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SUCCESSFUL STATE ENVIRONMENTAL PROGRAMS

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

ON

OVERSIGHT OF PROGRAMS DELEGATED BY THE EPA TO STATE DEPARTMENTS OF ENVIRONMENTAL PROTECTION

MAY 2, 2000

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SUCCESSFUL STATE ENVIRONMENTAL **PROGRAMS**

TUESDAY, MAY 2, 2000

U.S. SENATE, COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, Washington, DC.

The committee met, pursuant to notice, at 10:05 a.m. in room 406, Senate Dirksen Building, Hon. Bob Smith (chairman of the

committee) presiding. Present: Senators Smith, Baucus, Lautenberg, Thomas, and Chafee.

OPENING STATEMENT OF HON. BOB SMITH, U.S. SENATOR FROM THE STATE OF NEW HAMPSHIRE

Senator SMITH. The Environment and Public Works Committee hearing will come to order.

I'd like to say good morning, everyone. I'd like to welcome everyone to today's hearing on successful State environmental programs, and particularly thank the witnesses for some very enlightening written testimony. The materials we've received I think reflect the importance of this issue, as well as the passion and the innovative spirit that the States are bringing out to environmental protection.

This is the second in what will be a series of general oversight

hearings that we plan to conduct at the full committee level.

As I mentioned when the committee held its first oversight hearing on EPA's proposed budget for 2001, I wanted to step back a bit and take a look at the big picture of environmental protection. We will learn about programs that work. We might hear some about others that don't. But I hope we'll get many suggestions for some new approaches to some old problems, and perhaps in so doing not create more in the future.

I hope that we're going to hear about opportunities to improve environmental protection, providing the States the flexibility to identify their own priorities and to develop their own programs, and I believe that's very essential to improving environmental pro-

It has been said before, but it is worth repeating, that one size does not fit all. There's no way that we could look at any agency in Washington and draft an environmental law that says it applies to every single town, every single community, every single environmental problem in America. My goal over the long term will be to develop an EPA authorization bill that can incorporate some of the

concepts that are discussed in these hearings. Today's hearing is

the first step in that very long process.

Over the past 30 years, Congress and the EPA have taken what has been called a "stovepipe approach" to environmental protection—one law to address air, one law to address water, one law to address endangered species, another to address toxic wastes in the ground, and so forth. The problem is that these laws often don't connect. There's no connection between the stovepipes.

That approach, when we first began with environmental protection, was necessary. We were desperate. We had problems, and we needed to address them, and we needed to address them in a hurry. The question is: do we still need to stay with that kind of focus, or should we do something that connects and prioritizes these various stove pipes that we talk about.

In the 1970's, we were faced with rivers that were catching fire, raw sewage being discharged directly into our rivers and streams, and smokestacks billowing untreated fumes and toxic wastes, threatening our neighborhoods, so we did have an end-of-pipe solution, but the environmental problems we face today have evolved and they are more complex—problems that often can't be solved by the old approach.

The Clean Air Act amendments of 1990, for example, imposed a mandatory oxygenate requirement for gasoline. To meet that mandate, the refiners put MTBE in the gasoline supply. That same MTBE is now causing serious groundwater contamination throughout our country in tens of thousands of wells, not to mention lakes

and streams, all over America.

The remedy addressed one problem—air pollution—but it created

another one even greater, contamination of the groundwater.

The old approach to environmental protection has been equally ineffective in targeting limited resources on the most significant environmental problems. Under current law, for example, a company may be required to spend tens of millions of dollars on a pump-andtreat system to try to clean up an aquifer contaminated with DNAPL's-dense, nonaqueous-phase liquids-just what I always thought I'd be talking about when I became a U.S. Senator-even though the regulators know that the cleanup effort will almost certainly not be successful, because DNAPLs cling to the rocks and cannot be removed usually by pump-and-treat, as many in the audience know.

But if the laws were more flexible, then those same resources might be spent on other priorities and we could contain, if that aquifer could be contained, and we could use the money somewhere else. It might be better spent, for the time being, to clean up another problem. So we need to look at a holistic approach, moving

from pipe to pipe.

