit does EPA hope to achieve from the permit program?

**EPA RESPONSE:**

Prior to passage of the 1990 Amendments, all States had new source permit programs, since these were required under the 1977 Clean Air Act Amendments. In a 1990 survey of States, at least 35 States indicated that they issued operating permits to existing sources, and 10 more States indicated that they issued operating permits to new and modified sources only. So, prior to 1990, at least 45 States had both a new source permit program and some aspect of an operating permit program.

The 1990 survey also assessed the extent to which existing operating permit programs meet the requirements of certain provisions of what was to become title V of the 1990 Amendments. Twenty-two States were found to have one or more of the following problems: no operating permit program, no permit renewal, no coverage of existing as well as new sources, or no permit fees. More fundamentally, prior existing State programs were not designed to accomplish what is the central goal of title V: to codify in a single document all applicable Clean Air Act requirements for a facility.

A 1989 report prepared by the Senate Committee on Environment and Public Works took note of these prior existing permitting programs, but found that the absence of a federally mandated operating permit program was nonetheless a "serious gap in the current Act," and that a new operating permit program was needed to "better enforce the requirements of the law." S.R. Rep., No. 101-228, 101st Cong., 1st Sess. 346 (1989). The report noted that, among other benefits, the title V would reduce the confusion resulting from having the requirements of the Act scattered in numerous documents, would clarify how those requirements apply to the individual source, and in this way would provide a new level of certainty for the source, the permitting authority, and the public. *Id.* at 347.

The EPA expects the title V program to improve compliance with the Act requirements, which should reduce emissions of air pollutants that will in turn improve air quality. There is little question that the title V program will improve compliance; the only question is by how much. As noted, the primary purpose of title V is to assemble all air pollution control requirements in one document, and to require the permittee to certify whether it is in compliance with those requirements. We know compliance is improving - some States already implementing the rule report that the title V application process is an incentive to companies to identify and come into compliance with requirements they may have failed to meet in the past. Other sources are also taking emission reductions to stay out of title V. Because the primary value of title V lies in its enhancement of compliance with existing substantive requirements, rather than imposition of new substantive requirements, we cannot predict with certainty how much emission reduction (and the resulting improvement in air quality) can be attributed to title V. We believe it could be substantial, but it depends on the level of noncompliance uncovered by the permit. Our best estimate is that, of the emission reductions that should have been achieved by the Act, as little as 80 percent of those have been achieved in practice. If the title V permit program can improve this figure by only half, or up to 90 percent, then substantial emission reductions will have been achieved. Emission reductions of this magnitude will represent a significant improvement in air quality, and should reduce the need to impose additional substantive controls that would be needed to achieve that same improvement.

**QUESTION:**

G. Many State and local officials and employees were highly critical of EPA's August 1994 proposed changes to the operating permit rule--especially the requirement for public review of minor permit modifications. Why did the EPA propose this change to 502(b)(10) when clearly it could lead to unnecessary delays in product manufacturing with no emissions benefits? In 1992, the Justice Department interpreted that public notice and comment was not a mandate for these types of changes. Has the August 1994 proposal been formally withdrawn? If not, why not?

**EPA RESPONSE:**

The August 1994 proposal would require prior public notice for some of the changes that would qualify as minor permit modifications under the July 1992 rule. As a clarification, the minor permit modification procedures of the 1992 rule are relevant to the situation where a source must revise its permit. As such, the minor permit modification procedures implement section 502(b)(6), which addresses permit revisions. This aspect of the August 1994 proposal would not affect a source's ability to make changes without a permit revision under section 502(b)(10) of the Act.

As discussed above, in the supplemental proposal EPA will propose that for the large majority under minor source preconstruction programs, States be granted broad discretion to match the amount of public review for a permit change with the environmental significance of the change, with no public review required for de minimis or trivial changes. In addition, EPA will make clear that it interprets the concept of title I modifications to cover only major modifications at a source, and not those changes that would be subject to minor source preconstruction review. Both of these changes will give sources broad flexibility to make changes without unnecessary procedural delays.

EPA has not withdrawn the August 1994 proposal for two reasons. First, that proposal addresses other less contentious issues which will not be



addressed further in the supplemental proposal. Second, the issuance of the August 1994 proposal is the basis for the current stay of the litigation of the original part 70 rule. Some 20 entities challenged the rule in the D.C. Circuit, and the August 1994 proposal was critical to securing agreement to stay the litigation. However, the existence of the August 1994 proposal does not hamper EPA's ability to issue or finalize its supplemental proposal.

**QUESTION:**

H. Has EPA considered using general permits to implement title V? If so, why was the use of such permits rejected?

**EPA RESPONSE:**

Far from rejecting the use of general permits, EPA has always encouraged States to use general permits, and has provided for them under the current EPA rule. The EPA originally thought that more than one-third of the permits to major sources would be general permits; however, it has heard from some States that for small sources, issuing general permits would involve more effort than issuing individual permits. The EPA is hopeful that the benefits of general permits will become more apparent as States proceed to implement their programs, and that more States will take advantage of them. The EPA is committed to work with States to add them in developing general permits.

III. Enforcement and Monitoring -- Response submitted in letter dated July 20, 1995

IV. Permits -- Response submitted in letter dated July 20, 1995

V. TOXICS

A. The mandate in section 112 is to establish, on a very tight time-frame, rational standards that are based on the technologies employed by the top 12 percent of similar sources within a source category. How does EPA define a source category for development of a MACT standard? Can the definition be changed to increase the stringency of the standards? Should EPA be looking at whole facilities for MACT standards or only source categories within the whole facilities? Will EPA continue to allow emission trading or averaging for compliance with MACT standards? If a source is covered under MACT by virtue of emitting 10 tons of a single pollutant, does that mean that any individual source at that facility can be regulated regardless of its size? For example, could a source that emits 2 pounds of an air toxic be regulated simply by being located within a major source? What if a facility across the street emits 9.9 tons -- does that mean none of its emissions will be regulated even if they are much worse? Is this fair?

**EPA RESPONSE:**

Before specifically addressing your questions, I would like to offer you our view of Section 112. Section 112 is a common sense approach to the regulation of air toxics across the Nation. For 20 years, the Clean Air Act directed EPA to use risk assessment to regulate hazardous air pollutants to an "ample margin of safety" level. By 1990, there was broad consensus that this approach had failed. Due to controversy and litigation over risk assessments and "how safe is safe," EPA had managed to set standards for only seven toxic air pollutants and a handful of sources. More than two-and-one-half billion pounds of toxic chemicals were still released into the air each year, according to industry-reported Toxics Release Inventory (TRI) data. Thus, industry, environmentalists, States and EPA broadly agreed in 1990 to use a technology-based approach as the primary means of reducing emissions of air toxics.

Congress created the Maximum Achievable Control Technology or MACT program as a practical approach: based on evaluation of existing control technologies, EPA must establish control requirements to assure all major sources of hazardous air pollutants (HAPs) achieve the level of control no less stringent than the levels already being achieved by the better performing

similar sources. The MACT program provides for environmental equity by leveling the playing field for industry so that cleaner facilities are not at a competitive disadvantage relative to their dirtier competitors.

The EPA believes the MACT program is working. In the four years since 1990, the air toxics program has achieved more than was accomplished during the prior 20 years. EPA already has proposed or promulgated standards for over 40 source categories, which when fully implemented will reduce toxic emissions by more than one billion pounds per year. In doing so, EPA is implementing the MACT program in a creative and flexible manner to ensure that the standards are practical, make common sense, and focus on environmental results.

The EPA has worked closely with industry and others on each MACT standard. Where high costs or other problems are identified, EPA is taking a cooperative and problem-solving approach. The statute provides a menu of tools EPA is actively using to smooth the rough edges that can sometimes occur with a technology-based approach. These include:

- Applicability cutoffs
- Subcategorization
- Emissions averaging
- Breadth of affected source definition
- Compliance schedule beyond three-year compliance date when environmental benefits warrant it
- Prohibitory (exclusionary) rules in MACT standards (which serve as limits on potential emissions)

EPA remains committed to working with industry and other stakeholders in the development of its air toxics rules to assure common sense approaches can be implemented.

**1. How does EPA define a source category for development of a MACT standard?**

The EPA's source category list, required by § 112(c) of the Act, identifies categories of sources for which National Emission Standards for Hazardous Air Pollutants, or MACT standards, are to be established. This list includes all categories of major sources of hazardous air pollutants (HAP's) known to EPA, and all area source categories for which findings of adverse effects warranting regulation have been made. The EPA defines the source category for individual MACT standards based on a process or product-oriented criteria. Factors which are considered in setting the schedule for completing these standards include adverse effects of HAPs on public health and the environment, quantity and location of emissions for the category, and the efficiency of grouping sources.

2. Can the definition be changed to increase the stringency of the standards

The source category list has generally been changed by subcategorizing listed categories into subcategories. Such a change is done to provide the best fit for development of reasonable regulations for the MACT standards. Typically, categories have been subcategorized based on different processes or products that have different HAP emissions and different emissions controls. The EPA does not subcategorize in an effort to make standards more stringent. We have, however, used the categorization process to facilitate trading and to make standards more flexible.

3. Should EPA be looking at whole facilities for MACT standards or only source categories within the whole facilities?

The EPA looks at whole facilities in the development of MACT standards. Section 112 requires that air toxic controls are required for all industrial and commercial plant sites that emit major amounts of hazardous air pollutants as defined in the Act. The determination of whether a facility is a major source depends upon total HAP's emissions from the entire facility, not just the equipment within a particular source category.

Take for example a facility that emits multiple HAPs (none at 10 tons or more) and is composed of three 20-ton sources in different source categories. If EPA looked only at individual source categories within the whole facility, this facility would be considered to be a trio of area sources. It would be exempt from major source controls although its toxic emissions would total 60 tons a year -- far above the 25-ton major source threshold. Such a situation would not reflect a credible air toxics program and, thereby, not satisfy public concerns about toxic emissions.

4. Will EPA continue to allow emission trading or averaging for compliance with MACT standards?

Yes, where practical, EPA will continue the use of emissions averaging (sometimes referred to as emissions trading) for compliance with MACT standards.

5. If a source is covered under MACT by virtue of emitting 10 tons of a single pollutant, does that mean that any individual source at that facility can be regulated regardless of its size? For example, could a source that emits 2 pounds of an air toxic be regulated simply by being located within a major source?

This situation is not likely to occur. Small sources, such as those that emit 2 lbs, generally have not been controlled. Thus, the MACT floor would be no emissions controls. And with such small emissions potential, it's not likely that cost effective controls are available. Therefore, such small sources would not likely be effected by MACT standards. In contrast, however, if small and highly toxic emissions exist (such as chromium emissions at electroplating facilities), emissions controls have been applied in response to public concerns. Therefore, a MACT floor will exist, and MACT will be applicable for such highly toxic emissions.

6. What if a facility across the street emits 9.9 tons -- does that mean none of its emissions will be regulated even if they are much worse? Is this fair?

The Congress established the 10 ton per year major source cut-off as a policy decision concerning where to draw the line in regulating sources of toxic emissions. Once a source triggers the major source threshold, Congress also specified that all emissions of listed pollutants be considered for control. Thus, it is possible that pollutants emitted at less than 10 tons per year would have to be controlled by such a major source. The hypothetical case posed by the questions could occur, but it is not a common occurrence and should not condemn the basic policy decision made by Congress.

Congress also provided for consideration of the less than major source, if the emissions involved were of sufficient concern. As noted above, if an entire facility's emissions are less than 10 tons/year of a single HAP and the emissions warrant regulation as is the case with chromium emissions at electroplating facilities, the emissions from the facility would be regulated.

- B. Is MACT defined as the 88th percentile of the best controlled similar sources, or has EPA defined MACT at a higher level? If so, under what authority?

How many MACT standards have been set at the 88th percentile? How many have been higher and for what reason?

**EPA RESPONSE:**

The statute requires that regulation of existing sources shall not be less stringent than "the average emission limitation achieved by the best performing 12 percent of the existing sources...". Therefore in determining this minimum level, EPA identifies the best performing twelve percent of sources and calculates their average performance.

For example, if the best performing 12 percent of sources are:

|                           |              |
|---------------------------|--------------|
| Three sources which emit: | 3 Tons/hour  |
| Six sources which emit:   | 4 Tons/hour  |
| One source which emits:   | 12 Tons/hour |

Then, their average performance is 4.5 tons/hour and not 12 tons/hour. This latter number is the worst rather than average performance achieved by this group.

The EPA explicitly took comment and made a decision on this issue early in the process of implementing section 112 [See 59 FR 29196]. We have assumed that what was meant by "set at the 88th percentile" was "set at the MACT floor." We have set standards for eleven MACT source categories under Title III. For the source categories for which MACT has been determined, approximately 25% of the possible determinations were more stringent than the floor. The basic reason for going beyond the floor was cost effectiveness considerations in all cases. In the majority of cases, the floor was no control and there was a cost effective control option above the floor. Other reasons included the desire to establish standards that were consistent with similar existing standards, and consideration of the toxicity of the pollutants being emitted.

The EPA believes that the current interpretation is the most sensible reading of the statute. Further, it is EPA's experience that the performance level established in this manner is achievable at reasonable cost. We have and will continue to address industry concerns about costs through means such as the definition of source, emissions averaging, and subcategorization.

C. There are over 150 source categories that EPA must regulate under the toxics program, with most regulations due in the year 2000. Is the MACT program on track, or is EPA likely to miss many deadlines? Does EPA believe that all of these industries pose a public health threat that warrants additional regulation? My understanding is that the original draft of the Clean Air Act Amendments submitted by President Bush required MACT standards for only 50% of the source categories? Would EPA support having discretion not to regulate some of the lower risk source categories? What happens when EPA misses a deadline and the case-by-case MACT requirement under Section 112(j) kicks in? Is it likely that each state will develop its own MACT standards? What if EPA then develops a national MACT standard -- will all regulated companies have to comply with both standards? Is this possible? Is this likely?

**EPA RESPONSE:**

1. **Is the MACT program on track, or is EPA likely to miss many deadlines?**

Since the passing of the 1990 Amendments, the EPA has implemented fundamental changes in the regulatory development process to allow for more efficient and more rapid development of air toxic emission standards. These changes include a streamlining of our internal work group process, classification of standards to identify truly significant rulemakings that require Office of Management and Budget (OMB) approval, and initiation of the MACT Partnerships Program. The MACT Partnerships program was created to help us in developing more efficient regulations by involving all stakeholders early in the process and identifying data gaps or areas of non-consensus. This allows us to focus our limited resources on solving these problems rather than confirming areas of apparent consensus.

The EPA has promulgated all of the 2-year section 112(d) MACT standards and is scheduled to have all of the 4-year standards promulgated before the 112(j) date of May 15, 1996 is triggered. EPA staff is currently working on all of the 7-year standards and several of the 10-year standards. Our goal is to promulgate all standards in a timely manner so as to avoid the 112(j) hammer provisions. Having implemented these changes in the regulatory development process, EPA believes that we can currently meet our remaining statutory obligations to promulgate standards for all of the listed source categories. Our ability to meet this schedule is predicated on receiving the resources requested in the President's fiscal year 1996 budget. If EPA's budget were reduced by 34 percent, as provided for under the Appropriations Bill passed by the House of Representatives, there would be substantial delays in meeting the statutory deadlines for MACT standards. As a consequence, there is a high likelihood that section 112(j) would be triggered repeatedly.

2. **Does EPA believe that all of these industries pose a public health threat that warrants additional regulation?**

Yes, based on information available at this time. However, the 1990 Amendments allow anyone who believes MACT regulation is not warranted by the risk associated with the source category (i.e., the maximum cancer risk is less than 1 in 1,000,000 from each source in the source category) to request the Administrator to remove the source category (through Section 112(c)(9)) from the list of categories to be regulated by MACT. To date, we have not received any petitions to delist source categories from the source category list.

3. **Would EPA support having discretion not to regulate some of the lower risk source categories?**

Additional discretion is not needed. As discussed in 2 above, we believe we have the necessary ability to avoid regulating source categories of non-significant risks.

4. **What happens when EPA misses a deadline and the case-by-case MACT requirement under Section (j) kicks in?**

If EPA fails to promulgate a MACT standard within 18 months of the regulatory deadline, and if a State or local agency has an approved Title V permit program, Section 112(j) requires owners or operators of major sources in the category to submit a permit application. The permit would require the air toxic emission sources in the source category to meet a MACT equivalent level of emission control. This control level is determined on a case-by-case basis by the permitting authority.

The EPA structured the final 112(j) rule envisioning two possible approaches to processing a permit application. The first approach envisions that the permitting agency and industry were well aware that EPA would miss a deadline and the State has already determined what level of control must be met. In this case, the permit application requires a demonstration of how the owner or operator plans to comply with this level of control.

In the absence of such communication between the owner or operator and the permitting agency, the permit application only requires information on emission sources within the source category. The permitting agency would use the information collected through the permitting process from major sources to subsequently determine the level of control. The permit applicant would then submit additional information showing how the required level of control will be met.

The entire permitting process could take up to 2 years. Owners or operators of new sources are not required to comply with the MACT emission limitation until permit issuance. Owners or operators of existing sources may have up to an additional three years from permit issuance to comply.

Currently, EPA is scheduled to promulgate the MACT standards due in November 1994 on or before the date 18 months after this regulatory deadline. The EPA is considering how to ensure that resources are not expended unnecessarily on the preparation and processing of permit applications in such cases.



**5. Is it likely that each State will develop its own MACT standard?**

Given the streamlining efforts we have undertaken and reasonable resources, EPA can do its part to avoid the case-by-case MACT requirements under Section 112(j). Nevertheless, if states are called upon to develop case-by-case MACTs, there are two possible approaches a State might take.

Some States such as Louisiana currently have legislative authority to develop MACT regulations for specific source categories. These States would likely develop rules to implement Section 112(j) for such categories. Other States do not have this legislative authority. These States are likely to determine control levels through issuance of each permit or through a general permit. In both situations, the products from the MACT development process (e.g., information on technology, floors, etc.) would help the states and industry. Moreover, it is expected that States would share information to assist each other in making 112(j) determinations.

**6. What if EPA then develops a national MACT standard -- will all regulated companies have to comply with both standards? Is this possible? Is this likely?**

In our view, this is unlikely. There are two outcomes in States that must develop case-by-case MACT for source categories who later become subject to a national MACT standard. First, we can work with the State to make a demonstration under Section 112(l) of the Act that its standard is at least equivalent to the Federal standard. In this case, the owner and operator could continue to comply with only the case-by-case MACT requirements. Second, when we work with a State it could be determined that its case-by-case MACT requirement is not as stringent as the Federal standard. This should not occur often. The owner or operator then may be required to comply with the Federal standard in a reasonable period of time. Section 112(j) provides the owner or operator with a compliance extension of up to 8 years from promulgation of the Federal standard, or up to 8 years from compliance with a 112(j) standard, if the Federal standard is more stringent than the 112(j) emission limit requirements. We believe that our efforts to build partnerships among EPA, State and industry will result in most case-by-case MACT determinations being considered equivalent to the MACT standard.

**D. What has EPA done to implement the residual risk provisions of section 112(f)? My understanding is that after installing "maximum achievable control technology", regulated companies face yet another round of regulation for "residual risks that exceed 1 in 1 million". How many companies will have to install additional controls over and**

above MACT to meet this requirement? How many companies will be able to meet these very stringent levels of risk? Can EPA reliably predict a 1 in 1 million risk level in the environment?