This point was made very well in a recent article in the "Washington Post" just this past Sunday. Let me read a quote from that. The piece was entitled, "There's Smog in the Air, but it isn't all Pollution." Jonathan Rauch cited a 1998 "Resources for the Future Assessment of U.S. Environmental Policy" that concluded the following: "Nine major laws and hundreds of minor ones govern environmental policymaking. The resulting policies are fragmented, complex, disjointed, beset by rigidity and lack of coherence. Worse,

priorities have changed little since the EPA was founded in 1970, with a main focus on water, air, and traditional toxins, even

though other problems, such as radon, are now more pressing."
Mr. Rauch went on to note in that article that, "Environmental policy is obsessed with cleanliness and chemicals, chasing smaller and smaller quantities of less and less dangerous substances, and that is still what the law is doing, and in many of the same ways. It is fighting the old war with the old tactics, but the world has changed.

I would ask unanimous consent to include a copy of that article

in the hearing.

The point is right now we need new, innovative, flexible, and more-effective weapons to deal with the environmental problems. We have to solve the environmental problems we have today, but we don't want to create more for tomorrow. I think that's the essence of what we are about here.

The States will be the key to expanding the toolbox and success-

fully solving the environmental issues of the 21st century.

In the "Almanac of American Politics 2000," Michael Barrone wrote, "The initiative in shaping public policy is leaching out of Washington to the States, the localities, and the private sector." I wish it had been flowing out a little faster than leaching out.

We will hear today from many people that States are taking the first steps to implement innovative new approaches to environmental problems. They are setting priorities. They are developing partnerships with EPA and the private sector. And they are achieving real results on the ground. They are taking a holistic approach to the environment. They're making decisions based on good science, on risk assessment, and other tools in the box to maximize environmental benefits with limited resources, and I think not only should we listen to the States, we ought to encourage and promote these successful State programs.

Two weeks ago I was in a symposium in New Hampshire sponsored by the University of New Hampshire on environmental issues. It brought together some of the best, most creative minds in the State of New Hampshire, and some even from outside of the State of New Hampshire. I heard a lot of ideas about how we in Congress can improve our environmental laws to make them more effective and achieve better results. It is amazing what you learn when you listen to people on the job every day out there on the forefront who are doing the environmental cleanup.

One of the most consistent themes of that conference was flexibility. "Give us the flexibility. Give us the responsibility. Federal funding, yes, where needed. Help us out with resources when we need it, but let us do the job. Let us do the job. We'll get it done and we'll do it right." And I believe that the States have a good story to tell in this regard, and I think it is time we start learning and it is time we start listening—not just listening with testimony,

but reacting to that testimony and helping them.

So I look forward today to hearing from all the witnesses, and especially from my friend from New Hampshire, Bob Varney, on the performance partnership system, which is working so well in New Hampshire, where New Hampshire has negotiated a performance partnership agreement with the EPA that allows it, the State,

to identify priorities, and, within certain parameters, tailor its limited resources to address its own unique environmental problems and priorities.

So I believe that we should encourage and build upon these kinds of cooperative agreements that give States flexibility, while still holding them accountable.

I look forward to hearing about the performance partnership act agreements, as well as other information and testimony from the witnesses.

Senator SMITH. At this time, I would yield to my colleague, the ranking member, Senator Max Baucus.

[The article referenced in Senator Smith's statement follows:]

[From the Washington Post, April 30, 2000]

THERE'S SMOG IN THE AIR, BUT IT ISN'T ALL POLLUTION

(By Jonathan Rauch)

Thirty years ago, President Nixon, who was soon to announce that he would seek the creation of an Environmental Protection Agency, left little doubt about what he wanted to protect. "The 1970's absolutely must be the years when America pays its debt to the past by reclaiming the purity of its air, its waters, and our living environment," he said as he signed the National Environmental Policy Act.

Purity; clean air; clean water. Nixon's words aptly framed the 1970's environmental Policy Act.

Purity; clean air; clean water. Nixon's words aptly framed the 1970's environmental agenda. The good news today is that the country has succeeded with that agenda beyond most expectations. The bad news is that most people in the country don't know it. The public's ignorance is not at all good for the environmental movement.