**EPA Response:**

Section 112(f) requires EPA to submit a report to Congress, due in November of 1996, that will describe the methods that will be used to determine if there is significant residual risk remaining after the application of MACT regulations under section 112(d), and a strategy that will address ways of reducing that risk in order to protect the public with an "ample margin of safety". To aid in the development of this report, EPA has been conducting case studies using currently available data on health effects, emissions and sources to determine the most appropriate methodology for evaluating the levels of residual risk. We have also been improving our exposure assessment models in accordance with recommendations of the National Academy of Science (NAS) in their 1994 report, "Science and Judgment in Risk Assessment". The case studies are currently being conducted on some of the early source categories on the schedule for promulgation of MACT rules. Therefore, it is not possible, at this time, to provide an answer to the question of which source categories may have to install additional controls.

While some industries may find that their HAP emissions will need to be reduced further than MACT requires, these additional reductions may not have to be achieved through additional regulations and controls. Concurrently with the case study analyses, EPA is developing a strategy for implementing any risk reductions required. This strategy will take into consideration the risk reductions that may result from emission reduction strategies developed in other areas such as the urban area source or criteria pollutant programs. Additionally, the residual risk strategy should allow EPA, working in conjunction with States, the flexibility to focus its attention on a smaller number of source categories, subcategories, hazardous air pollutants, or geographic areas in order to reduce residual risk in a more efficient and reasonable way. It may be possible in some cases that pollution prevention may achieve the desired risk reductions.

As to the question of whether EPA can reliably predict a 1 in 1 million risk level, EPA currently has many tools available to estimate or measure emissions, to predict the dispersion of emitted pollutants, and to estimate human exposures by both inhalation and non-inhalation pathways. Only when these tools are coupled with the data can determinations of the "uncertainty" or "reliability" of the results be assessed. The existence of data gaps decreases EPA's ability to predict a particular level of risk without uncertainty. The NAS recognized this and

emphasized it in their 1994 report when they stated, "the dominant analytical difficulty in decision-making based on risk assessments is pervasive uncertainty...given the many data gaps in our knowledge". Their "solution" was that each assessment should contain a more detailed description of the uncertainties created by these data gaps. The EPA has been engaged in efforts to develop the analytical tools needed to describe the uncertainties created by the data gaps encountered in the risk assessment process. We are also improving the way we communicate the risks and the uncertainties to risk managers and the public in order to provide them with a better frame of reference for the range of risk being presented.

**E. What is the purpose of section 112(g)? What environmental benefits will be achieved by section 112(g)? Will section 112(g) continue to trigger case-by-case MACT determinations after national MACT standards have been issued? If a company installs case-by-case MACT under section 112(g), will it also have to comply with a national MACT standard?**

**EPA RESPONSE:**

Section 112(g) provides the opportunity to achieve hazardous air pollutant reductions at major sources at the time significant changes occur, rather than waiting for national regulations. If such controls are integral to the planning as project changes occur, it is often more cost-efficient.

Section 112(g) achieves the following benefits. First, anyone, in any State, living near a newly constructed major-emitting plant will be assured that they are not being exposed to toxic pollutant emissions that could have been avoided with available control measures. Second, anyone, in any State, living near an existing major-emitting plant will be assured that when significant changes occur, that the plant owner will ensure that the new emissions are well-controlled.

Before, and only before, a federal MACT standard is set, section 112(g) would require a case-by-case MACT determination. The EPA intends that if a major capital expenditure had been made for a new piece of control equipment, should rarely be a need to replace it later to comply with a federal MACT standard. It is our view that sources which install controls that are substantially as effective as those required under a subsequent standard should not be required to retrofit different control equipment at a later point. Moreover, the EPA expects that if a source applies good controls at the time of construction or modification, those controls will be closely equivalent to what MACT will subsequently be considered to be. Consequently, the EPA believes it is highly unlikely that any change in control technology would be needed.

There may be some cases where it is appropriate to apply a subsequent MACT standard to a source with a prior 112(g) determination. For example, in those cases where a section 112(g) review leads to a decision not to apply any controls, and a subsequently issued MACT standard requires 90 percent control, the EPA believes it would be appropriate to require MACT to apply to that source. The EPA believes that in such cases, a source should be given up to 8 years, to comply with the MACT standard.

- F. How are small businesses affected by 112? MACT standards for these sources are optional and can be less stringent, but section 112(k) mandates a study of these facilities leading to additional regulation. What is the status of the study? How many small businesses will be regulated as a result of this study? How many minor sources are now regulated under section 112? How many small businesses have closed as a result of these standards?

**EPA RESPONSE:**

**1. How are small businesses affected by 112?**

An important distinction under Section 112 is whether a source is "major" vs. "area." Major sources are those that exceed, even after controls, a significant level of hazardous air emissions, regardless of size of business or number of employees. The Small Business Act defines a small business as one that is independently owned and operated, and not dominant in its field. In fact, some small businesses (e.g., secondary lead smelters) can emit high enough levels of hazardous air pollutants to be major sources, under Section 112. As such, these sources would be subject to MACT and permit requirements. However, most small businesses (e.g., dry cleaners, metal platers) are area sources and therefore may be subject to less stringent regulation than MACT. Moreover, under Section 112, area sources may only be regulated after a special finding has been made that they pose some level of health or environmental threat. Hence, small businesses that are area sources cannot be regulated unless the Administrator does a special analysis showing they warrant regulation, considering costs, availability of controls, etc. Small business concerns are factored into such findings, through informal and formal means.

- 2. MACT standards for these sources are optional and can be less stringent, but section 112(k) mandates a study of these facilities leading to additional regulation. What is the status of the study?**

Section 112(k) of the 1990 Amendments does require EPA to submit to Congress, by November 1995, a report on a national strategy for reducing public health risks from area sources of HAPs. This report is required to undergo public comment prior to

submittal to Congress, and thus, small businesses will have an opportunity to comment on EPA's strategic approach. Small businesses will not be regulated, per se, as a result of this strategy. What the strategy will do is merely make recommendations for further EPA actions, including additional research, but also possibly including the future regulation of various area source categories as needed to achieve the cancer risk reduction and other goals established in the Clean Air Act. Any subsequent regulation of small business based on such recommendations, however, will commence only from individual rulemakings and will necessarily again involve the impacted businesses as stakeholders early on.

EPA currently projects that the national urban area source strategy will be able to take credit for many efforts already underway that will achieve meaningful cancer reductions -- without having to recommend significant additional regulation. The principal reason for this is that EPA is finding that it, along with State air agencies, has already identified and targeted for regulation -- as part of the toxics program and under the criteria pollutant programs -- many of the area sources that contribute most significantly to public health risk. For example, cars, trucks, buses, woodstoves, chrome electroplaters, dry cleaners, metal cleaners, and secondary lead smelters have already all been the attention of various rulemakings.

**3. How many small businesses will be regulated as a result of this study?**

We cannot quantify the outcome at this time. If EPA finds that any additional small businesses require attention as a result of the Section 112(k) strategy, it will look for creative ways to limit emissions under various authorities rather than assuming that add-on controls are required under the MACT program. For example, this may involve crediting innovative State programs already in place, or assuring that low cost pollution prevention options are available for use by affected facilities. For example, many States have limited woodsmoke emissions through local prevention and curtailment programs, which EPA would hope to credit under the Section 112(k) strategy rather than mandate additional national requirements on stove manufacturers. Or, as another example, in the case of cooling towers using carcinogenic chromium as a water treatment additive, EPA has assured that effective substitute treatments are available as a pollution prevention alternative.

**4. How many minor sources are now regulated under section 112? How many small businesses have closed as a result of these standards?**

We assume that "minor source" means "area source" in this context. Out of the 19 source categories for which Section 112

standards have been set, five source categories included regulations for area sources. [It should be pointed out that an area source can be a large enterprise and not necessarily operated by a small business.] In the aggregate, these regulations apply to an estimated 120,000 area sources, mainly small vapor degreasing operations. The MACT standard for these sources is based on pollution prevention and work practices, and does not cause closure of these sources.

- G. In defining a major or minor source, EPA interprets the definition in the Act of "potential to emit considering controls" as requiring that these controls be federally enforceable before they can count against the potential to emit. Does this mean that a source complying with a state regulation would not be able to take that into account in the federal program? If the plant across the street is subject to a federal standard, could its potential emissions be lower, but its actual emissions higher? Why is this fair? Please explain EPA's position on this issue.

EPA RESPONSE:

The EPA believes that the provision for federal enforceability makes sense. For sources that truly have the capability to emit major amounts, and avoid requirements for Federal permits and Federal emission reduction requirements by restricting their operations, the EPA believes there should be a credible system to ensure that those restrictions are adhered to. The requirement for federal enforceability increases the credibility of the system by giving EPA the opportunity to address instances of noncompliance. In addition, it provides citizens the opportunity to ensure that sources in their communities are not improperly avoiding requirements that would decrease exposures to hazardous pollutants.

We feel there are many ways to ensure that such restrictions do not create a burden. In a policy guidance memorandum released on January 25, 1995, the EPA has highlighted approaches such as general rules and general permits, to define requirements for large numbers of sources without having to resort to individual permits. In order to ensure that States have sufficient time to implement any needed approaches, the memorandum provides for a two-year transition period. Under this policy, sources emitting less than 50 percent of the major source threshold would not be treated as major sources. Sources emitting more than 50 percent of the major source threshold, and for which there are State permits limiting their emissions to less than major amounts, can submit a certification accepting the State limits as federally enforceable.

Under the current policy, therefore, both plants in the example could take the State limits into account. Over the long term, the EPA believes that States are taking the necessary steps to ensure that all sources seeking area source status, and emitting close to the major source threshold will have federally enforceable limits.

Finally, we note that on July 21, 1995, the District of Columbia Circuit Court of Appeals, in National Mining Association, et.al., versus U. S. EPA, issued a decision which granted an industry petition challenging EPA's position on Federal enforceability. The EPA is evaluating the implications of this decision.

**H. Will facilities be able to change materials and production operations while the section 112(g) process runs its course?**

**EPA RESPONSE:**

Yes. For example, if an automobile manufacturing operation has a permit to apply a variety of types of paints, it will be able to switch among these paints without triggering section 112(g). A pharmaceutical manufacturer which has a permit to make a variety of drugs with a given chemical production train will be able to switch from production of one drug to the other without triggering section 112(g). In general, at sources for which the state or local air quality agency, and the exposed public, have a clear understanding of the scope of a plant's operations, changes within that scope will not trigger 112(g).

Where a company plans a major shift in the types of materials an operation uses, for example one associated with a major capital expenditure to overhaul an operation, or to change the basic nature of an operation that was previously permitted, such operational changes may trigger section 112(g) if they are not allowed for in the existing permit.

**I. Will facilities making section 112(g) modifications have to wait for technology determinations, public participation, and EPA approval? If so, how long would this take?**

**EPA RESPONSE:**

With respect to the length of time for the review, it is important to understand that section 112(g) "modifications" can involve different types of situations.

One type of "modification" is new construction at a major source plant site that emits significant, but less than "major" amounts. If, for example, an electronics manufacturer builds a new building on its current plant site, the types of preconstruction review states will wish to conduct under section

112(g) will likely converge with the already existing minor source preconstruction review process, and thus add no additional review time. At a recent stakeholder meeting, a State representative indicated that this type of modification, that is, involving new construction projects, would constitute the majority of "modifications" encountered under section 112(g).

Another type of "modification," is a modification involving a process change to an existing operation. For example, an automobile manufacturing facility may want to test the quality of new types of paints which may not be allowed or envisioned by existing permits. Another example would be an existing building at an electronics manufacturing facility that wants to switch to a new type of chemical to modernize the production operation at that building. The EPA does not intend to mandate specific steps in the administrative process for these types of modifications, but rather to allow states the flexibility to use already-existing processes to review them quickly if they believe review is needed. The EPA will engage in further discussions with the stakeholders to explore options to ensure a speedy administrative process.

The level of public review for these changes is likely to vary somewhat from State to State. We do not envision an EPA "approval" of the State's 112(g) determinations.

J. Recently, the EPA announced its intention to move to delegate the air toxics program. How would this program work? When will it be available? What role will the stakeholders play in developing this program?

**EPA RESPONSE:**

We assume that this question refers to the recent developments to find more straightforward and less prescriptive ways to delegate the section 112(g) program to State and local agencies. The EPA has recently held two meetings with stakeholders, on June 1 and on July 7, to discuss a concept under which the Agency would "reinvent" the April 1, 1994 proposed regulation implementing section 112(g). Under this concept, the Agency would promulgate a very short rule laying out basic elements that a State rule implementing section 112(g) must contain. This could allow States great flexibility to use existing air toxics programs to carry out the section 112(g) requirements, or to create programs tailored to their circumstances. While specifics are being developed, this concept has received generally positive feedback from stakeholders. The EPA will continue to work with stakeholders, and, of course, they will have the opportunity to comment on the rule. The EPA currently plans to develop a final rule by late spring.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 11 1995

OFFICE OF  
AIR AND RADIATION

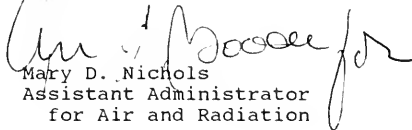
Honorable Lauch Faircloth  
Chairman/Subcommittee on Clean Air, Wetlands,  
Private Property and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, DC 20510

Dear Mr. Chairman:

Thank you for your letter of August 11, 1995, which transmitted a series of questions on the Title V permit program from yourself and Senator Thomas. Our response is enclosed.

If I can be of further assistance to you, please let me know.

Sincerely yours,

  
Mary D. Nichols  
Assistant Administrator  
for Air and Radiation

Enclosure

QUESTIONS FOR MS. MARY NICHOLS FROM  
SENATOR LAUCH FAIRCLOTH

## QUESTION:

1. You indicated during the hearing that the level of public participation required for permit changes will be determined by the States and depend upon the extent of those changes. What will EPA's role in this determination be? Will this scheme be used for both major and minor sources?

## EPA RESPONSE:

Under the Environmental Protection Agency's (EPA) August 31, 1995 supplemental proposal in the Federal Register, the level of public participation for permit changes would be determined by States for the vast majority of changes. Public and EPA review would be required for the more environmentally significant changes, such as major new sources or major modifications. For the remainder (i.e., those that are less environmentally significant) States would be allowed to match the level of public review to the environmental consequence of the change. States could exempt the smallest changes from any public review.

EPA's role in this determination would be minimal. In the supplemental proposal, the EPA gives general criteria for States to use in the matching process. States are also directed to apply the standard from the D.C. Circuit case, Alabama Power Co. v. Costle, 636 F.2d 323, in deciding which changes are de minimis and therefore exempt from public and EPA review. Under this approach any State that chooses to forego public review for some changes and can support its decision with a factual record would not have its decision second-guessed by EPA. The foregoing would apply to changes made at any source required to get a title V permit, whether major or minor.

## QUESTION:

2. During the hearing, you indicated that EPA did not have an economic impact analysis prepared for the Title V program, including parts 70 and 71. What is your best estimate for the Title V program? Please include costs to the taxpayers for

Federal and State programs, as well as costs to the regulated community, including costs for additional staff and consultants.

**EPA RESPONSE:**

Ms. Nichols testified that we are in the process of going back and looking at the reduced costs associated with the supplemental proposal which was published on August 31, 1995. However, EPA did prepare a regulatory impact analysis (RIA) when it promulgated the part 70 regulations in July 1992. The RIA contains cost estimates for sources, State and local permitting agencies, and EPA for the first 5 years of the program. Total costs are estimated to be an average of \$526 million for each of the first 5 years. The cost to EPA would be \$14 million (which would be funded through EPA appropriations). State and local agencies would incur \$160 million in costs, but this would be covered entirely by permit fees from sources subject to the program; there would be no cost to taxpayers. The costs to sources would be \$512 million, which includes permit fees to cover the \$160 million State and local costs.

For any Federal permit program (part 71) that would have to be administered by EPA, the average annual costs are estimated to be \$18.6 million per year total. This estimate is from the draft RIA prepared in conjunction with the part 71 proposed regulations and assumes EPA will administer fully staffed and operational permit programs in 10 States. The annual costs to EPA would be \$11.4 million and the annual costs to sources would be \$7.2 million. The \$11.4 million costs to EPA would be funded through EPA appropriations (Title V requires permit fees equal to the cost of a Federal program to be collected from sources and forwarded to the Federal Treasury). The RIA assumes such programs would operate for 2 years. In fact, we believe the actual costs will be substantially lower because we expect most programs to operate for a matter of months at a cost of about \$3.0 million per year.

**QUESTION:**

3. Based on the above costs, and your own estimates of likely emissions reductions attributed to implementation of title V, what do you think is the cost-per-ton reduction from title V?

**EPA RESPONSE:**

Although we can estimate costs of the program, we do not have specific estimates of the emissions reductions attributable to title V. However, based on past compliance data, we believe them to be significant. Many States have reported that companies are in fact achieving major reductions in emissions in an effort to comply with substantive Clean Air Act requirements discovered

in the course of preparing their permit applications and compliance certifications. We will be tracking this closely over the course of implementing the program.

**QUESTION:**

4. You have stated that the Title V program was not intended by Congress to be the source of new substantive requirements. Why then does EPA condition increase flexibility on an emissions cap?

**EPA RESPONSE:**

An emissions cap is hardly a new substantive requirement. Caps have been used for many years as a way of avoiding more stringent requirements, such as certain preconstruction requirements, that would apply if the cap were not in place. They are still used this way in flexible permits, including the Intel permit.

The EPA has also promoted an approach of preapproving certain activities, which before title V had to receive approval individually from the State. When used in combination with a cap, this approach can provide great flexibility, since it can avoid entirely the need for any kind of permit revision. Flexible permits of this type have been highly recommended by the electronics industry. They believe this is a very effective way to provide the flexibility to make changes that increase emissions at some units without requiring a revision to the permit. We agree and we have proposed to require States to accept the cap approach if requested by a source. We also have encouraged States to provide additional flexibility by preapproving changes under their State preconstruction permit programs.

**QUESTION:**

5. Much has been made of the White Paper, yet the simple fact remains that it is merely guidance, which can be changed at a whim. Would you oppose codifying in statute the concepts and approaches laid out in the White Paper?

**EPA RESPONSE:**

EPA does not issue guidance on a "whim" but in fact developed the White Paper after weeks of consultation with industry and other stakeholders.

We do not believe it is necessary or desirable to codify the White Paper in statute. The main purpose of the White Paper is to clear up certain misconceptions regarding the requirements of the permits rule. It does so simply by explaining what the rule

minimally requires. Therefore, a change from the positions set out in the White Paper would only result from a change to the rule itself, which would require giving the public an opportunity to comment. Moreover, issuing it as guidance has had an immediate effect; it has been widely read and is being widely implemented. We believe the sort of detailed implementation guidance provided in the White Paper is best handled through Agency rulemaking or policy guidance, rather than through a change in the statute.

EPA also intends to issue additional white papers to address other implementation concerns such as how to streamline the permit. As with the original White Paper, EPA will work with industry, States, and environmentalists to understand their concerns and respond to them in the guidance. In these cases, we would again encourage States to expeditiously implement the new guidance.

**QUESTION:**

6. EPA has stated that there are concerns in the regulated community that EPA will issue guidance in the future which would establish new requirements concerning the contents of a completed application. Absent a statutory fix, how does EPA plan to foreclose these concerns?

**EPA RESPONSE:**

The White Paper merely noted this as a concern that had been expressed by some States and some in the regulated community. Like a number of other concerns addressed by the White Paper, EPA believes this was a misconception. Based on the response from the regulated community, EPA's White Paper has clarified many issues related to the application and has greatly diminished concerns about additional guidance. We will use this same approach to address any new issues concerning applications that are raised from the regulated community. As with the original White Paper, any new guidance will be developed with assistance from our industry, State and environmental stakeholder. For the reasons given in our response to the previous question, a statutory fix is unnecessary and could delay relief to the regulated community.

**QUESTION:**

7. What is the legal foundation for EPA allowing greater optional flexibility only in those cases where a plant has agreed to an emissions cap? Could this be viewed as an attempt by EPA to bootstrap an emissions limitation on a record keeping permit?

**EPA RESPONSE:**

Section 502(b)(10) of the Act requires State permit programs to include provisions allowing changes at a permitted facility's operation can to be made without a permit revision if the change is not a title I modification and does not exceed the emissions allowable under the permit whether expressed as a rate or in terms of total emissions. EPA interprets this section to compel States to issue permits containing emission caps if requested by an applicant. Thus, if a facility's permit contains an emissions cap set at the threshold for title I modifications (e.g., 40 tons per year for VOC's), any change that does not exceed the cap could be made without a title V permit revision. The change would of course need to comply with other terms of the permit, such as any rate-based emission limits on a unit. As we said in response to question #4, the electronics industry in particular has asked for permits with emission caps.

The use of emission caps to provide industry greater flexibility and to implement an express provision of the Act could hardly qualify as "bootstrapping an emission limitation on a recordkeeping permit." Nor would a permit with only recordkeeping provisions be an effective means of implementing a flexible permit. An emissions cap is needed (and desired by industry) to ensure that changes do not exceed certain thresholds and become subject to State preconstruction requirements as major modifications, or major sources subject to section 112(g) requirements, for example.

**QUESTION:**

8. I am still concerned that the main defect of the compliance certification issue remains -- it appears to be an extended fishing license for the enforcement side of EPA. What assurances can you give me that the compliance certification won't be used in that manner?

**EPA RESPONSE:**

The EPA does not expect to develop many enforcement actions or to trigger large-scale investigations as a result of compliance certifications required under the title V programs. For example, EPA enforcement action would be limited to cases where an owner or operator willfully operated without a permit in violation of known requirements, or falsified a compliance certification, or such similar acts. To date, EPA has not placed a heavy emphasis on enforcement because many sources, as a result of the operating permits program provisions, are working with permitting authorities to identify, clarify, and resolve areas of potential misconception concerning applicable requirements. Furthermore, since local or State permitting authorities are responsible for implementing and enforcing the operating permits program, EPA enforcement action would only occur in those limited instances in which local or State permitting authorities fail to

take timely and appropriate corrective action. While sources remain responsible for ensuring compliance with applicable requirements, and thus subject to enforcement action for failing to maintain compliance, EPA prefers to achieve compliance through assisting sources.

**QUESTION:**

9. The White Paper did not address the "once in/always in" problem. How do you intend to ensure that sources will not become inappropriately categorized?

**EPA RESPONSE:**

EPA has not and does not intend to adopt a "once in/always in" policy for title V. If, for example, a company reduces its potential to emit (PTE) to below major source thresholds after being subject to title V, the Agency believes such a plant should be allowed out of the title V program. The Agency intends to clarify this position in future white papers or policy statements.

**QUESTION:**

10. Could you discuss the veto issue in more detail? It is my understanding that you plan to use the veto only in cases where citizens have petitioned. How have such arrangements worked in the past?

**EPA RESPONSE:**

For the first 5 years, we intend to use our veto for less environmentally significant permit revisions only in cases where a citizen has petitioned us. (Less environmentally significant revisions are those where EPA allows the State to determine the level of public review based on the environmental significance of the change.) If a citizen's petition brings to EPA's attention a permit revision that allegedly fails to fully or accurately incorporate all applicable requirements, or for which required opportunities for public review were not provided, the Agency would review the revision for possible objection. Where its review revealed an environmentally significant error in the permit revision, EPA would object.

During the 5-year period, EPA will audit how well State programs are working, and at the end of the period could decide through rulemaking whether to continue its waiver of the veto. EPA could still review more environmentally significant permit revisions, such as major emission increases, without waiting for a citizen petition.

## QUESTION:

11. EPA's response to Question III.E (small business leniency) is limited. It explains the statutory basis for leniency to small businesses, but does not answer why such an approach cannot be extended to other than major sources.

## EPA RESPONSE:

As we explained in our response to Question III.E., a recently-issued policy extends EPA's new approach to small business compliance and enforcement to major, as well as minor, Act sources. The policy applies to all sources -- major and minor -- that employ 100 or fewer persons on a company-wide basis.

## QUESTION:

12. You have indicated that 45 States had at least some aspect of an operating permit program prior to passage of the Clean Air Act Amendments of 1990. Why did not EPA simply focus on bringing those programs to full maturity instead of starting essentially ab initio?

## EPA RESPONSE:

Although 45 States had some kind of permit program, most were not close to meeting the minimum requirements of title V. For example, many States issued permits to new sources only, not existing ones. Also, many State permits did not contain all requirements under the Act, or they lacked adequate compliance certification requirements. Many parts of existing State programs were useful, however, and States have used them as starting points in developing their title V programs.

## QUESTION:

13. You have indicated that you expect compliance to increase from 80 to 90 percent because of title V. On what do you base this belief? If you believe that rule effectiveness will increase [to] 90 percent as a result of title V, will you give States 90 percent rule effectiveness in 15 percent and attainment plans? Is there some reason why you believe that a State-drive[n] program won't garner the same sort of benefits?

## EPA RESPONSE:

We used the increase from 80 to 90 percent to illustrate that a 10 percent improvement in rule effectiveness would cut emissions in half. However, as we indicated in our response to question 3, we do not have the information needed to quantify how



much of an improvement in rule effectiveness will be achieved by title V. As we stated in our testimony on August 1, we have performed studies indicating that some State rules were achieving no more than and in some cases less than 80 percent of the expected reductions in emissions; we believe this shortfall was due to non-compliance, in part because the companies were not aware of requirements to which they were subject. The operating permits program will substantially improve compliance with existing requirements, which in turn will result in improved air quality.

Our policy for 15 percent and attainment plans is to allow States to take credit for improvements in rule effectiveness over 80 percent based on State or local studies that account for local factors. If States provide sufficient information for granting the increase in rule effectiveness, we would certainly give States credit for that increased rule effectiveness.

As to whether State-driven programs would not garner the same increases in rule effectiveness as a title V program, our response to the previous question points out the shortcomings of many existing State permit programs relative to title V.

**QUESTION:**

14. You have asserted that there is little question that the Title V program will improve compliance. If you know that companies are not already in compliance, why aren't you bringing enforcement actions against them?

**EPA RESPONSE:**

As mentioned in our response to Question 8, EPA initiates enforcement action in those instances when we find that sources are out of compliance and that local or State permitting authorities fail to take timely and appropriate corrective action. EPA will continue its enforcement program, but with the advent of title V, EPA expects to gain greatly improved compliance as sources begin to fulfill their obligations under the operating permits program.

EPA believes that sources will be more likely to comply with their obligations when, as a result of the operating permit application process, these obligations are placed in written, legal documents and compliance with these requirements is certified initially and then on an annual basis. Absent such documents or duties to certify compliance, EPA finds that many sources often yield to competitive pressure at the expense of air quality.

In the short life of the operating permits program, experiences shared by permitting authorities confirm EPA's increased compliance expectations. While preparing the initial permit application, sources are uncovering applicable requirements of which they are previously unaware and are working with their permitting authorities to clarify and resolve misconceptions about applicable requirements. Similarly, while preparing initial permit applications, sources are discovering failures in meeting applicable regulations and taking immediate steps to address these problems, resulting in improved compliance.

**QUESTION:**

15. EPA recently indicated that it may allow States more time to develop shelters for their synthetic minors. While we applaud this common sense approach, we question why it cannot be broadened. If EPA is willing to allow States to shelter synthetic minors, will you endorse statutory language to close, once and for all, the question of potential to emit? Also, if EPA is willing to let States permit synthetic minors, why not take the extra step and simply turn the title V program over to the States?

**EPA RESPONSE:**

EPA's policy of January 25, 1995 provided a summary of the approaches States can use to create "shelters" for low-emitting sources whose potential to emit (PTE) exceeds major source levels. The most common approaches include (1) upgrading State operating permits in a way that creates effective and enforceable restrictions, and (2) creating State rules or general permits that minimize the degree to which case-by-case permitting is needed.

In addition, this January 25 policy announced a 2-year transition period (that is, until January of 1997) to ensure that States have time to implement these approaches. For example, during this 2-year period any source emitting less than 50 percent of the major source threshold, and keeping adequate records, would not be considered a major source. The EPA believes that by the end of the 2-year transition period, approaches will be readily available to sources seeking to limit their PTE.

We do not believe that a statutory fix is necessary or advisable on the subject of PTE. Our experience is that States are working with their sources to devise common-sense approaches that work best in their jurisdiction. More importantly, States are implementing limits on PTE as rapidly as they can, and as a result, we estimate several thousand companies nationwide are no longer major sources and therefore not subject to title V.

The EPA plans to take actions that should be complementary to these State efforts. First, the EPA is considering rulemaking that would permanently exempt from the system sources that emit low levels of actual emissions. Second, the EPA will clarify the types of common-sense inherent limitations that can be considered in calculating a source's potential to emit so as to avoid the need to create a synthetic "shelter." For example, for emergency electrical generators that operate only during power outages, we recently issued guidance that allow operators to assume the generator operates 500 hours per year or less rather than 8760 hours per year.

We are "turning the title V programs over" to the States as quickly as possible, by approving State and local title V programs. As of September 1, 1995, we have approved 17 State and well over half of the local programs. Over the next 6 to 12 months, we expect all but a very few State and local agencies to be running their programs.

**QUESTION:**

16. Why should not States be allowed five years to issue the first round of title V permits instead of the 3 years currently allowed?

**EPA RESPONSE:**

EPA already allows up to 5 years to complete issuance of permits under the current rule for States that demonstrate compelling reasons why they cannot issue all permits in the first 3 years. We expect about a dozen programs (including the two with the largest number of sources - Texas and Los Angeles) to be approved under this approach.

**QUESTION:**

17. Why shouldn't section 112(r) (emergency response) and title VI (stratospheric ozone protection) be removed from consideration, both as a means of determining applicability and as a source of applicable requirements?

**EPA RESPONSE:**

EPA recognizes that some provisions of the emergency response and stratospheric ozone protection regulations are inappropriate for determining applicability with, and as a source of applicable requirements for, the operating permits program. However, EPA believes that those regulation provisions which are appropriate for inclusion in the operating permits program should remain under consideration of the operating permits program. We have taken steps to segregate individual portions of the regulations and to remove the inappropriate regulations from the

scope of the operating permits program. EPA has proposed redefining the term "regulated air pollutant" so that the contribution from emissions of section 112(r) pollutants are not included in determining applicability, unless these pollutants are regulated under another provision of the Act. EPA guidance contained in the White Paper reduces the applicable requirements of section 112(r) from requiring detailed quantities or estimates of emissions of specific pollutants to indicating only whether or not a source is required to submit and implement a risk management plan.

With respect to removing unnecessary title VI requirements, EPA proposed redefining the term "applicable requirement" to include only those sections under title VI that apply to capture and recycling of ozone-depleting substances during service and disposal of refrigerator equipment and air conditioners. Other requirements, such as those contained in the phase out of production and consumption of ozone-depleting substances; nonessential products containing chlorofluorocarbons; labeling; and safe alternative sections, have little relevance to individual sources and under EPA's supplemental proposal would be removed from the scope of the operating permits program.

**QUESTION:**

18. There has been a great deal of concern raised over the agency's decision that an employer must calculate its Potential to Emit (PTE) and that only federally enforceable controls can be considered. This presumes that State or locally imposed control measures operating at a facility are not operating. Does the agency in fact assume that only federally enforceable emission control reduce air emissions -- we would appreciate a yes or no answer. If the answer is no, then why not allow PTE to be calculated as if the existing control measures are in fact doing what they have been installed to do? If you believe that they are not adequately controlling emissions, please provide very recent data to support your view. Data 10 or 15 years old is irrelevant because of the tremendous changes in controls and technologies.

**EPA RESPONSE:**

As you may be aware, the D.C. Circuit issued an opinion on July 21, 1995 that remands to the Agency the issue of whether limits on potential to emit must be federally enforceable for section 112 requirements. A separate case is pending to decided whether limits on potential to emit must be federally enforceable for title I requirements. Until such time as final court decisions are made in both cases, the Agency believes it is premature to comment on what its final position might be on this issue.

**QUESTION:**

19. At the hearing you responded that the average cost of a title V permit application for a major facility was \$50,000. As you are aware, Texas Instruments Corporation stated that its costs were \$250,000. Please provide supporting documentation for your statement. Also, please provide this Subcommittee with a synopsis of any comments on proposed rules, letters, economic analysis, critiques of your regulatory impact analysis that support or challenge your numbers.

**EPA RESPONSE:**

In accordance with the Paperwork Reduction Act, EPA prepared an Information Collection Request (ICR) analysis for the part 70 regulations. The ICR was approved by the Office of Management and Budget on July 28, 1992. A copy of the ICR is attached. Table 6 of the ICR provides estimated costs for sources for years 4 through 8 after promulgation of part 70; this includes the period when permit applications would be due from sources. The information indicates that large sources (with emissions greater than 100 tons per year (tpy)) would expend a total of 1194 hours to apply for a permit. This includes rule interpretation, information collection, and permit application preparation. At \$50 per hour, the hours translate into \$59,700. For sources below 100 tpy, the estimate is 660 hours of effort for a cost of \$33,000.

All the sources in table 6 of the ICR are assumed to be major, i.e., sources below 100 tpy can be major for hazardous air pollutants or major for ozone or particulate matter in certain nonattainment areas. Taking into account the number of "large" and "small" sources in table 6 and the costs for each, the average burden for all sources would be \$44,250 per permit application. These data in the ICR supports an estimate of approximately \$50,000 in 1995 dollars. A number of sources will be very large and complicated requiring a more detailed analysis and a more extensive permit application, and consequently entail higher costs such as the Texas Instruments example. The majority of sources, however, will be more routine and their costs will be considerably below the \$50,000 estimate.

The EPA has over the last year received general information from various sources indicating that permit application costs are excessively high and much more than estimated by EPA in the ICR. In investigating these assertions, EPA found that applicants were frequently going far beyond the requirements of part 70 for the scope and comprehensiveness of permit applications. As you are aware, the Agency's response to these concerns was the White Paper clarifying the requirements for permit applications. Implementation of the White Paper should bring actual costs more in line with estimated costs.

As you requested, attached are supporting material and analyses prepared as a result of comments on the RIA for part 70. These include:

- o A survey of State and local agencies which provided background information for the RIA and ICR.
- o Two pages from the technical support document for part 70 which respond to public comment on the burden analysis.
- o A summary of, and EPA's response to, comments from the public hearing on the RIA.
- o A summary of, and EPA's response to, comments of the Small Business Administration.

QUESTIONS FOR SENATOR FAIRCLOTH  
FROM  
SENATOR CRAIG THOMAS

QUESTION:

1. It is my understanding that the operating permit program currently applies to "major" sources with emissions that exceed certain threshold levels. In determining whether a mine is a major source, does EPA require consideration of fugitive emissions from the mine?

EPA RESPONSE:

Title V defines "major source" as including any stationary source or group of stationary sources that are adjacent to one another and commonly controlled and that is either a "major source" under section 112 of the Act or a "major stationary source" as defined in section 302(j) or part D of Title I of the Act (see section 501(2)). With regard to surface mines, EPA does not require the consideration of fugitive emissions from a mine in determining whether the mine by itself is major under title V, unless the mine is a major source of hazardous air pollutants (HAPs) under section 112. As indicated in the response to question 6, fugitive emissions of HAPs are to be counted in determining whether a source is major under section 112.

QUESTION:

2. Mining operations often include mineral processing plants that crush and grind ore to prepare it for the next step in the extraction process. Mineral processing plants are subject to new source performance standards that were adopted after EPA initially adopted its list of fugitive emissions sources in 1980. In determining whether a mineral processing plant is a major source, does EPA require consideration of fugitive emissions from the plant?

EPA RESPONSE:

As noted above, Title V defines "major source" as including major stationary source as defined in section 302(j) or part D of Title I of the Act. Section 302(j) provides that fugitive emissions from a source may only be counted in determining whether the source exceeds the major source threshold if EPA has determined by rule that fugitive emissions from that category of sources should be so counted. Part D follows section 302(j) in this regard.

EPA has thus far determined by rule that the fugitive emissions of all sources subject to NSPS promulgated prior to August 7, 1980 should be counted in making major source

determinations. EPA has not yet conducted such a rulemaking for NSPS promulgated on or after August 7, 1980, including the NSPS for metallic mineral processing facilities.

The Title V regulations as originally promulgated, however, require that the fugitive emissions of sources subject to New Source Performance Standards (NSPS) be counted in determining whether a source is major under section 302(j) and thus under Title V, regardless of when the NSPS was promulgated. EPA has since acknowledged in guidance that it did not conduct the requisite rulemaking under section 302(j) to so expand the scope of source categories for which fugitives must be counted.

As a result, EPA has stated in guidance that State permit programs which do not require fugitive emissions to be counted at sources subject to NSPS adopted after August 7, 1980 will still be approved. Furthermore, EPA is revising part 70 and will promulgate part 71 (the federal operating permit program) to require that in determining whether a source is major under section 302(j) or part D and thus under Title V, fugitive emissions from a source category subject to NSPS be counted only if a 302(j) rulemaking has been completed for that source category.

**QUESTION:**

3. EPA has adopted so-called "co-location rules" that operate to include within a permit all facilities that are located on contiguous property and under common ownership or control. It is my understanding that, at present, EPA does not require States to use the co-location rules to require permits for mining or mineral processing facilities that are not major sources if fugitive emissions are not considered. Is that correct?

**QUESTION:**

4. In determining whether a facility is a major source, EPA sometimes counts emissions from so-called "support facilities" that perform activities ancillary to the primary activity at the site. I understand that, at present, EPA does not require states to use the support facility rule to require permits for mining or mineral processing facilities that are not major sources if fugitive emissions are not considered? Is that correct?

**EPA RESPONSE TO QUESTIONS #3 AND #4:**

As noted above, the Title V definition of major source covers "any stationary source or group of stationary sources" that meets specified major source or major stationary source definitions (see section 501(2), emphasis added). The Title V regulations implement the above-quoted language by means of the "collocation" provisions of the regulations' major source



definition.

In promulgating the Title V regulations, the Agency interpreted the collocation provisions as requiring that adjacent, commonly controlled ("collocated") sources be combined under certain circumstances for purposes of making major source determinations under Title V. In general, collocated sources are combined for purposes of making major source determinations when they belong to the same industrial grouping as defined by the two-digit Standard Industrial Code (SIC) issued by the Office and Management and Budget. However, there is an exception to this rule for support facilities. Under the support facility test, collocated sources with different two-digit SIC codes will nevertheless be combined where one of the collocated sources is a support facility of the other.