While activists came together last weekend to celebrate Earth Day 2000, the public celebrated Earth Day 1970 for the 31st time.

American environmentalists have one of the great American success stories to tell, if only they would tell it. For example, in June 1969 the Cuyahoga River in Cleveland caught fire (not for the first time); that river burns no longer, and the EPA estimates that the proportion of major U.S. lakes, rivers and streams that are safe for fishing and swimming has doubled since 1970, to about 70 percent. Today, the most toxic thing about the once-foul Potomac River is the view of Rosslyn in Northern Virginia.

The record on air pollution is more striking still. Since 1970, the population has grown by almost a third, and both the gross domestic product and the number of miles we rack up while driving have more than doubled. The sulfur dioxide and carbon monoxide levels are down by two-thirds, nitrogen oxide by almost 40 percent, ozone by 30 percent; lead has effectively been banished from the air. In the cities, unhealthy air days are down by more than half, just since 1988. All told, the volume of toxic substances released into the atmosphere has dropped 42 percent since then. "Pollution in all categories has declined, and pollution has declined even relative to domestic manufacturing output," says Gregg Easterbrook, whose 1995 book, "A Moment on the Earth: The Coming Age of Environmental Optimism," was denounced by some environmental activists as inexcusably cheery.

But here's the really odd thing: Much of the public doesn't believe it. In March, Environmental Defense (formerly the Environmental Defense Fund) commissioned an Earth Day poll. A clear majority of the 1,000 adults surveyed, 57 percent, said that U.S. environmental conditions are worse today than 30 years ago; 67 percent agreed that "Despite the Clean Air Act and Clean Water Act, air and water pollution seem to continue to get worse." Young people were even gloomier than older people.

"We were surprised," says Steve Cochran Environmental Defense's spokesman. "It's clear that people haven't taken much heart in the progress that's been made." Other surveys confirm the public's gloomy outlook: A Newsweek poll conducted this month by Princeton Research Associates found 52 percent saying the country has made only "minor progress" toward solving environmental problems since the first Earth Day, and 23 percent saying "no progress" or that the problems had gotten worse. Plainly, where the environment is concerned, the public and reality have parted ways.

Why is the public so unaware of the good news? In part, because journalists are so reluctant to report it. In a series of studies, the Washington-based Center for Media and Public Affairs has found that "the news makes environmental problems look worse than the scientific experts believe," according to Robert Richter, the non-profit center's president. Critical stories on governments' and businesses' handling of environmental problems vastly outnumber positive ones, the center finds, and stories about impending crises are incessant.

Fueling that tendency are environmentalists themselves. The radical ones have spent the past 30 years gleefully forecasting one apocalypse after another. Mainstream groups are calmer, but they don't spend much time talking about how much cleaner your air is. The environmental community, notes Environmental Defense's

Cochran, has always seen its main job as pointing out problems.

Fair enough, up to a point; you can't convince people to change the world by telling them that everything is just fine. But decades of alarmism have extracted a price. In a roundabout way, environmentalists' gloom has hobbled environmentalism.

In 1998, Resources for the Future, an environmental think tank, published an assessment of U.S. environmental policy. The verdict was quietly scathing Nine major laws and hundreds of minor ones govern environmental policymaking, the think tank noted; the resulting policies are "fragmented," "complex," "disjointed," beset by "rigidity and lack of coherence." Worse, priorities had changed little since the EPA was founded in 1970, with the main focus on water air and traditional toxins, even

"rigidity and lack of coherence." Worse, priorities had changed little since the EPA was founded in 1970, with the main focus on water, air and traditional toxins, even though other problems, such as radon, are now more pressing. "The system is not all that different from the way it was in 1970," says Terry Davies of Resources for the Future, who was an author of the study.

Twentieth-century environmentalism began, under Theodore Roosevelt, as a brawny conservationism. But its rebirth in the 1960's sprang from worries about pesticides and carcinogens and smoggy air and burning rivers. So Congress and the EPA dedicated themselves to eliminating incremental nanograms of pollutants: "microenvironmentalism," to borrow a term from Peter Huber of the Manhattan Institute. Environmental policy became obsessed with cleanliness and chemicals, chasing smaller and smaller quantities of less and less dangerous substances.

stitute. Environmental policy became obsessed with cleanliness and chemicals, chasing smaller and smaller quantities of less and less dangerous substances.