Under the Agency's interpretation, the Title V collocation provisions applied to sources regardless of whether they had been listed by rule under section 302(j) of the Act. Further, EPA interpreted the Title V collocation rules as requiring that fugitive emissions from unlisted source categories be counted under some circumstances in making Title V major source determinations. Mines and metallic mineral processing facilities have not been listed by rule under section 302(j).

The Agency has since issued guidance to the States announcing that it no longer considers binding its interpretation of the collocation rules as they apply to unlisted sources in title V major source determinations. It announced that the Agency intended to conduct further rulemaking on the proper interpretation of the collocation rules with regard to unlisted sources, and that until the rulemaking was completed, States would have discretion in applying the collocation rules to unlisted sources in Title V major source determinations.

**QUESTION:**

5. I have been told that EPA cannot consider mining fugitive emissions in the major source determination unless the agency determines by rule that the benefits of the resulting regulation would outweigh the costs. Do you agree? Do you intend to conduct rulemaking to examine these issues? Would such a rulemaking discuss problems with accurate measurement of fugitive emissions?

**EPA RESPONSE:**

The Agency does consider the benefits and costs associated with listing a source category under a section 302(j) rulemaking. EPA has already undertaken a section 302(j) rulemaking regarding surface coal mines. In that rulemaking, completed in 1989, EPA decided not to list surface coal mines. The benefits and costs of regulation were considered in that rulemaking.

Regarding measurement of fugitive emissions, EPA regulations provide that only those fugitive emissions that are reasonably quantifiable need be counted.

**QUESTION:**

6. A recent judicial decision appears to hold that EPA may consider fugitive emission of substances listed as hazardous without the rulemaking just described. Does EPA view this decision as limited to listed hazardous substances only? Do you believe that current techniques for measuring fugitive emissions are sufficiently accurate to constitute a reasonable basis for regulation? What studies or other available data would you cite to support your views?

**EPA RESPONSE:**

In *National Mining Assoc. v. EPA* (July 21, 1995), the DC Circuit Court of Appeals upheld EPA's decision to require, for purposes of a section 112 major source determination, inclusion of fugitive emissions in a source's aggregate emissions without a section 302(j) rulemaking.

The court's decision was limited to the question of whether fugitives should be counted for purposes of section 112 major source determinations without rulemaking. Consequently, EPA views this decision as limited to listed hazardous substances, consistent with the requirement in section 112 to count only these substances when determining whether a source has the potential to emit major amounts of HAPs (i.e., 10 tons/year of a single pollutant or 25 tpy of a combination of pollutants).

The Agency has applied the results from a variety of testing methods in the evaluation of fugitive emissions from mining and other rock and ore handling operations. Many improvements to the reproducibility and repeatability of such methods have occurred over the past few years. These are documented in "A Review of Methods for Measuring Fugitive PM-10 Emission Rates" (EPA/454-R-93-037). The accuracy and precision estimates for these methods are provided in this and other documents and are considered in evaluating data the Agency collects. The Agency intends to continue evaluating and improving the performance of these methods. Nevertheless, we believe that these methods are of sufficient accuracy for regulatory development purposes.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OCT 16 1995

OFFICE OF  
AIR AND RADIATION

Honorable Lauch Faircloth  
Chairman, Committee on Environment  
and Public Works  
United States Senate  
Washington, D. C. 20510

Dear Senator Faircloth:

Enclosed are my responses to your follow-up questions to your I/M and Title V hearings before the Senate Subcommittee on Clean Air, Wetlands, Private Property and Nuclear Safety as transmitted with your letter of September 13, 1995.

At this time, I would like to correct a statement in my letter to you of August 18, 1995, concerning vehicle inspection and maintenance. In it we stated that funds given by us in a grant to the Coalition for Safer Cleaner Vehicles (CSCV) for development of technicians' training had been disbursed to Aspire, Inc. My staff who oversee that grant have informed me that, in fact, no funds were disbursed by CSCV to Aspire. Rather, Aspire donated staff time and facilities to CSCV for activities in conjunction with CSCV's technician training efforts. I deeply regret the miscommunication.

If I can be of further assistance to you, please let me know.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Mary D. Nichols".

Mary D. Nichols  
Assistant Administrator  
for Air and Radiation

Enclosure

**EPA'S RESPONSES TO QUESTIONS FROM THE I/M AND TITLE V  
HEARINGS ON 6/29/95 AND 8/1/95 BEFORE THE SENATE  
SUBCOMMITTEE ON CLEAN AIR, WETLANDS, PRIVATE PROPERTY  
AND NUCLEAR SAFETY**

**A. GENERAL CAA QUESTIONS**

**QUESTION 1:**

*Is the NAAQS for ozone set so as to separate out health effects caused by concurrent phenomena such as extreme heat and the presence of particulate matter?*

**RESPONSE:**

Yes, the NAAQS for ozone is set so as to separate out and consider health effects caused or exacerbated by concurrent phenomena such as extreme heat and the presence of particulate matter or other air pollutants. The primary (health-based) NAAQS for ozone, as well as for other criteria pollutants, generally are based on two types of health effects investigations--experimental and epidemiology (i.e., community based) studies. The first involves either human subjects or laboratory animals exposed under carefully controlled conditions (i.e., heat, humidity, pollutant concentrations). The second type of investigation is conducted by observing health effects of individuals living in communities where pollutant levels are monitored, but other phenomena such as extreme heat and presence of particulate matter are not controlled. The experimental studies permit direct assessment of the impact of a particular pollutant on individuals and groups of experimental subjects without the presence of confounding variables. Since epidemiology studies are conducted in the "real world," they allow investigators to analyze the impact of a particular pollutant (e.g., ozone) on human health in the presence of other pollutants and environmental conditions, such as extreme heat. By comparing the results of experimental and epidemiology studies at a particular pollutant level, it is possible to evaluate the incremental impact of non-ozone environmental conditions on human health.

**QUESTION 2:**

*Are the NAAQS set, in any respect, to prevent additional deaths; i.e., 1 additional death per 100,000?*

**RESPONSE:**

The EPA has not used any specific risk goal or criterion (e.g., 1 additional death per 100,000) in setting NAAQS. When determining a level for the NAAQS that provides an adequate margin to protect against pollution levels that may pose an unacceptable risk of harm, the Administrator considers such factors as the nature and severity of the

health effects involved, the size of the sensitive population(s) at risk, and the kind and nature of uncertainties associated with the health effects studies and any risk analyses based on those studies.

**QUESTION 3:**

*If the NAAQS are based only on risk, and not cost, why should they not be set at levels that are based on zero anthropogenic emissions?*

**RESPONSE:**

As stated above, the NAAQS are set at a level which provides an adequate margin of safety to protect against pollution levels that may pose an unacceptable risk of harm. After the NAAQS are set, individual states must determine what reductions in anthropogenic emissions are necessary to achieve the standards in all geographic areas. None of the current standards requires anything close to zero anthropogenic emissions.

**QUESTION 4:**

*Is the air quality in the United States getting better or worse, generally speaking?*

**RESPONSE:**

Generally speaking, the quality of the Nation's air continues to improve. Prior to the Clean Air Act of 1970, emissions of the six criteria pollutants and precursors, for which EPA subsequently established NAAQS, had increased significantly. For example, from 1950 to 1970, emissions of nitrogen oxides increased 98 percent, volatile organic compounds (precursor to ground level ozone) increased 47 percent, carbon monoxide increased 30 percent, and sulfur oxides increased 39 percent. Since 1970, emissions of all but one of these pollutants have declined, in some cases dramatically. Our 1993 Trends Report released last October reported the impressive reduction in lead emissions, down by 98 percent, which is clearly the biggest success story. Emissions reductions were also recorded for particulates (down 78 percent), sulfur oxides (down 30 percent), carbon monoxide (down 24 percent), and volatile organic compounds (down 24 percent). Only nitrogen oxides (up 14 percent) showed an increase between 1970 and 1993.

The 10-year air quality trends, 1984 to 1993, showed improvements for all six pollutants. Air quality levels for ozone improved 12 percent, carbon monoxide levels improved 37 percent, sulfur dioxide levels improved 26 percent, nitrogen dioxide improved 12 percent, lead levels improved 89 percent, and particulate levels improved 20 percent (because of the change in the particulate standard in 1987, the particulate

level improvement was measured from 1988 to 1993). Despite these improvements in emissions and air quality levels, in 1995 millions of people were living in areas which had not attained the O<sub>3</sub> NAAQS (see question 11 below).

**QUESTION 5:**

*What is the scientific rationale for the current ozone design values? How are temporal, spatial and meteorological considerations addressed?*

**RESPONSE:**

The air quality design value is intended to provide a measure of how far concentrations must be reduced to achieve attainment or, equivalently, how far the area is out of attainment. The Clean Air Act Amendments of 1990 introduced a classification process using the ozone design value to categorize nonattainment areas according to the extent of their ozone problem.

The EPA design value method yields an estimate for the ozone design value that is consistent with the current ozone NAAQS. The ozone design value is generally the fourth highest daily maximum 1-hour concentration as the design value during the 3-year compliance period. The fourth highest value is the design value, since if the fourth highest day is reduced to the level of the standard, then there will be one day per year above the level of the standard assuming three complete years of data.

The nonattainment area classifications were generally derived from 1987-89 air quality data which was the most recent data available at the time of enactment. The 3-year compliance test is designed to account for the temporal, or year-to-year, variability in ozone concentrations. Thus, although no direct adjustment is made for changes in meteorological conditions, compliance is not judged on just a single bad, or good year, but rather averaged across the 3-year compliance period. Spatial conditions are accounted for by considering all monitoring sites within the metropolitan area when judging compliance. Every monitoring site in the metropolitan area must meet the standard for the area to be in compliance with the ambient standard.

**QUESTION 6:**

*If the NAAQS change, how will redesignations/reclassifications be performed? How does this square with EPA's expressed concern over reclassifications which may result from attempts to allow the use of recent data for reclassification purposes?*

**RESPONSE:**

If a new NAAQS were adopted, it would provide an opportunity to reexamine a number of issues concerning the implementation of the current programs. Toward this end, the

EPA has established a Subcommittee under the Clean Air Act Advisory Committee (a group of outside consultants from a variety of industries, state and local governments and environmental groups) to provide advice and recommendations on implementing possible new NAAQS for ozone and fine particles, as well as implementing a possible new regional haze reduction program. The Subcommittee is comprised of representatives from industry, environmental groups, state, local and tribal governments. The EPA has charged the Subcommittee to examine key aspects of the existing implementation programs (including designations and classifications) for ozone and PM, and to provide for more effective approaches that could integrate broad regional and national control strategies with more localized efforts.

If there is a change in the NAAQS that replaces the current standard, EPA would use the input from this consultative process to help determine what the appropriate new classification system is for designating areas as attainment or nonattainment. The EPA would then establish, through full public notice and comment rulemaking, the new system; evaluate all existing air quality data; and make new designations and classifications. The Clean Air Act provides that designations under a new or revised NAAQS occur within three years of the promulgation of the new or revised NAAQS, based on the air quality of each area as well as its contribution (if any) to air quality problems in nearby areas. The Act further provides that at the same time that, or after, EPA designates areas as nonattainment, EPA may classify those areas based on the severity of the problems and the availability and feasibility of control measures that may be necessary to provide for attainment. These provisions grant EPA broad flexibility in designating and classifying areas.

**QUESTION 7:**

*How many exceedances were there nationwide in 1988? How many in 1995? Could you characterize the meteorological conditions of those years?*

**RESPONSE:**

In 1988, the number of hourly ozone exceedances totaled 6006 nationwide. States are not required to report the official 1995 air quality data until the spring of 1996. However, early indications are that the number of hourly ozone exceedances will likely be more than 1350 nationwide. The 1995 exceedances are estimated from data that has not been through quality assurance procedures yet and therefore should be treated as an estimate.

Comparing the 1995 and the 1988 episodes, it was found that they both are associated with stagnant weather systems.<sup>6</sup> The temperatures and wind patterns are very similar. But the July 1995 episode was much more humid. Because higher relative humidity has a negative effect on ozone production for high temperatures, the net effect is that the meteorological conditions of the July 1995 episode were somewhat less conducive to ozone formation than July 1988. It is clear that the reductions in ozone precursors

associated with Clean Air Act implementation has had a very positive impact on reducing the number of exceedances that have occurred nationwide.

**QUESTION 8:**

*You have indicated that state-enforceable limits are acceptable to determine potential-to-emit. This indicates to me that EPA believes that State programs -- both permitting and enforcement -- are equivalent to federal programs. If state-enforceable limits are acceptable to determine such an important component of the Title V program, why shouldn't the whole program be turned over to the States?*

**RESPONSE:**

We are turning the Title V program over to the states. Once their programs are approved, the states will implement Title V by accepting permit applications, issuing permits, etc. This approval process is making rapid progress. As of mid-September, 1995, 21 state and 36 local programs were approved. We expect these numbers to increase substantially in the next several months as EPA finally approves programs currently proposed for approval.

In January 1995, EPA issued a transition policy that allows use of state-enforceable limits for two years (up to January 1997) to limit potential to emit. This was an interim policy, intended to give states time to adopt federally-enforceable limits, and did not convey EPA acceptance of state enforceable limits on a permanent basis.

The answer to your question about why EPA's acceptance of state-enforceable limits under this policy shouldn't equate to broad acceptance of state-run programs for many other purposes, such as Title V programs is that existing state programs, although well-suited for their intended purpose, are limited in scope and lack the features required of a Title V program. For example, state NSR programs address only SIP requirements at new sources and modifications at existing sources; they do not cover all existing sources or requirements under the Act outside of the SIP, such as requirements for hazardous pollutants or acid rain. State operating permit programs also usually cover only SIP requirements.

EPA does believe that certain state programs are acceptable for determining potential-to-emit. State new source review (NSR) programs approved by EPA, state prohibitory rules and federally-enforceable state operating permit programs are three such programs. EPA approval of these programs in no way means that they are suitable as replacement Title V programs, as your question might imply. Indeed, limits on potential-to-emit under these state programs are often taken so that companies may avoid Title V.

However, the features lacking in many existing state programs are often those essential to improving compliance with the Act, which is the main objective of Title V programs.



Examples of these features include initial certification of compliance with all requirements of the Act, annual certification of compliance with permit terms, prompt reporting of deviations from the permit, a compliance schedule for out-of-compliance sources, citizen access, and ensuring major sources have adequate monitoring. Through these features, a Title V program improves compliance with existing regulations, and allows states to avoid adopting more stringent and more costly regulations to improve air quality. Without these features, existing state programs would not provide the benefits of Title V and it would not be equitable to treat them as equivalent to states with approved Title V programs.

**QUESTION 9:**

*How many states have toxics programs?*

**RESPONSE:**

The September 1993 EPA National Air Toxics Information Clearinghouse (NATICH) database report on air toxics activities indicates that 31 state agencies have an existing air toxics program. None of these programs includes all of the requirements of Title V of the Clean Air Act.

**QUESTION 10:**

*You reference a "margin of safety" in setting the NAAQS. What, in parts per billion, do you estimate the margin of safety to be for the ozone NAAQS?*

**RESPONSE:**

In setting NAAQS, EPA has recognized that some risk may remain. Since EPA is unable to identify a specific threshold or zero risk level for ozone, there is no specific concentration interval that represents "the margin of safety." Concerning the "threshold" issue, EPA cited in its 1978 ozone proposal notice (43 FR 26965) the following conclusion:

. . . that no clear threshold can be identified for health effects due to ozone. Rather, there is a continuum consisting of ozone levels at which health effects are certain, through levels at which scientists can generally agree that health effects are less certain and harder to identify. Selecting a standard from this continuum is a judgment of prudent public health practice and does not imply some discrete or fixed margin of safety that is appended to a known 'threshold'. [Emphasis added.]

At the September 19-20, 1995 meeting of the Clean Air Scientific Advisory Committee (a group of outside scientific experts) on EPA's draft criteria document and draft staff paper for ozone, the Committee reaffirmed the view that, based on currently-available scientific information, there is no clear threshold level for ozone and no zero risk level above background concentrations.

**QUESTION 11:**

*There has been much discussion about exposed populations. For ozone, could you indicate how many people reside in those counties in nonattainment; how many of those people are likely to be outside during a violation episode; the length of time you estimate such people remain outside; and the fraction of such people who may be considered to be in high risk categories (i.e., young children, the elderly, etc.)?*

**RESPONSE:**

As of September 1, 1995, there are 117 million people living in classified ozone nonattainment areas. The EPA has prepared several exposure analyses as part of the review of the ozone NAAQS which estimate population exposure for the general population, outdoor workers, and outdoor children in nine urban areas around the United States. Since ozone can penetrate indoors, especially in non-air conditioned buildings, exposures of concern are not restricted solely to outdoor exposures. While EPA cannot generalize how many people are likely to be outside during a violation episode, the available human activity data suggest that a substantial number of children and "outdoor workers" (e.g., farmers, construction workers, etc.) spend a significant amount of time outdoors during the summer months when ozone levels are highest. For example, about 47 percent of preteens (ages 6-13) and 31 percent of teenagers (ages 14-18) are judged to be active outdoors and spend at least 4 1/2 hours outdoors daily during the months of June, July and August. For the nine urban areas analyzed, this represents about 3.1 million children out of a total population of about 41.7 million people. For these same nine urban areas, the number of outdoor workers is estimated to number about 1.0 million persons. Based on limited human activity data, it is estimated that these outdoor workers typically spend from 4 to 16 hours outdoors on workdays. The EPA does not have estimates for other potential high risk groups like asthmatics or other groups with respiratory disease due to the scarcity of human activity data for these groups.

**QUESTION 12:**

*What is your best estimate of the costs incurred in trying to reach attainment?*

**RESPONSE:**

No recent estimate exists of the costs of attaining the ozone standard based on the 1990 Clean Air Act. However, as a part of its efforts to review the current ozone standard, the Agency is developing baseline costs for attaining the current ozone standard. These cost estimates are scheduled to be available in June 1996.

**B. QUESTIONS ON I/M****QUESTION 13:**

*Of what relevance are studies of the benefit/effectiveness of I/M that employ data from pre-1981 vehicles? Will EPA's certification rules for 1981 and later model years, which have the effect of limiting the adjustability of motor vehicles, tend to make data from fully adjustable cars unrepresentative of more recent model years?*

**RESPONSE:**

The Portland studies, to which your question appears to refer, show that a well run periodic emissions inspection program (i.e., one in which tests are properly done, the motorist compliance rate is good, and effective repairs are performed) is capable of getting substantial emissions reductions. Your question about the effect of changes in vehicle technology since that time is a good one. The fact that vehicle technology has changed raises two questions: have the changes eliminated the in-use excess emissions problem (i.e., do we still need I/M?), and (if the in-use excess emissions problem persists and we still need I/M) what elements of the Portland program have lost their effectiveness as a result of the changes? A number of recent studies in which emission measurements were taken on large numbers of vehicles, such as tunnel studies conducted by a number of independent researchers, EPA's analyses of IM240 results from Indiana and Arizona, and the California Pilot study conducted by the California Air Resources Board, all indicate that excess emissions problems persist despite the penetration of fuel-injected and computer-controlled vehicles into the fleet. However, these changes in vehicle technology have made the tests used in I/M programs in the past, the idle and two-speed tests, much less effective at identifying high-emitting vehicles. For this reason, EPA has focused on developing improved test procedures, such as the IM240 and, more recently, the ASM which show promise of being better able to identify high emitters among new technology vehicles (see the answer to question number 15 for further discussion of this issue). Similarly, EPA's Vehicle Maintenance Initiative is geared toward making training available to better enable technicians to repair vehicles failing the new tests and to do better emissions repairs in general.

**QUESTION 14:**

*With respect to the data EPA relies upon concerning I/M efficacy: How many of the failures to comply that EPA credits I/M with finding and correcting were caused by improper use of leaded gasoline or catalyst removal? Now that leaded gasoline is far less available, of what relevance is that data?*

**RESPONSE:**

The credits in the MOBILE model for the idle and two-speed tests have never assumed any detection of misfueling. Misfueled vehicles were omitted from the datasets from which credits for these tests were developed. I/M programs obtained credit in the past through visual inspections of the fuel inlet restrictor and the tailpipe lead test. As the availability of leaded gasoline has diminished, updated versions of the model gave less credit for these checks. MOBILE5a assumes that leaded gasoline disappears altogether in 1995, hence no credit is given for detection of misfueling for program scenarios in 1995 or later.

**QUESTION 15:**

*What levels of false failures does EPA anticipate (failures of "commission")? How many failures (people) does that translate into? How much will it cost for those failing falsely to prove compliance? Given the rates of errors of commission, how many people are statistically likely to fail falsely twice?*

**RESPONSE:**

Error of commission rates depend upon the type of test used and the stringency of the pass/fail standards or cut points. With any test, cut points can be raised or lowered depending upon the level of emission reductions that are sought through the I/M program. Lowering the cut points results in more failing vehicles and, up to a point, more emission reductions. However, lowering the cut points also increases the risk of false failures or errors of commission. With EPA's recent flexibility amendments to the I/M rule, and the additional credit options the agency has published, the range of test types, and the stringency of cut points likely to be used in enhanced I/M programs has expanded considerably. Therefore, there is no good way to estimate the numbers of people that might be affected by errors of commission. Please note, however, that errors of commission can be eliminated by raising the cut points. The more accurate a test is in identifying vehicles with excess emissions, the tighter cut points can be without causing errors of commission.

The IM240, at cut points of 0.8 grams per mile (gpm) HC, 15 gpm CO, and 2.0 gpm NOx, identifies 92 percent of excess HC emissions, 68 percent of excess CO emissions, and 83 percent of excess NOx emissions. Error of commission rates at these cut points are less than one percent. Data from the California Pilot Program

appear to indicate that the Acceleration Simulation Mode (ASM) test with cut points set to achieve similar identification rates has error of commission rates of about one percent. However, it is important to note that this study was conducted under laboratory rather than field conditions, and that field testing by EPA has shown that, when ASM cut points are tightened to achieve identification rates similar to the IM240 at the cut points listed above, error of commission rates range from 5 to 10 percent.

The two-speed test, at the standard cut points of 221 parts per million (ppm) HC and 1.2 percent CO only identifies 34 percent of the excess emissions from 1983 and later port-fuel injected high emitters and 62 percent of excess emissions from super emitters of the same age range and technology type. The false failure rate at this cut point level ranges from less than one percent to roughly three percent. Lowering the cut points to 100 ppm HC and 0.5 percent CO raises the HC identification rate to 78 percent, but also raises the false failure rate to 15 percent. With regard to the anticipated expense, a motorist experiencing a false failure could pass by simply driving the vehicle until it is fully warmed up, return for a retest, and pass without spending any money at all. It is also possible for such a motorist to buy some repairs and then pass the retest for reasons only partly related to the repairs that were done. Due to the many possible scenarios, it is impossible to state a cost figure for repairs necessary to pass if a vehicle is falsely failed.

**QUESTION 16:**

*Using modeling and data from 2 serious nonattainment areas of your choosing, please provide the emissions reductions anticipated by EPA for I/M and fleet turnover annually for the years 1995-2000.*

**RESPONSE:**

EPA's Office of Mobile Sources does not have local age distributions, vehicle mile traveled (VMT) distributions, projected VMT growth rates, or other such data available for different urbanized areas. Our staff have done an analysis using national average figures, as is described below. An analysis using actual areas could be done, but more time would be required to obtain and analyze statistics for the urbanized areas under study. While the use of data for specific areas might result in different percent reduction figures from those obtained using national averages, the size of the reductions from I/M and fleet turnover relative to each other would be little changed.

The table below shows emissions reductions for I/M and fleet turnover that have been estimated using MOBILE5a. The I/M program assumed in this scenario is an annual test-only program meeting EPA's high enhanced performance standard with cut points phased in as described in EPA's Technical Guidance document on IM240 and functional evaporative testing. The proportion of the emissions reductions attributed to I/M are determined by subtracting the annual emissions reductions MOBILE5a

estimates would occur if no I/M program were in place from the total emissions reductions projected by MOBILE5a for the I/M program under consideration.

| Year | HC      |     | CO      |     | NOx     |     |
|------|---------|-----|---------|-----|---------|-----|
|      | Trnover | I/M | Trnover | I/M | Trnover | I/M |
| 1995 | 18%     | 82% | 19%     | 81% | 19%     | 81% |
| 1996 | 34%     | 66% | 26%     | 74% | 30%     | 70% |
| 1997 | 24%     | 76% | 8%      | 92% | 12%     | 88% |
| 1998 | 40%     | 60% | 45%     | 55% | 24%     | 76% |
| 1999 | 39%     | 61% | 53%     | 47% | 12%     | 88% |
| 2000 | 37%     | 63% | 61%     | 39% | 15%     | 85% |

**QUESTION 17:**

*You indicate that "all I/M programs ... will be carefully evaluated with actual emissions data to determine whether their emission reduction targets are being met." In light of this, could you please explain the a priori 50% discount for test-and-repair programs?*

**RESPONSE:**

The test-and-repair discount is used as part of a prospective evaluation of a program's emissions reduction potential prior to its implementation. In making the prospective estimates of program effectiveness, the Agency must use the best available information on its likely effectiveness, including the past performance of similar programs. The Clean Air Act required EPA to use its past auditing experience in developing its guidance for I/M. As you know this experience has shown that test-and-repair programs in general have been far less effective than test-only in identifying high emitting vehicles and ensuring that they are repaired. Once programs have been in place long enough to have had some opportunity to obtain measurable emission reductions they will be

evaluated with actual program data to determine whether they are getting the emission reductions to which the state committed in its SIP.

**QUESTION 18:**

*This concept of a protocol to evaluate test-and-repair programs is interesting, but I have heard that EPA has made excessive, unnecessary, and unduly burdensome requests of Virginia and Utah to demonstrate their program proficiency. We keep coming back to the same point. Why can't EPA simply give full credit initially to all programs and then audit actual reductions at some point down the road? Would EPA be more likely to take such an approach if States promised to take measures to compensate for any shortfall in reductions?*

**RESPONSE:**

EPA staff have had extensive on-going discussions with state personnel in both Utah and Virginia to develop the test-and-repair evaluation protocol. In the course of these discussions, the state personnel have not indicated to our staff that our requests or ideas represented excessively burdensome requests for them. EPA is sensitive to the concerns of the states and we wish to be reasonable. If any of the states with whom the agency is conducting effectiveness evaluations were to indicate to us that we were making unreasonable demands, we would certainly take action to remedy that situation. Your suggested approach of giving all I/M programs full credit initially is the approach EPA took when I/M programs were being implemented for the first time and there was no past performance upon which to judge the likely effectiveness of different program types. However, states and EPA now have many years of experience in overseeing I/M programs. Common sense, and the language of the Clean Air Act require that EPA apply this experience to the assessment of the likely effectiveness of proposed programs. The Agency has explored the idea that EPA give full credit to test-and-repair programs initially if states commit to measures to improve the program should a subsequent analysis show that emissions reduction targets are not being met. When the I/M regulations were proposed, in July 1992, they included such a provision -- termed "provisional equivalency." Test-and-repair advocates indicated they were not willing to commit to compensating measures and opposed this provision. States interested in implementing hybrid or test-and-repair have not indicated an interest in such an approach in their negotiations with EPA.

**QUESTION 19:**

*How many I/M audits does EPA perform each year? How many covert and other audits (counting individual vehicles) does EPA perform annually? How many do the States perform? What are these sample sizes (EPA and the States considered separately) compared to the total number of annual tests performed nationwide?*

**RESPONSE:**

EPA's report entitled "Quantitative Assessments of Test-Only and Test-and-Repair I/M Programs" is enclosed with this response. Appendix A gives a complete listing of all the audits performed by the Office of Mobile Sources. The number of covert audits performed by the states varies from state to state, and in some states the vehicles used in the covert audits are not set to fail the test. EPA did not use covert audit data where vehicles were not set to fail in its analysis of the relative effectiveness of test-only and test-and-repair programs. The numbers of covert audits performed by states indicated in Figure 2 of the report give a reasonable representation of the range of numbers of covert audits performed by the states. The ratios of covert audits done in a state to the number of licensed stations in that state range from five percent in Massachusetts, to 94 percent in Colorado (given that covert audits are conducted to assess the performance of inspection stations, EPA believes that the ratio of covert audits to the number of licensed stations is a more relevant measure of the adequacy of the auditing effort than the ratio of audits to number of inspections performed).

**QUESTION 20:**

*With respect to the equity concerns raised concerning the repair waiver, you indicated that States have adopted special provisions to help lower-income people pay for necessary repairs. Could you discuss whether this approach might be considered an unfunded mandate? Should EPA participate in some funding mechanism to help States and their lower-income citizens pay for I/M repairs?*

**RESPONSE:**

Neither the Clean Air Act nor EPA's regulations require states to implement repair assistance programs. Any state that were to implement such a program would do so of its own initiative, not in response to any federal requirement. With regard to your question of whether EPA should participate in some funding mechanism to help states and their lower-income citizens pay for repairs, the states have not indicated that they look to EPA to assist with such a program.

**QUESTION 21:**

*Does the I/M regulation require programs to take into consideration driving times (not distance), including the "ping-pong" effect?*

**RESPONSE:**

Section 51.355(b) of the I/M regulation states that "(t)he SIP shall demonstrate that the network of stations providing test services is sufficient to insure short waiting times to get a test and short driving distances." When the regulation was proposed, EPA asked



for comment on what parameters should be included in the convenience requirements and whether the regulation should include limits (e.g., should average waiting times be limited to something like fifteen minutes). The bulk of the comments were to the effect that, while a convenience requirement in the regulation was a good idea, states should be given wide latitude in defining convenience for the affected populations.

**QUESTION 22:**

*Could you discuss the I/M contracting experience in Connecticut?*

**RESPONSE:**

Connecticut has had a contractor-operated centralized program for many years. It has been a well-run program, it has enjoyed good public acceptance and there have been very few complaints. The state entered into a contract, in March 1994, with Envirotec, the successor company to the previous contractor to operate the enhanced I/M program.

I/M testing contracts are awarded and negotiated privately between the states and the contractors. EPA is not involved in the process. Information on this could be obtained by contacting the state directly.

**QUESTION 23:**

*How many (and which) States have postponed or canceled the implementation of a test-only I/M-240 based program? Why?*

**RESPONSE:**

Enclosed is a status report on the implementation of enhanced I/M in the various states. It indicates which states have canceled or postponed implementation of test-only IM240-based programs. In most cases, EPA has not been fully informed of why this decision was made. For example, in Texas the stated reason for canceling the program was motorist complaints. However, the legislative effort to cancel the program was announced before the program started officially testing vehicles. Hence, it is clear that other factors were involved; however, EPA has not been informed of what they were.

**QUESTION 24:**

*What were the appropriations and staffing levels for the Office of Mobile Sources from FY 1988-FY 1995?*

**RESPONSE:**

See attached chart for OMS appropriations and staffing levels.

OFFICE OF MOBILE SOURCES  
 RESOURCES FY 1988 to FY 1995  
 (Dollars are in Millions)

|           | <u>FTE</u> | <u>S&amp;E*</u> | <u>PRO</u> | <u>AC&amp;C**</u> |
|-----------|------------|-----------------|------------|-------------------|
| FY 1988   | 317.4      | \$19.3          |            | \$8.1             |
| FY 1989   | 311.0      | \$18.9          |            | \$8.1             |
| FY 1990   | 325.0      | \$20.4          |            | \$10.0            |
| FY 1991   | 387.0      | \$25.6          |            | \$17.7            |
| FY 1992   | 404.0      | \$27.1          |            | \$25.6            |
| FY 1993   | 397.7      |                 | \$23.8     | \$22.3            |
| FY 1994   | 353.0      |                 | \$23.8     | \$27.4            |
| FY 1995** | 382.0      |                 | \$24.2     | \$27.6            |

\* Salaries and Expenses (S&E) became Program and Research Operations (PRO) appropriation beginning FY 1993.

\*\* When PRO was established, certain items funded in S&E were moved to AC&C.

\*\* Operating plan numbers (includes 16.0 FTEs for contractor conversion).

## ENHANCED I/M STATUS

| State                       | Key Items  | Current Events  |
|-----------------------------|--|---|
| Arizona                     | <p>Overall <i>Implemented, Running Smoothly</i><br/> Full SIP <i>Approved 5/8/95</i><br/> Enhanced Start Date <i>January 1995</i><br/> Planned Network Type <i>Test-Only</i></p>             | <p>IM240 program implemented January 1 and is now running smoothly. Averaging 12 vehicles per hour through the lane, as designed. Motorist satisfaction back to normal levels after transition to new program. Conducting large-scale remote sensing study.</p>   |
| California - Enhanced Areas | <p>Overall <i>Proceeding Smoothly</i><br/> Full SIP <i>Submitted/Complete 6/30/95</i><br/> Enhanced Start Date <i>November 1995</i><br/> Planned Network Type <i>Hybrid</i></p>              | <p>New program design exceeds low enhanced standard, but does not meet high enhanced. Final rules needed before SIP can be approved. Program implementation underway and testing is expected to partially begin by November 1995. Hybrid system will use ASM testing. Sacramento began limited I/M test-only testing in August 1995.</p>                    |
| Colorado - Enhanced Areas   | <p>Overall <i>Implemented</i><br/> Full SIP <i>Conditionally Approved 11/8/94</i><br/> Enhanced Start Date <i>January 1995</i><br/> Planned Network Type <i>Test-Only</i></p>                | <p>The contractor is still having dynamometer problems which lead to lane down time and average wait times in excess of 15 minutes (the contract requirement). The contractor has been fined \$395,000 for wait time problems. Greely begins RSD testing on 10/1/95.</p>  |
| Connecticut                 | <p>Overall <i>Phase-in Proceeding Smoothly</i><br/> Full SIP <i>Submitted/Complete June 1994</i><br/> Enhanced Start Date <i>January 1996</i><br/> Planned Network Type <i>Test-Only</i></p> | <p>Voluntary IM240 testing underway. State considering switch to ASM. Mandatory testing to be phased in by January. Current program running smoothly.</p>   |
| Delaware                    | <p>Overall <i>Proceeding Smoothly</i><br/> Full SIP <i>Submitted/Complete 2/24/95</i><br/> Enhanced Start Date <i>July 1996</i><br/> Planned Network Type <i>Test-Only</i></p>               | <p>SIP submitted and found complete March 3. The state began in July the pressure check and visual checks of emission controls. Will amend SIP in September to include modeling and administrative changes to its regulation.</p>   |
| District of Columbia        | <p>Overall <i>Proceeding, Minor Problems</i><br/> Full SIP <i>Submitted/Complete 7/13/95</i><br/> Enhanced Start Date <i>January 1998</i><br/> Planned Network Type <i>Test-Only</i></p>     | <p>The state submitted their SIP to the region on July 13, 1995. The Region found it complete on July 14, 1995. A letter of completeness was sent to the District on July 14, 1995. SIP calls for RSD screening of fleet and IM240s on only 60% of cars, without explanation or detail. A redesignation request was submitted for CO on Sept. 18, 1995.</p> |
| Georgia                     | <p>Overall <i>Proceeding, Minor Problems</i><br/> Full SIP <i>Submitted/Complete 12/29/94</i><br/> Enhanced Start Date <i>July 1996</i><br/> Planned Network Type <i>Hybrid</i></p>          | <p>A pre hearing SIP for age-based hybrid submitted to EPA for comment. Decentralized test-only network planned for cars older than 6 years and decentralized, test-and-repair network for newer cars. Should achieve high enhanced I/M credit. Public hearing set for August 16.</p>   |
| Illinois                    | <p>Overall <i>On Hold</i><br/> Full SIP <i>Submitted/Complete 6/29/95</i><br/> Enhanced Start Date <i>January 1997</i><br/> Planned Network Type <i>Test-Only</i></p>                        | <p>Request for Proposals has been prepared and will request bids on three testing scenarios: IM240, two-mode ASM, and one-mode ASM.</p>   |

## ENHANCED I/M STATUS

| State              | Key Items   | Current Events  |
|--------------------|---|---|
| Indiana            | <p>Overall <i>Proceeding Smoothly</i><br/> Full SIP <i>Submitted/Complete June 1995</i><br/> Enhanced Start Date <i>December 1995</i><br/> Planned Network Type <i>Test-Only</i></p>          |   |
| Louisiana          | <p>Overall <i>On Hold, Evaluating Alternatives</i><br/> Full SIP <i>Submitted/Complete 8/22/95</i><br/> Enhanced Start Date<br/> Planned Network Type <i>Test-and-Repair</i></p>              | State taking advantage of new flexibility for low enhanced I/M program. A public hearing was held on August 2, 1995.  |
| Maine              | <p>Overall <i>Terminated</i><br/> Full SIP <i>Conditionally Approved 11/3/94</i><br/> Enhanced Start Date<br/> Planned Network Type <i>None</i></p>   | Program terminated in March. Proposed 15% plan and attainment plan do not include I/M. There is no legislative authority for an I/M program.  |
| Maryland           | <p>Overall <i>Phase-in Proceeding Smoothly</i><br/> Full SIP <i>Submitted/Complete 7/12/95</i><br/> Enhanced Start Date <i>June 1996</i><br/> Planned Network Type <i>Test-Only</i></p>       | Voluntary IM240 testing underway. Mandatory IM240 testing set for June 1996. Program operating smoothly for now. A redesignation request was submitted for CO on Sept. 18, 1995. More committee hearings will be held in Nov. 1995.   |
| Massachusetts      | <p>Overall <i>Program Proposed</i><br/> Full SIP <i>Submitted/Complete 12/29/94</i><br/> Enhanced Start Date<br/> Planned Network Type <i>Test-Only</i></p>                                   | State is considering a decentralized, test-only system to meet the high enhanced performance standard. State has requested assistance in developing interest in a franchise approach.   |
| Missouri           | <p>Overall <i>On Hold, Evaluating Alternatives</i><br/> Full SIP <i>Submitted/Complete 9/1/94</i><br/> Enhanced Start Date <i>January 1997</i><br/> Planned Network Type <i>Test-Only</i></p> | State sued over Clean Air Act requirement to achieve a 15% reduction by 1996; basing claim on State's rights provision of constitution. Arguments completed but no court decision yet. State legislature has deleted funds for program for 1995. State has met with EPA to discuss options. |
| Nevada - Las Vegas | <p>Overall <i>On Hold, Evaluating Alternatives</i><br/> Full SIP <i>Submitted/Complete 7/28/94</i><br/> Enhanced Start Date<br/> Planned Network Type</p>                                     | State hopes to demonstrate CO attainment without I/M and is planning a low enhanced I/M program. An amended SIP will be submitted.  |
| New Hampshire      | <p>Overall <i>On Hold, Evaluating Alternatives</i><br/> Full SIP <i>Conditionally Approved 10/12/94</i><br/> Enhanced Start Date<br/> Planned Network Type <i>Unknown</i></p>                 | The State is considering options under EPA's flexibility rule. The State recently revised legislation to take advantage of the flexibility. The program is expected to be either a hybrid or a test-and-repair system. In addition, the State plans to exempt new cars from the program.    |