That is still what the law is doing, and in many of the same ways. It is fighting the old war with mostly the old tactics. But the world has changed. "The threats to health and safety from air and water are negligible," says Robert W. Crandall, an economist at the Brookings Institution. The environmental movement, unlike the environmental policy, has evolved in step with that reality. What primarily worries serious environmentalists these days is not the microcosm but the macrocosm: big, global issues such as extinction and biodiversity, depleted stratospheric ozone, urban sprawl, rain forest destruction and, above all, global warming.

But the public yawns. It stands squarely behind the agenda of the first Earth Day. In a poll earlier this month, the Gallop Organization found that the public frets a lot about air and water pollution, worries much less about ozone depletion, rain forests and habitat loss, and cares hardly a fig for extinction and urban sprawl. At the bottom of the list? You guessed it: global warming. The Environmental Defense poll turned up similar results, with global warming ranked second to last, ahead of only urban sprawl.

In other words, the public's priorities almost perfectly invert the environmental

In other words, the public's priorities almost perfectly invert the environmental movement's priorities. Perversely, the aspirations of Gore-era environmentalism are now blocked by the public's commitment to Nixon-era environmentalism.

And who can blame the public? Americans' capacity for worry is limited, and environmentalists are asking them to worry about everything at once. Air and water are still dangerous, they tell us, but global warming is even more dangerous—super-dangerous! Perhaps inevitably, their message drowns itself out. If, as environmentalists and the media and the movie "Erin Brockovich" remind us, the air and water are still full of poisons, then the 1970's agenda is as urgent as ever. And if we're still one breath or sip away from bowel cancer, global warming will have to

So gloom has propelled environmentalism forward, but at the steep price of leaving its followers behind. The movement has proved expert at giving alarm; now, against its every instinct, it needs to learn to give hope. To get beyond 1970, it must at long last swallow its pride and concede victory.

OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator Baucus. Thank you very much, Mr. Chairman. I commend you for holding these hearings. It is always good to take perspective of where we are and how well these statutes work. Actually the subject of this hearing does cut to the heart of one environmental protection. The relationship between Federal and State environmental programs is the main question. What do we do about all of this?

The history on this subject, as you know, Mr. Chairman, is long. The first Federal environmental laws, like the Water Pollution Control Act of 1956 and the Air Quality Act of 1967, left the States with the primary responsibility for pollution control. The Federal Government at that time conducted research and provided tech-

nical assistance, but that was pretty much it.

In the 1970's, under the leadership of this committee, Congress concluded that those early laws had fallen short, and a national approach was needed. Bipartisan laws, such as the Clean Air Act of 1970 and the Clean Water Act of 1972, were enacted by Congress and signed by President Nixon. They shifted primary authority for the formulation and enforcement of environmental standards to the EPA, but also authorized EPA to delegate that authority to qualified States.

Subsequent environmental laws, like the Safe Drinking Water Act and RCRA, followed the same model.

This system of Federal standards and State delegation has had mixed results. On the one hand, it has helped make environmental protection one of the great success stories of the post-cold-war era. Since 1970's, our population has increased by 70 million people, but our air and our water are definitely cleaner, by a good measure. Clearly, a system of strong national environmental laws has been a key to this success.

On the other hand, many people, including many capable and committed State environmental officials, believe that the Federal/State relationship is not working as well as it should. They want more flexibility. They want to be equal partners, not junior part-

ners.

These are not new issues. We have been wrestling with them for some time. In fact, in 1993, when I became chairman of the committee, one of our first hearings was on this very same subject.

As I said then, I'm prepared to explore reforms in the Federal/State relationship. I don't believe that the Federal Government always knows best. But we should explore these reforms carefully. The current system of national environmental laws has been, for all of its imperfections, a great success. We should not make major changes to the current regulatory system without careful consideration of its implications.

To my mind, there are three issues. First, how does EPA set the basic criteria to determine whether a State is qualified to assume primary responsibility for implementing a national environmental law? In the case of some environmental laws, this may be no longer a big issue because most States already have been delegated the necessary authority. In some other cases, however, it is an issue. For example, as we consider reforms to Superfund, the Endangered Species Act, and the remediation waste program, we need to consider appropriate criteria for increased State roles.