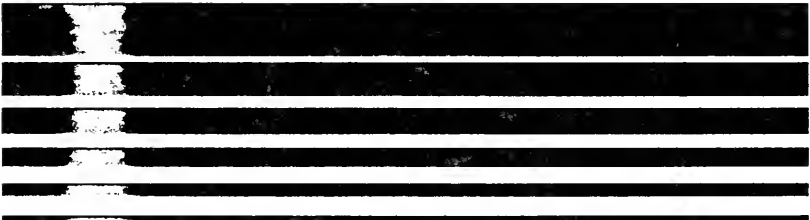
## ENHANCED I/M STATUS

| State           | Key Items  | Current Events   |
|-----------------|--|--|
| New Jersey      | <p>Overall <i>Proceeding Smoothly</i><br/> Full SIP <i>Submitted/Complete 7/24/95</i><br/> Enhanced Start Date <i>January 1997</i><br/> Planned Network Type <i>Hybrid: Age and Retest Based</i></p> | State is in the process of implementing a hybrid program. Emergency rules were adopted on August 28, 1995.   |
| New York        | <p>Overall <i>Program Proposed</i><br/> Full SIP <i>Submitted/Complete 8/2/95</i><br/> Enhanced Start Date <i>January 1997</i><br/> Planned Network Type <i>Hybrid</i></p>                           | State has proposed a hybrid program for New York City that would meet the high enhanced performance standard and two alternative programs for upstate New York that would either meet the low enhanced standard or the new OTR low enhanced standard.  |
| Ohio            | <p>Overall <i>Proceeding Smoothly</i><br/> Full SIP <i>Approved 4/4/95</i><br/> Enhanced Start Date <i>January 1996</i><br/> Planned Network Type <i>Test-Only</i></p>                               | State has opted to implement enhanced, test-only IM240 in Cincinnati, Cleveland and Dayton (only a basic I/M program required by the Act in these areas). Dayton was redesignated as attainment for ozone in May 1995. Toledo was redesignated for ozone attainment in August 1995.  |
| Pennsylvania    | <p>Overall <i>Suspended</i><br/> Full SIP <i>Disapproved 4/13/95</i><br/> Enhanced Start Date<br/> Planned Network Type <i>unknown</i></p>   | State considering options under EPA flexibility proposals. Redesignation requests are in the Regional office for review for Pittsburgh and Reading. On September 11, 1995 a Federal Register notice was published announcing EPA's April 13, 1995 disapproval.   |
| Rhode Island    | <p>Overall <i>On Hold, Evaluating Alternatives</i><br/> Full SIP <i>Submitted/Complete 1/95</i><br/> Enhanced Start Date <i>December 1995</i><br/> Planned Network Type <i>Test-Only</i></p>         | Governor held a conference on March 24 on I/M options. Direction not decided.  |
| Texas           | <p>Overall <i>Program Proposed</i><br/> Full SIP <i>Approved 8/22/94</i><br/> Enhanced Start Date<br/> Planned Network Type <i>Hybrid</i></p>  | Texas proposed three alternative I/M program designs consistent with EPA's flexibility rule, and is now focusing on the Motorist's Choice option which is a hybrid system using an idle or loaded mode test.   |
| Texas - El Paso | <p>Overall <i>Terminated</i><br/> Full SIP <i>Approved 8/22/94</i><br/> Enhanced Start Date<br/> Planned Network Type</p>  | Three options proposed by State. None would appear to meet low enhanced performance standard without modification. EPA has provided comments to State.   |
| Utah            | <p>Overall <i>On Hold, Evaluating Alternatives</i><br/> Full SIP <i>Submitted/Complete 11/94</i><br/> Enhanced Start Date<br/> Planned Network Type <i>Test-and-Repair</i></p>                       | EPA continues to work closely with the Utah to evaluate the effectiveness of the existing network. A protocol for the analysis has been drafted and is under joint review. Weekly meetings are being held between County, State, and EPA staffs. Analysis of 1.5 million records for Salt Lake County is underway. Other counties will follow. |

## ENHANCED I/M STATUS

| State      | Key Items   | Current Events  |
|------------|---|---|
| Vermont    | Overall <i>On Hold, Evaluating Alternatives</i><br>Full SIP <i>Sanctions Imposed 9/6/94</i><br>Enhanced Start Date<br>Planned Network Type                            | Stationary source offset sanctions went into effect September 6, 1994. There was news that Vermont is going to do a decentralized low enhanced I/M performance standard meeting the OTR Flex rule requirements. |
| Virginia   | Overall <i>On Hold, Evaluating Alternatives</i><br>Full SIP <i>Submitted/Complete 7/19/95</i><br>Enhanced Start Date<br>Planned Network Type <i>Test-and-Repair</i>   | EPA working with State to evaluate current network effectiveness.   |
| Washington | Overall <i>Implemented, Running Smoothly</i><br>Full SIP <i>Submitted/Complete</i><br>Enhanced Start Date<br>Planned Network Type <i>Test-Only</i>                    | SIP meeting low enhanced performance standard was submitted to EPA on Aug 14 .  |
| Wisconsin  | Overall <i>Proceeding Smoothly</i><br>Full SIP <i>Conditionally Approved 1/12/95</i><br>Enhanced Start Date <i>July 1995</i><br>Planned Network Type <i>Test-Only</i> | State moving smoothly toward program implementation of test-only, IM240 program. In process of meeting terms of conditional approval.   |

# EPA Quantitative Assessments of Test-only and Test-and-Repair I/M Programs



## Executive Summary

### Quantitative Assessments of Test-only and Test-and-Repair I/M Programs

- » In the early 1980s, EPA established I/M program credits after conducting a large-scale study of the test-only I/M program in Portland, Oregon.
- » For the enhanced I/M rulemaking, EPA used data from over 10,000 covert audits to assess the effectiveness of I/M programs. These results, along with the tampering survey data, form the basis for EPA's 50% effectiveness discount for test-and-repair programs. (It is important to note that covert audits assess the inspector's response to strangers, not to regular customers with whom there is an on-going business relationship that might be jeopardized by a test failure and resulting undesired repairs. Hence, these data may underestimate the actual extent of improper testing in test-and-repair programs.)
  - Over 10,000 covert audits conducted by state agencies with vehicles set to fail the tailpipe test and/or the visual anti-tampering inspection show that improper testing in test-and-repair programs occurs 48% of the time.
  - 293 covert audits conducted in 12 test-and-repair states by EPA, also with vehicles set to fail, show improper testing 81% of time.
  - Audits of 49 test-and-repair I/M stations in Missouri and New York, both of which use the most advanced BAR90 analyzers, found improper *emission* testing 34% and 46% of the time on the initial test. Taking into account retests, improper emission tests are estimated to occur between 56% and 71% of the time.
  - Audits of 13 test-only programs found no instances of improper *emission* testing on either initial tests or retests.
  - Visual inspections are conducted in a few test-only programs and improper testing has been found in those that had not implemented quality assurance programs. Good quality assurance resulted in only rare occurrences of improper visual tests.
- » EPA used data from national tampering surveys of over 60,000 vehicles to assess the effectiveness of anti-tampering programs
  - Tampering survey data taken in Portland, Oregon, the site of a test-only program, were used as the original basis for tampering check credits in the MOBILE model. These credits recognized visual check effectiveness levels ranging from 33% - 95%, varying with type of check.
  - Subsequent state and national tampering surveys in test-and-repair states, show that test-and-repair programs have not been as effective in finding and fixing tampered vehicles.
- » The California I/M Review Committee conducted a study involving 1100 cars that were recruited, screened, and sent to test-and-repair stations for testing and repair.
  - The Committee concluded that vehicles were inspected correctly only 24% of the time. There was no significant change in inspection effectiveness from the previous study, despite the introduction of BAR90 analyzers and tougher enforcement.



- The Committee also found that the emission reduction shortfall from the program ranged from 59%-68% depending on pollutant.
- » EPA used all of these data to adjust the emission reduction credits in MOBILE5a to reflect current knowledge about the effectiveness of test-only and test-and-repair I/M programs.
- » Testimony and other comments on EPA's proposed option, to grant provisional equivalency to test-and-repair enhanced I/M programs pending a subsequent demonstration of equivalent emission reductions, overwhelmingly indicated that there is no known way to make test-and-repair program equivalent to test-only.
- » The conflict of interest in test-and-repair programs for failing a good customer is likely to intensify in enhanced I/M programs where that customer would face as much as \$450 in repair costs.

## Table Of Contents

|                           | <u>Page</u> |
|---------------------------|-------------|
| Executive Summary         | i           |
| Table Of Contents         | iii         |
| 1.0 Introduction          | 1           |
| 2.0 Background            | 1           |
| 3.0 Covert Audit Data     | 5           |
| 4.0 Tampering Survey Data | 8           |
| 5.0 Major Studies         | 14          |
| 6.0 Conclusions           | 15          |
| Appendix A                |             |
| Appendix B                |             |

## 1.0 Introduction

Over the last 15 years, EPA has amassed a vast array of quantitative information about the effectiveness of inspection and maintenance programs. Many thousands of vehicles have been involved in studies, covert audits, and other investigations that contribute to this array of data. EPA has used these data in developing the emission reduction credits that are available to I/M programs in the MOBILE model, currently MOBILE5a. These data came from audits of I/M programs conducted by both EPA auditors and state auditors, dozens of tampering surveys conducted on roadways across the country, and studies conducted by states and EPA laboratories (or contractors to EPA). This paper explains these data and the methodologies used to acquire the information.

There are three primary sources of data that EPA uses to establish credits: audit data, tampering survey data, and, for lack of better term, special study data. Each of these sources will be discussed in depth in the following sections. Before getting into the details of these data, however, it is useful to review the requirements of the Clean Air Act and the process EPA went through to establish the I/M rules.

## 2.0 Background

The Clean Air Act Amendments of 1990 (the Act) require serious and worse ozone areas and carbon monoxide areas with a design value over 12.7 parts per million to implement an enhanced I/M program. The Act requires EPA establish a performance standard for enhanced I/M programs, to establish *binding* guidance (i.e., regulations), and to require that enhanced programs have certain specified features. The most controversial of those required features is specified in §182(c)(3)(C)(vi):

Operation of the program on a centralized basis, unless the State demonstrates to the satisfaction of the Administration that a decentralized program will be equally effective.

Section 182(a)(2)(B) requires EPA to take "into consideration the Administrator's investigations and audits of such programs." In April of 1991, EPA issued draft guidance for I/M programs. Public workshops were held on April 22 and April 25 to explain and get comment on the proposed guidance. Prior to issuance of the draft guidance, EPA met with state air agency representatives, environmental groups, motor vehicle manufacturers, I/M industry representatives, and automotive dealer and service station associations to explain "high-tech" I/M testing including IM240 and evaporative system pressure and purge tests. Public comment was positive to EPA's proposals to establish new high-tech test procedures as the basis for the enhanced I/M performance standard. Over 300 written comments were reviewed by EPA prior to publication of a Notice of Proposed Rulemaking for I/M requirements in the Federal Register on July 13, 1992. The proposed rule called for a high-option performance standard for areas required to implement enhanced I/M programs. The proposed regulatory text was published in the Federal Register on July 28, 1992. Public workshops on the proposal were held in Washington, D.C. on August 12 and August 13, and public comments were accepted through August 27, 1992. The final I/M rule was published on November 5, 1992.

In the NPRM, EPA asked for comments on three different ways for States to submit a decentralized program which could be approved as "equally effective" to a centralized system. In the first option, "presumptive" equivalency would be granted to decentralized, test-only programs. EPA based this on two important features of the decentralized test-only approach: the conflict of interest which contributes to improper testing in test-and-repair networks is eliminated and the focus of the decentralized test-only business is solely on testing. In the second option, "provisional" equivalency would be granted to upgraded test-and-repair programs for initial plan

approval provided there was clear legislative authority and a commitment to abandon the network should formal evaluation show that the problems with improper testing, oversight and quality control were present. In the third option, EPA proposed that "case-by-case" equivalency would be granted to test-and-repair programs if a state could demonstrate, based on past performance, that the program would achieve emission reductions greater than the default level credits. Special credits would be assigned in such cases.

NESCAUM, the American Lung Association, NRDC, STAPPA/ALAPCO, the New York DEC, the New York Department of Motor Vehicles (DMV), the California EPA, the California I/M Review Committee, and many others commented that in light of evidence that decentralized test-and-repair programs cannot meet a centralized, test-only performance standard, it was inappropriate and probably illegal for EPA to allow for provisional equivalency. They stated that no evidence has been provided that decentralized test-and-repair programs can work as well as test-only programs. These commenters also argued that to grant provisional equivalency without some confidence in the prospects for success is irresponsible, in that it would allow ineffective and costly programs to continue while air quality improvement suffers. The National Automotive Service Association urged EPA to be clear in setting equivalency requirements so that small business owners were not misled. The organization was concerned that a change to test-only after evaluation would mean that owners would not have time to recover their investments. Parties argue that either test-and-repair programs should not be allowed at all, or up-front equivalency demonstrations should be made.

Parties arguing that test-and-repair programs could not and would never be able to meet a centralized, test-only enhanced performance standard cited past experience, especially with the BAR90 systems in California and New York. They also believed that the inherent conflict of interest, the large number of stations, and the institutional barriers they faced made it impossible for a decentralized test-and-repair system to work equally effectively. Even with its highly motivated program management and after spending from \$6-7 per car on oversight, the California program is still experiencing high improper testing rates; it is not likely that any other state can or will do better.

EPA was impressed by the fact that the state agencies that are charged with implementing enhanced I/M programs stated in no uncertain terms that they knew of no solution to the problem of test-and-repair ineffectiveness and virtually all urged EPA to eliminate provisional equivalency from the final rule. EPA was also surprised to hear that many representatives of the decentralized, test-and-repair industry were not in favor of the provisional equivalency approach taken in the rule. They considered it a non-option because of the uncertain situation it created and the political difficulty such an approach would face.

Two States, California and New York, were in a particularly good position to comment on the equivalency of test-and-repair networks due to the length of their experience, the size of their programs, and the strength of their oversight efforts. California is recognized by most observers as having the most effective and comprehensive decentralized, test-and-repair system in the country. The California I/M Review Committee's Draft Fourth Report to the Legislature, issued on September 8, 1992, reinforced the findings discussed in the proposed rule that test-and-repair I/M programs were achieving only 50% (at best) of the potential emission reductions. The report shows that the enhanced BAR90 system being used in California is achieving only 42% of the potential for HC, 32% for CO, and 34% for NOx. The Committee also writes that:

"Limited evidence available to the Review Committee suggest that improper Smog Checks may occur more frequently under circumstances where the vehicle owner has had a previous business relationship with the Smog Check station. Under these circumstances, there is an inherent conflict of interest between the desire of the Smog Check station to satisfy the customer and the need to perform a proper and thorough inspection that may cause the vehicle to fail."

The Review Committee also concluded that given the enormous expenditures on enforcement in California, additional expenditures on enforcement to improve compliance would not be cost-effective.

The New York DMV presented extensive testimony on the pitfalls of implementing a test-and-repair program. New York is using the most advanced BAR90 arrangement with modem hook-ups to a centralized data processing system and automatic polling of stations. The Department testified that the 50% credit reduction estimated for test-and-repair programs by EPA is supported by the Department's findings. The DMV set out in designing its BAR90 system to "close every loophole" Nevertheless, the testimony from New York demonstrates that despite having the most sophisticated analyzers, excellent data collection and analysis, and aggressive covert audits, other fundamental problems impeded effective performance. EPA views many of these problems as major stumbling blocks and encourages the reader to review the docket for the full text of this testimony. Two examples will provide a flavor. First, New York testified that data analysis alone is insufficient evidence in court, that in order to successfully prosecute, the State must catch the inspector doing the improper testing. Second, the State found, as have California and others, that catching inspectors actually doing improper testing is extremely difficult. NY DMV testified:

"If you [the inspection station] don't do inspections for anybody but regular customers - bad inspections for anybody but regular customers, or [for] good, strong referrals - from either another station or some person you know and trust - then an undercover will never get you." (underline reflects oral emphasis)

This is a fundamental limitation in the test-and-repair system. EPA's experience with covert audits is that it is very hard to overcome the natural suspicion of inspectors at stations. They know the state is out doing covert audits and most take the necessary precautions to avoid being detected engaging in improper testing; many times EPA covert auditors are discovered by the station and confronted. Thus, a quality assurance system has two effects: It eliminates egregious improper testing and it makes inspectors cautious about for whom they improperly test. However, it also makes improper testing harder to detect because it is driven underground. California showed that with the expenditure of vast amounts of resources it could reduce the covert audit false improper test rate from about 80% to about 20-30%. But the I/M Review Committee's work shows that much of this change was a diminution in detection not wholly a reduction in actual improper testing or an improvement in program performance.

The due process system makes it virtually impossible to detect, stop, and prevent improper testing in test-and-repair systems. New York DMV found that while the BAR90 system has unproved its ability to detect improper testing through data analysis, the legal system essentially doesn't allow data to be introduced as evidence. Even when an inspector is caught doing an improper inspection during a covert audit, the plea before the judge is that an isolated mistake was made inadvertently - even when data indicated a larger problem. The inspector gets off with a reprimand, or a short suspension. Even when a revocation is obtained, the inspector can get a stay within 30 days and is back in business, or the business simply reincorporates with different principals (often in-laws). Under these circumstances, the type of analyzer, the type of test, the amount of oversight, and the expenditures made are essentially irrelevant.

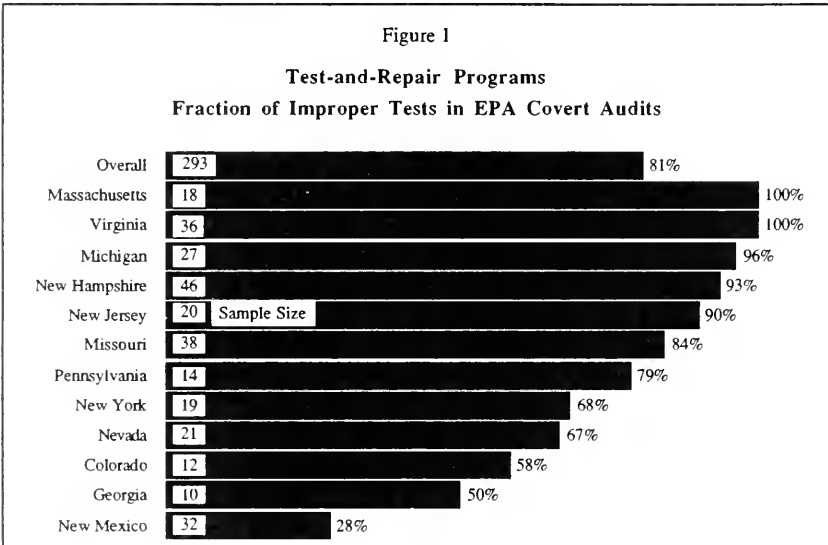
The House Committee Report on the Clean Air Act gives some insight into the Committee's thinking on this question when it states, "The intent of the Committee is that enhanced inspection and maintenance programs as required under this subsection are to either be centralized, or to include other program elements which taken together allow a decentralized system to be as effective as a centralized system in identifying noncomplying motor vehicles, and causing such vehicles to be repaired." (House Report 101-490, Part I, p. 240) The basic problem with the provisional equivalency approach was that neither EPA nor the states or other commenters know of any "other program elements taken together" that will achieve equal effectiveness, except the separation of test and repair. While some comments indicated concern over particular aspects of the definition of a decentralized test-only system, most concurred with EPA that such a system could be equally effective. However, the docket was conspicuously lacking in ways to make decentralized, test-and-repair programs equally effective (i.e., none in addition to those that have already been tried and failed).

In light of the absence of known elements to make test-and-repair equally effective, EPA shared the concern that provisional equivalency for test-and-repair systems would simply delay the implementation of effective enhanced I/M programs, that it would create more confusion and hardship than a transition to a test-only network, and would be inordinately expensive to attempt. Therefore, EPA dropped the provisional equivalency option for test-and-repair systems from the final rule. Nevertheless, besides implementing a decentralized, test-only system, states still have the option under the provisions of case-by-case equivalency to demonstrate that their existing decentralized, test-and-repair programs will be as effective as a test-only system. States will have to make this demonstration at the time of SIP submittal as contemplated by the statute.

### 3.0 Covert Audit Data

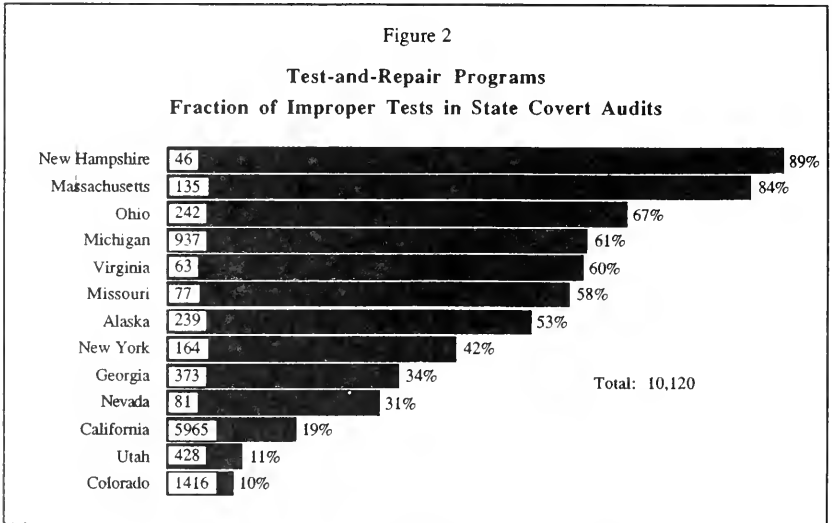
EPA first started auditing I/M programs in 1984. Since that time, 94 audits have been conducted in 31 states that are required to implement enhanced or basic I/M under the Clean Air Act Amendments of 1990 (a complete list is included in Appendix A). These audits were conducted under the auspices of the National Air Audit System. The National Air Audit System procedures for I/M audits were developed with the participation of STAPPA/ALAPCO\* and with the advice of General Accounting Office. The audits consist of a range of activities aimed at assessing the effectiveness of I/M programs and include such things as records review, data analysis, overt audits of inspection lanes and stations, and other activities. The audits found significant problems in test-and-repair programs which were documented in several reports published throughout the 1980s. In 1988 EPA began conducting covert audits with vehicles set to fail tampering checks during audit site visits. In conducting these audits, EPA randomly selected stations and lanes in the inspection network in order to achieve an unbiased sample. Different geographic areas within the region being audited were covered. The number of covert vehicle runs depended on the size of the program and the time and resources available during the site visit. EPA also began encouraging states to use this technique because it quickly became evident that this was a powerful tool for identifying improper testing.

Figure 1 shows the results of EPA covert audits in test-and-repair I/M programs. The sample size is shown on each bar in the chart and the fraction of vehicles that were improperly passed is shown on the end of each bar. Overall, out of 293 covert audits, 81% of them were done improperly. The range is from a low of 28% improper testing and a high of 100%.



\* State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officers

Figure 2 shows the results from covert audits of test-and-repair stations conducted by State oversight agencies. One major difference between EPA covert audit studies and state covert audit studies is that sample sizes from state audits - which are conducted year round - are much larger. Overall, state covert audits show lower improper test rates than EPA covert audits. There are several contributing factors. One of the biggest problems with covert audits is the risk of being discovered by the inspection station. EPA auditors have a much lower risk of discovery because, typically, EPA auditors and covert vehicles are new to the area. State agencies have sometimes found that lists of state audit vehicles are circulated among stations, allowing inspectors to identify the vehicle when it arrives for inspection. Another factor is that EPA audits always involve setting the vehicle to fail the test. State auditors often do covert audits with vehicles set to pass as well, and some of these are mixed into the data in Figure 2. As a result, these covert audits do not effectively assess the rate at which test stations improperly pass vehicles. Nevertheless, using a program weighted average, the state audit results show that improper testing occurs about half of the time for perfect strangers on the initial test.



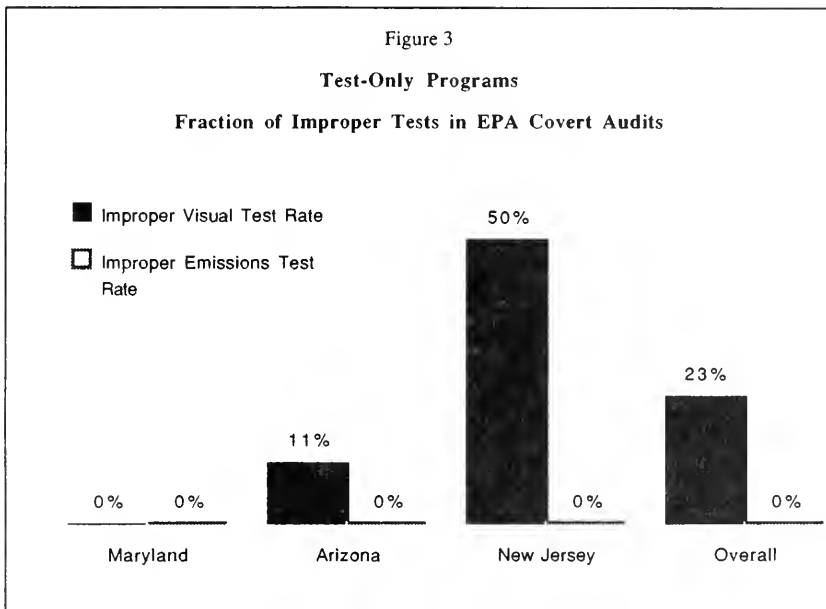
Covert audits in test-and-repair systems understate actual levels of improper testing since covert auditors are strangers in the test stations in which they get tested. This is especially true of emission tests since improper testing on this aspect requires active intervention by the inspector to get a passing result, as opposed to a tampering check which involves passively neglecting to perform the test. The fourth report to the legislature by the California I/M Review Committee states: "Limited evidence available to the Review Committee suggests that improper Smog Checks may occur more frequently under circumstances where the vehicle owner has had a previous business relationship with the Smog Check station." Information collected during EPA covert audits and analysis of test data confirm this.

Analysis of test data from test-and-repair programs shows that vehicles that initially fail frequently get one or more retests resulting in a pass immediately after the initial test. EPA covert audit experience shows that inspectors will do unauthorized retests (or multiple initial tests) to get a



passing result. A wide variety of strategies are used to accomplish this: dilute the sample, change engine speed, test another vehicle (clean piping), etc. State quality assurance data show evidence of innumerable cases of issuance of certificates of compliance in test-and-repair programs without having done proper emission inspections.

Figure 3 shows EPA data on covert audits in test-only programs. EPA has done covert auditing less frequently in test-only programs, mainly because overt audits have never indicated any improper testing problems with emission testing. With the addition of visual inspections to test-only programs in the late 1980s, EPA initiated covert audits with vehicles set to fail both the emission test and the visual check. The audits confirmed earlier findings with regard to the emission tests: that improper emission testing was not a problem. The results on the visual check, however, showed very low levels of improper testing with the exception of the State-run system in New Jersey.



Covert audits reveal the improper testing rate when vehicles are brought in for initial testing by customers unknown to the testing facility. EPA believes that improper testing will occur at least as often when retests are performed following an initial failure. BAR90 equipment was designed to make it difficult, or at least inconvenient, to perform an improper test. It was hoped that BAR90 programs would overcome the problem known to exist in test and repair networks. The most relevant data on whether increased oversight and technological innovation can stop improper testing comes from recent studies of BAR90 I/M programs. The results of the California I/M Review Committee study are discussed in Section 5. EPA's audit of the Missouri BAR90 I/M program found that inspectors improperly passed vehicles set to fail the emission test 34% of the time. Because at a minimum, improper testing occurs on the retest at the same frequency, the

overall improper emission test rate in Missouri is estimated to be 56%. Covert audits of the New York BAR90 I/M program showed similar results. In that case, vehicles set to fail the emission test were improperly passed 46% of the time, yielding an estimated overall improper emission test rate of 71%.

It is important to note that covert audits assess the inspector's response to strangers, not to regular customers with whom there is an on-going business relationship that might be jeopardized by failing the customer and subjecting him or her to undesired repairs. Hence, these data may underestimate the actual extent of improper testing in test-and-repair programs. This conflict of interest associated with failing a good customer is likely to intensify in enhanced I/M programs where that customer would face as much as \$450 in repair costs. The pressure to falsely pass such customers will likely be much greater.

#### 4.0 Tampering Survey Data

With the cooperation of State and local governments, EPA has conducted roadside tampering surveys of motor vehicles in cities throughout the country each year since 1978. These surveys provide information about national tampering rates and trends in tampering behavior. The surveys are conducted for 5 days in each city visited. Generally, 5-10 different sites are selected through out the city, and with the aid of local or state police, motorists are randomly pulled over and their vehicles emission controls are inspected. The typical survey covers about 500 vehicles. Appendix B provides a list of the tampering survey locations and the number of vehicles inspected in each. In all, 40 states have been visited and over 65,000 cars have been inspected.

In developing MOBILE5a credits, EPA analyzed the tampering survey data from the late 1980s to assess whether test-and-repair programs and test-only programs were being effective at reducing tampering rates and keeping them low. Until 1984, when Houston, Texas and California began comprehensive anti-tampering programs, the test-only program in Portland, Oregon was the only one that inspected the complete range of emission control components. Portland's test-only I/M program has been intensively studied by EPA (see discussion in Section 5) and the impact of the visual inspection program was used as the basis for establishing emission reduction credits in MOBILE3 for anti-tampering programs.

Figures 4 and 5 show the tampering rates found in each individual city for programs that were operating for at least 2 years at the time of the survey. Two no-I/M-program areas are included for reference and the rates are all from 1987 and 1988 surveys. Figure 4 shows that test-and-repair programs show high overall tampering rates (i.e., for catalyst, inlet, air, PCV and evaporative canister) compared to the test-only program in Oregon. Similarly, Figure 5 shows that even for the simplest of the visual checks - catalyst and inlet - the anti-tampering programs in test-and-repair states were not as effective as those in the test-only program in Oregon.

Figure 4  
Overall Tampering Rates in Select I/M Programs

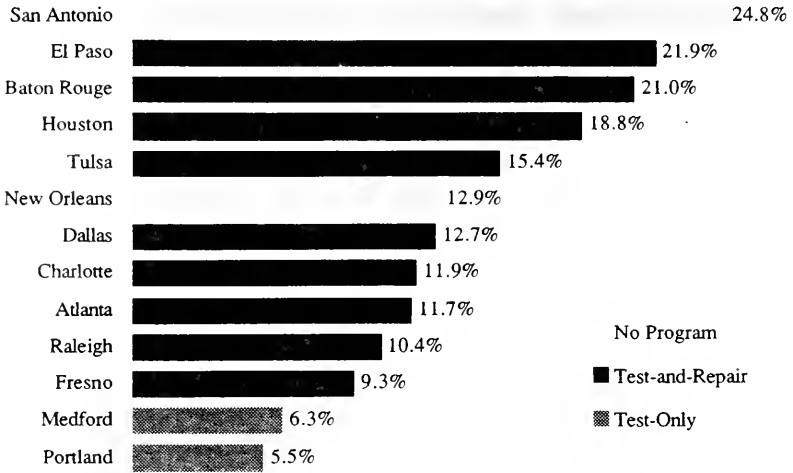


Figure 5  
Catalyst and Inlet Tampering Rates in Select I/M Programs

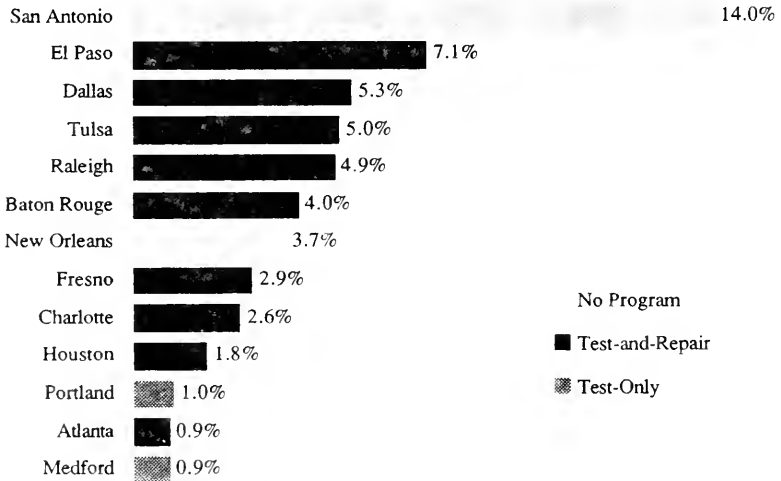
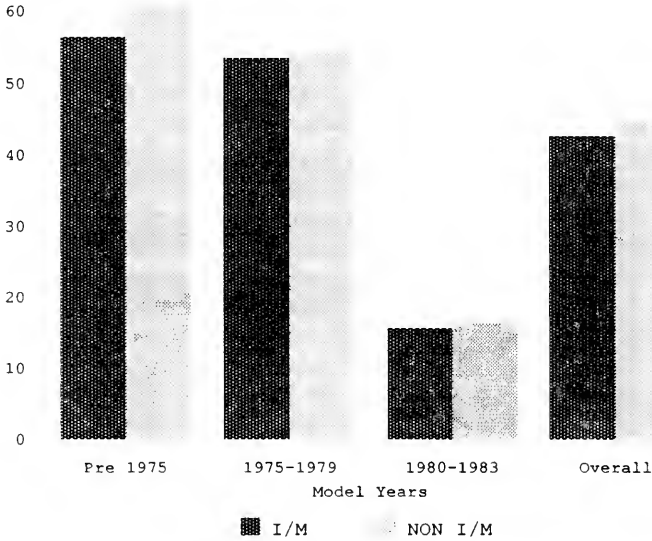


Figure 8

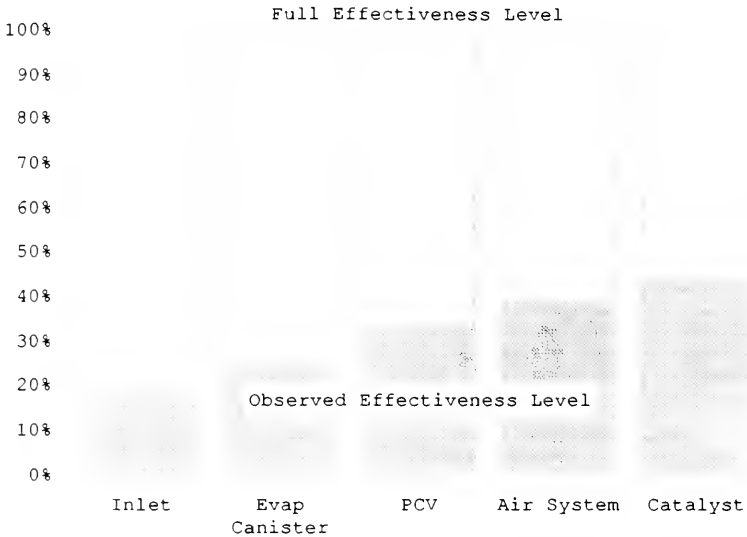
### Tampering Rates in I/M and Non-I/M Areas in California



A variety of sources of data on test-and-repair anti-tampering programs are available. The California I/M Review Committee has done extensive review and evaluation of the California test-and-repair program. The study used a variety of techniques including roadside tampering surveys. One of the many important findings of this study was that roadside tampering rates for the items checked in the I/M test did not differ substantially between the vehicles that had already been subject to I/M and those that had not. It should be noted that California uses a broader definition of the term "tampering" for both its survey and I/M checklist than that used by EPA; thus, the overall rates are not comparable to EPA's national survey rates. These results are illustrated in Figure 8.

Figure 9

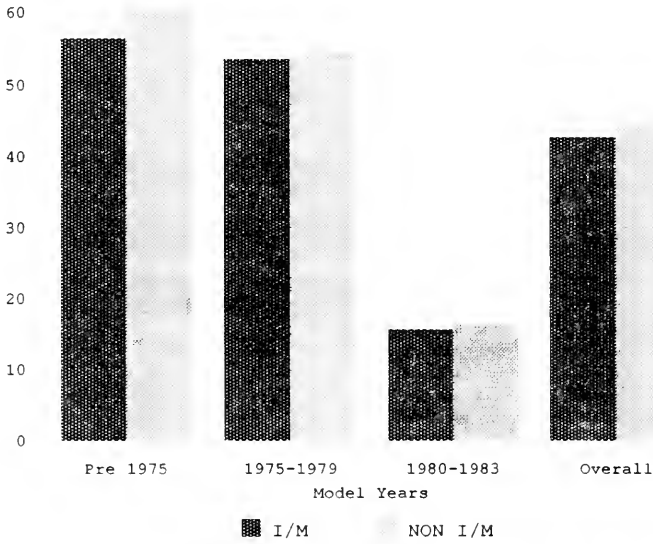
**Frequency of Proper Tampering Tests  
in California's Covert Audit Program**



In addition to the survey data, audits of test-and-repair anti-tampering programs find improper inspections. Covert investigations continually find that inspectors fail to check for components, fail to fail tampered vehicles, and sometimes fail to do the inspection at all. California's covert audit work indicates that licensed inspectors neglect to fail tampered vehicles in the majority of cases. Figure 9 shows the results by component. During EPA overt audits in test-and-repair programs, inspectors have been asked by auditors to demonstrate an inspection, and are frequently unable to do the check correctly, either neglecting to check for one or more components or improperly identifying components.