The second issue is the appropriate level of Federal oversight. We don't want the EPA to micromanage the States. We don't want

people to focus on bean counting rather than on real environmental performance. However, even in a reformed system, the Federal Government does have an important role.

A former chairman of this committee, John Chafee—who was the father of one of our eminent colleagues on this committee—made this point during a 1993 committee hearing. He noted that States sometimes need a threat of Federal enforcement in order to per-

suade their own legislatures to take necessary action.

Senator John Chafee said, "I don't know how in Rhode Island or Montana or any place else we could maintain strong environmental programs without the assurance that other States were at least having a minimal environmental protection standard likewise. We have tremendous competitive pressures saying, "You're forcing us to do things that they're not doing next door." I think it is a point well worth remembering.

Which brings me to the third issue, resources. If we move to a system that is more flexible and that looks at environmental performance rather than more static measures, we should understand that the new system will require more resources than the current

one—it will require more people and more money.

If we are going to allow flexible permits that allow tradeoffs between, for example, air emissions and water discharges, they will take time to measure the tradeoffs and consult with people in the affected community. Then it will take careful monitoring to assure that the system is delivering the promised benefits.

Don't get me wrong. I'm all for more-integrated and flexible approaches. I have proposed multimedia systems of my own. But I agree with Jason Grumet of NSCAUM who says in his prepared testimony that "without increased resources, well-intentioned efforts toward flexibility will ultimately be undermined by a small minority of interests who will seek to exploit this flexibility for private gain."

With that, Mr. Chairman, I thank you again for taking another look at this issue. It is one that we should look at, but it is one

that does not have easy answers.

Thank you.

Senator Smith. Thank you, Senator Baucus.

Senator Thomas?

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

Senator THOMAS. Mr. Chairman, I will just file a short statement, please.

I am glad, too, that you are holding this hearing. This is a subject that we all deal with. I've really come to the conclusion that much of it is a mentality, a culture of sorts. It is like contracting. If you are going to contract to someone, then you must have the supervisory capacity to act, or you should get out of the contract

I think a lot of the local people in the agencies do seek to really have partnerships, but often from the top down they are not allowed to do that.

There are a lot of successes. Wyoming, for instance, had some real successes on underground storage tanks, and they did pretty much themselves.

So I hope that, as we go about talking about partnerships, that we commit to finding the technique, culture, or mentality to let that happen. I believe that's what holds us much of the time.

Thank you, sir.

Senator Smith. Thank you, Senator Thomas.

Senator Lautenberg?

OPENING STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator Lautenberg. Thank you, Senator Smith, for holding this

hearing.

I've listened carefully to what you had to say, and I agree that there has to be more cooperation. That seems to be a theme upon which we can all agree. How do you put that into place without discriminating against some people who live in States that aren't performing quite up to the standards that might be best for their health? Are we to stand by and say, "There is a pollution discharge from industrial States of the Midwest and the air floats over New Jersey, New York, Connecticut, and Rhode Island. That's that Midwestern State's decision." Well, it's not, because it's not just their air; it is our air, too. When it comes to rivers and streams, it's not their streams; it is our streams, too. When it is the Hudson River that separates New Jersey from New York, it is a jointly owned resource. It also carries joint responsibility.

So, Mr. Chairman, I think it is a very important subject to review, but too often there have been differences on how you get this

cooperation done.

I think that to suggest that States should be left out would be entirely wrong. On the other hand, I think to say the Federal Government ought to be left out, in my view, would be entirely wrong.

I think Senator Baucus pointed out that in many cases the States and the communities were responsible for developing environmental law that ultimately became Federal law, because they were working directly with the problem.

My own State of New Jersey is laboring to clean up hundreds of toxic dump sites. We had an industrial past, and it created a grim present, and perhaps even a grimmer outlook for the future when you see that pollution of water and air might be the result of the pollution

In Southern California, climate and dependence on automobiles made it susceptible to smog. It still leads the Nation in air pollution. Again, an example of what some had to do in order to clean the air.