Figure 8

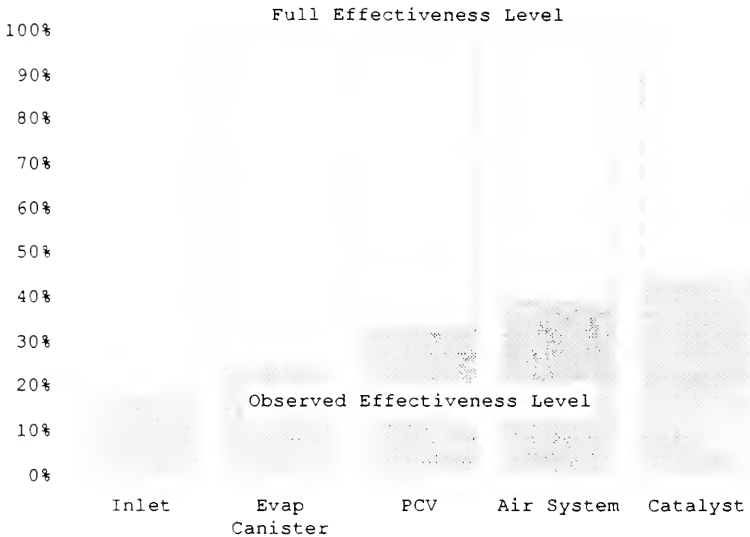
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Figure 9

**Frequency of Proper Tampering Tests  
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## 5.0 Major Studies

Several major studies have been conducted to evaluate the effectiveness of I/M programs. Two of those studies will be discussed here: an EPA study of the test-only program in Portland, Oregon, and work performed by the California I/M Review Committee.

The Portland, Oregon study was conducted in the late 1970s and was used as the basis for developing the credits for I/M programs that are contained in the original MOBILE model. At the time, Portland was one of three operating I/M programs, all of which were test-only. EPA's study of Portland involved about 2,300 vehicles in Portland and about 600 vehicles in the non-I/M area of Eugene, Oregon. Passing and failing vehicles were recruited in Portland to determine how well the program identified vehicles that needed repair, what effects commercial repairs had on those vehicles, the effectiveness of the retest, and the duration of the emission reductions achieved. A variety of other issues were addressed as well, including fuel economy and cost-effectiveness. Vehicles recruited in Eugene were used as a control group. The study found that the program was achieving a 47% reduction in HC emissions and a 42% reduction in CO emissions among vehicles that failed the test. The results of EPA's study of this test-only I/M program form the basis for I/M credits that were part of the 1982 State Implementation Plans. EPA did not at that time make a distinction between the amount of credit for test-only programs vs. test-and-repair programs.

The California I/M Review Committee's "Evaluation of the California Smog Check Program and Recommendations for Program Improvements: Fourth Report to the Legislature" is one major study that played a central role in EPA's latest adjustments to the credits in the MOBILE model. As part of the evaluation the California Air Resources Board (CARB) recruited a large sample of in-use vehicles to evaluate the effectiveness of the inspections and the changes in emissions resulting from vehicles going through the program. The vehicles were covertly taken to licensed Smog Check facilities for regular inspections and the results were monitored.

Vehicles were selected randomly from the registration files and were further sorted in order to obtain a representative cross-section of model years and technology types (i.e., the combination of fuel metering and emission control system). Owners were offered a variety of incentives to allow their cars to be used for the study. Candidate vehicles were given an initial screening consisting of a complete emission and visual check to find failing vehicles. Previous studies by CARB had found that vehicles that ought to pass are rarely falsely failed; hence, this study focused on the fate of vehicles that were high emitters. Vehicles that failed the initial screening were given a confirmatory Smog Check, a thorough diagnosis of emission defects, and a baseline FTP test, including evaporative SHED tests if the diagnosis indicated problems with the vehicle's evaporative control system. Vehicles that were found to have passed the initial screening were returned to the owners and dropped from the program. A total of 1,110 participated in the next phase of the program as undercover cars.

The undercover cars were taken to official Smog Check stations by either CARB staff or student assistants posing as motorists in need of a certificate of compliance. Smog Check stations were randomly selected and visited until one of the following occurred: the vehicle was failed and properly repaired, as determined by a diagnosis performed afterwards; the vehicle was failed and qualified for, and received a waiver; the vehicle (improperly) passed Smog Checks at two separate stations. All vehicles received thorough diagnoses and FTPs after completion of the field testing to determine the change in emission levels as a result of any repairs that were performed.

The study found that, on vehicles with at least one underhood defect only 58.5% failed the Smog Check. By comparison, in a 1986 study using 795 undercover vehicles 59.6% of such vehicles failed the Smog Check. Hence, quality of these inspections did not change significantly despite BAR90 analyzers, retraining of inspectors, and tougher enforcement instituted since that



time. When looking at all types of tests, it was found that only 24% of the test vehicles received a complete, proper inspection. Thus, many vehicles were passed with defects that were not detected or fixed. The improper test rate on the tailpipe emission test alone was not analyzed by the Committee. The study found that the California Smog Check program was achieving a reduction of 19.6% for HC, 15.3% for CO, and 6.7% for NOx. These results are 41% of the potential HC benefits, 32% of the potential CO benefits, and 34% of the potential NOx benefits. In other words, the emission reduction shortfall ranges from 59% to 68% for the three pollutants.

## 6.0 Conclusions

The data EPA has used in making decisions about I/M programs comes from several sources, including national tampering surveys, EPA and state audits, and special studies like the one conducted by the California I/M Review Committee and EPA's study of the Portland, Oregon I/M program. These studies gathered quantitative data on the testing of well over 10,000 vehicles in programs across the country.

EPA initially developed the tailpipe emission test credits in the MOBILE model from the results of a large-scale study of the test-only program in Portland, Oregon. EPA subsequently developed anti-tampering program credits based on a tampering survey of the Portland area in 1982. The roadside results were used as an objective measure of the effectiveness of the Portland program. These credits were initially made available to all I/M programs regardless of network type. Many test-and-repair programs instituted visual inspections and claimed credit in the SIP for these tests. Subsequent national tampering surveys in these cities showed that the credits EPA established were not reflected in the roadside tampering surveys conducted after the programs were in effect for several years. Program audits showed that inspectors routinely pass vehicles that should fail. EPA used the data on visual anti-tampering inspection effectiveness from the audits and national tampering surveys to adjust the emission reduction credits in MOBILE5a to reflect the results of a well run, test-and-repair program. The benefits were reduced by 50% or 75% depending on the emission control component tested.

Similarly, EPA found in audits of I/M programs, that emission testing was done objectively in test-only I/M programs. While minor procedural violations were apparent in some programs (e.g., neglecting to shut off accessories during the test), there was never any evidence that inspectors were attempting to get cars that should fail to pass improperly. On the other hand, the data shows that inspectors in test-and-repair programs routinely attempted to get failing cars to pass the initial test, and this for perfect strangers. EPA believes that the rate of improper emission testing in test-and-repair programs is at least as great on retests as that found on initial tests. These data led EPA to reduce the emission test credits by 50% in MOBILE5a for test-and-repair programs.

**Appendix A**

**National Air Audit System Audits Performed by EPA**

## NATIONAL AIR AUDIT SYSTEM AUDITS PERFORMED BY EPA

| Location             | Type        | Date         | Location           | Type        | Date         |
|----------------------|-------------|--------------|--------------------|-------------|--------------|
| Anchorage, AK        | Test&Repair | August 86    | Maryland           | Test-only   | November 85  |
| Anzona               | Test-only   | May 84       | Maryland           | Test-only   | June 90      |
| Arizona              | Test-only   | July 91      | Maryland           | Test-only   | June 91      |
| Arizona              | Test-only   | August 91    | Massachusetts      | Test&Repair | May 84       |
| California           | Test&Repair | January 86   | Massachusetts      | Test&Repair | July 86      |
| Cincinnati, OH       | Test&Repair | June 89      | Massachusetts      | Test&Repair | June 89      |
| Cleveland, OH        | Test&Repair | June 89      | Medford, OR        | Test-only   | October 88   |
| Colorado             | Test&Repair | May 84       | Memphis, TN        | Test&Repair | May 90       |
| Colorado             | Test&Repair | August 85    | Memphis, TN        | Test-only   | June 84      |
| Colorado             | Test&Repair | August 88    | Memphis, TN        | Test-only   | June 86      |
| Colorado             | Test&Repair | July 90      | Memphis, TN        | Test-only   | March 88     |
| Connecticut          | Test-only   | May 84       | Michigan           | Test&Repair | March 87     |
| Connecticut          | Test-only   | September 85 | Michigan           | Test&Repair | April 90     |
| Connecticut          | Test-only   | September 86 | Missouri           | Test&Repair | March 85     |
| Connecticut          | Test-only   | February 89  | Missouri           | Test&Repair | May 87       |
| Dallas, TX           | Test&Repair | March 87     | Missouri           | Test&Repair | August 92    |
| Dallas, TX           | Test&Repair | December 88  | Nashville, TN      | Test-only   | November 85  |
| Davis County, UT     | Test&Repair | August 87    | Nevada             | Test&Repair | October 84   |
| Davis County, UT     | Test&Repair | October 85   | Nevada             | Test&Repair | December 90  |
| Delaware             | Test-only   | March 85     | New Hampshire      | Test&Repair | October 88   |
| Delaware             | Test-only   | June 88      | New Hampshire      | Test&Repair | September 90 |
| Delaware             | Test-only   | November 89  | New Jersey         | Hybrid      | July 84      |
| District of Columbia | Test-only   | June 84      | New Jersey         | Hybrid      | November 86  |
| District of Columbia | Test-only   | March 85     | New Jersey         | Hybrid      | March 89     |
| District of Columbia | Test-only   | November 88  | New Jersey         | Hybrid      | September 90 |
| District of Columbia | Test-only   | August 90    | New Mexico         | Test&Repair | June 90      |
| El Paso, TX          | Test&Repair | June 87      | New York           | Test&Repair | December 84  |
| Fairbanks, AK        | Test&Repair | August 86    | New York           | Test&Repair | June 86      |
| Georgia              | Test&Repair | January 85   | New York           | Test&Repair | April 89     |
| Georgia              | Test&Repair | January 86   | North Carolina     | Test&Repair | March 85     |
| Georgia              | Test&Repair | June 86      | North Carolina     | Test&Repair | July 88      |
| Georgia              | Test&Repair | November 88  | Northern Kentucky  | Test&Repair | October 87   |
| Houston, TX          | Test&Repair | March 85     | Northern Kentucky  | Test&Repair | August 89    |
| Houston, TX          | Test&Repair | April 85     | Northern Kentucky  | Test&Repair | August 90    |
| Houston, TX          | Test&Repair | August 85    | Pennsylvania       | Test&Repair | March 86     |
| Houston, TX          | Test&Repair | April 86     | Pennsylvania       | Test&Repair | May 89       |
| Houston, TX          | Test&Repair | January 88   | Portland, OR       | Test-only   | April 85     |
| Illinois             | Test-only   | May 87       | Provo, UT          | Test&Repair | January 87   |
| Illinois             | Test-only   | June 89      | Provo, UT          | Test&Repair | August 87    |
| Indiana              | Test-only   | August 85    | Salt Lake City, UT | Test&Repair | October 85   |
| Indiana              | Test-only   | January 87   | Seattle, WA        | Test-only   | February 86  |
| Indiana              | Test-only   | February 90  | Seattle, WA        | Test-only   | December 88  |
| Indiana              | Test-only   | November 90  | Spokane, WA        | Test-only   | September 87 |
| Louisiana            | Test&Repair | December 86  | Virginia           | Test&Repair | June 84      |
| Louisiana            | Test&Repair | December 87  | Virginia           | Test&Repair | April 90     |
| Louisiana            | Test&Repair | March 89     | Wisconsin          | Test-only   | July 85      |
| Louisville, KY       | Test-only   | March 86     | Wisconsin          | Test-only   | July 90      |



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## **Appendix B**

### **National Tampering Survey Sites**

| State          | Site           | Year | Number of Vehicles | State          | Site             | Year | Number of Vehicles |
|----------------|----------------|------|--------------------|----------------|------------------|------|--------------------|
| Texas          | Beaumont       | 1990 | 500                | New Jersey     | Camden           | 1986 | 498                |
| Kentucky       | Covington      | 1990 | 610                | Kentucky       | Covington        | 1986 | 500                |
| North Carolina | Greensboro     | 1990 | 570                | Washington     | Seattle          | 1986 | 504                |
| West Virginia  | Huntington     | 1990 | 600                | California     | Los Angeles      | 1986 | 505                |
| Kentucky       | Lexington      | 1990 | 610                | Arizona        | Tucson           | 1986 | 499                |
| Florida        | Miami          | 1990 | 500                | Louisiana      | Baton Rouge      | 1986 | 500                |
| California     | Santa Barbara  | 1990 | 542                | Missouri       | Kansas City      | 1985 | 469                |
| Massachusetts  | Boston         | 1990 | 611                | Kansas         | Kansas City      | 1985 | 475                |
| Indiana        | Gary           | 1990 | 536                | California     | Fresno           | 1985 | 466                |
| Texas          | Houston        | 1990 | 580                | North Carolina | Charlotte        | 1985 | 430                |
| Tennessee      | Knoxville      | 1990 | 575                | North Carolina | Raleigh          | 1985 | 501                |
| Kentucky       | Louisville     | 1990 | 951                | Kentucky       | Louisville       | 1985 | 456                |
| North Carolina | Raleigh        | 1990 | 525                | Delaware       | Wilmington       | 1985 | 502                |
| Florida        | Tampa          | 1990 | 500                | Maine          | Portland         | 1985 | 436                |
| California     | San Diego      | 1989 | 500                | Virginia       | D.C. Suburbs     | 1985 | 380                |
| California     | Bakersfield    | 1989 | 520                | New York       | Long Island      | 1985 | 305                |
| Arizona        | Phoenix        | 1989 | 465                | Pennsylvania   | Philadelphia     | 1985 | 446                |
| Texas          | Dallas Suburbs | 1989 | 422                | Ohio           | Cleveland        | 1985 | 383                |
| Louisiana      | Baton Rouge    | 1989 | 4967               | Louisiana      | baton Rouge      | 1985 | 438                |
| Florida        | Jacksonville   | 1989 | 580                | Texas          | Houston          | 1985 | 450                |
| Michigan       | Detroit        | 1989 | 441                | New Mexico     | Albuquerque      | 1985 | 449                |
| Ohio           | Cincinnati     | 1989 | 390                | California     | Bakersfield      | 1984 | 320                |
| Ohio           | Cleveland      | 1989 | 368                | Nevada         | Reno             | 1984 | 83                 |
| Wisconsin      | Milwaukee      | 1989 | 490                | Texas          | Dallas           | 1984 | 268                |
| Montana        | Missouri       | 1989 | 500                | Alabama        | Birmingham       | 1984 | 300                |
| Missouri       | Springfield    | 1989 | 540                | D.C.           | Washington       | 1984 | 300                |
| Alaska         | Anchorage      | 1989 | 503                | Ohio           | Cincinnati       | 1984 | 325                |
| Alaska         | Fairbanks      | 1989 | 436                | New Jersey     | Various Sites    | 1984 | 270                |
| Colorado       | Denver         | 1989 | 465                | New York       | New York         | 1984 | 308                |
| Arizona        | Tucson         | 1988 | 424                | Massachusetts  | Boston           | 1984 | 286                |
| Arizona        | Phoenix        | 1988 | 450                | Florida        | Tampa            | 1984 | 327                |
| California     | Stockton       | 1988 | 500                | Missouri       | St. Louis        | 1984 | 314                |
| Louisiana      | Baton Rouge    | 1988 | 523                | Oregon         | Portland         | 1984 | 603                |
| Texas          | Houston        | 1988 | 550                | Texas          | El Paso          | 1984 | 334                |
| Texas          | El Paso        | 1988 | 515                | Wisconsin      | Milwaukee        | 1984 | 388                |
| New Mexico     | Albuquerque    | 1988 | 500                | Illinois       | Cook County      | 1983 | 268                |
| Oklahoma       | Oklahoma City  | 1988 | 505                | Kansas         | Sedgwick County  | 1983 | 290                |
| Texas          | San Antonio    | 1988 | 533                | Texas          | Houston          | 1983 | 374                |
| South Carolina | Columbia       | 1988 | 505                | Colorado       | Denver           | 1983 | 332                |
| New York       | New York       | 1985 | 406                | California     | Los Angeles      | 1983 | 270                |
| New Jersey     | Various Sites  | 1988 | 520                | Arizona        | Phoenix          | 1983 | 297                |
| Alabama        | Birmingham     | 1988 | 500                | Florida        | South Dade Co.   | 1082 | 309                |
| Florida        | Orlando        | 1988 | 500                | Louisiana      | Baton Rouge      | 1982 | 183                |
| Oregon         | Medford        | 1988 | 328                | Texas          | Houston          | 1982 | 293                |
| Florida        | Miami          | 1987 | 450                | Oklahoma       | Tulsa            | 1982 | 282                |
| Oklahoma       | Tulsa          | 1987 | 500                | New Jersey     | Several Location | 1982 | 290                |
| Texas          | El Paso        | 1987 | 500                | Rhode Island   | Several Location | 1982 | 324                |
| Texas          | Houston        | 1987 | 500                | Minnesota      | Minneapolis      | 1982 | 307                |
| Texas          | Dallas         | 1987 | 508                | Washington     | Seattle          | 1982 | 312                |
| DC Suburbs     | Maryland       | 1987 | 450                | Oregon         | Portland         | 1982 | 310                |
| New Jersey     | Newark         | 1987 | 431                | Nevada         | Las Vegas        | 1982 | 275                |
| Florida        | Orlando        | 1987 | 575                | Texas          | Houston          | 1981 | 209                |
| North Carolina | Charlotte      | 1987 | 600                | Tennessee      | Chattanooga      | 1981 | 190                |
| Tennessee      | Nashville      | 1987 | 505                | Arizona        |                  | 1979 | 328                |
| Georgia        | Atlanta        | 1987 | 531                | Delaware       |                  | 1979 | 330                |
| Washington     | Spokane        | 1987 | 382                | Minnesota      |                  | 1979 | 300                |
| Oregon         | Portland       | 1987 | 531                | New Jersey     |                  | 1979 | 318                |
| California     | Fresno         | 1987 | 500                | Tennessee      |                  | 1979 | 274                |
| Louisiana      | New Orleans    | 1987 | 500                | Texas          |                  | 1979 | 236                |
| Kentucky       | Covington      | 1987 | 500                | Virginia       |                  | 1979 | 98                 |
| Missouri       | St. Louis      | 1986 | 413                | Vermont        |                  | 1979 | 616                |
| Illinois       | East St. Louis | 1986 | 551                | Washington     |                  | 1978 | 306                |
| Florida        | Jacksonville   | 1986 | 477                | Virginia       |                  | 1978 | 416                |
| Texas          | Houston        | 1986 | 507                | Texas          |                  | 1978 | 216                |
| Tennessee      | Memphis        | 1986 | 580                | Tennessee      |                  | 1978 | 324                |
| Pennsylvania   | Pittsburgh     | 1986 | 504                | Maine          |                  | 1978 | 335                |
| Virginia       | Richmond       | 1986 | 500                | Delaware       |                  | 1978 | 356                |
| Connecticut    | Hartford       | 1986 | 428                |                |                  |      |                    |

Total 62,565

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