The first models for the acclaimed "right to know" laws actually came from cities—Philadelphia and Cleveland, to name a couple. These States and municipalities could not wait for the Federal Government to act. They had pollution problems that needed to be solved, and solved then.

We have always looked to State and local agencies for that kind of leadership and information and innovation.

At the same time, we've got to maintain a level playing field nationwide. There is a critical role for the Federal Government to play in setting minimum standards for environmental protection. Water pollution—water bodies don't recognize State boundaries. The beaches legislation that this committee recently reported out, Mr. Chairman, also deals with the issue of consistency among

So without the Federal Government serving to set a baseline for what is clean, the public can't be assured that the beaches will be tested the same way no matter what State they visit. One could be cavalier about that and say, "Listen, you've got to know the State that you're going to. Do they care about the parasites in the water as much as States A, B, and C?" Well, I think the public has really the right to know that.

Even in the international arena, the key to ratifying the Kyoto Protocol on climate change will be hammered out as a workable arrangement under which developing countries reduce their green-

house gases. It affects all of us.

I remember when some of us were in Brazil, at the first summit. I talked to an interior minister from Brazil and complained bitterly about the burning of the Amazon. His response to me was that, "Well, one of our farmers burning an acre of land does substantially less damage to the environment than one of your chemical workers producing material that works itself into the air and invades our air and other people's air, as well.'

So, once again, you are drawn into a cooperative environment that I think also has to be considered as we write law and as we

hold these hearings.

So, Mr. Chairman, I think you are doing the right thing, and I hope that we'll have a chance to hear from the witnesses in full as to what they think about it.

Senator Smith. Thank you, Senator Lautenberg.

Senator Chafee, so you have any opening comments?

Senator Chafee. I thank the chairman for calling the hearing and look forward to hearing the successful State stories from the panelists today.

Thank you.

Senator Smith. I'd like to welcome Mr. McCabe and Mr. Guerrero. Michael McCabe is the Acting Deputy Administrator of the U.S. EPA, and Mr. Guerrero is the Director of Environmental Protection Issues at the General Accounting Office.

Gentlemen, as you know, your statements will be made part of the record. I would appreciate it if you could summarize in about 5 minutes, because we have two other panels, as well. In order to get the questions in, we're going to need to kind of tighten up the time, if we can.

Mr. McCabe, we'll start with you.

STATEMENT OF W. MICHAEL McCABE, ACTING DEPUTY AD-MINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. McCabe. Good morning, Chairman Smith, Senator Baucus, members of the committee.

I'd like to thank you for the opportunity to speak here today, to represent the Agency, talk about this important work that we are, in fact, doing with our partners, the States, to protect public health and the environment.

As a former Regional Administrator of the mid-Atlantic States, I saw day-to-day the strengths and frustrations of the EPA/States partnerships. I am pleased to say that the strengths far outweighed the frustrations. You will be hearing from some of my colleagues in the next panel about their perception of this partnership.

As we approach the 30th anniversary of the creation of the Environmental Protection Agency in December, Americans have much to be proud of. As you mentioned, Mr. Chairman, we have come a long way in our journey as world pioneers in environmental protec-

tion.

The highlights of our 30-year history confirm that the Nation's environment is safer and the public health is more secure than it was when EPA began.

At various times, vested interests have sought to derail and roll back these significant advances. The foundation of public support built over the years, however, has proven immovable, and the rallying cry of opponents to strong protection that environmental protection is incompatible with economic expansion has been debunked and discredited in the wake of the strongest economic performance in our Nation's history.

Under the Nation's environmental laws, EPA and the States each have important duties. We are coequal and interdependent. A longstanding division of labor defines our roles. Broadly speaking, EPA is charged with developing standards that provide basic protection for all citizens. States are the primary delivery agents, working directly with businesses, communities, and concerned citizens.

A number of Federal laws call for EPA to delegate to the States the primary responsibility for program implementation, and States have, in fact, now assumed responsibility for approximately 70 percent of the programs eligible for delegation. Over nearly three decades, States, localities, and tribes have developed a strong environmental management capacity. A number of States have increased their investment in environmental programs and have adopted environmental standards that exceed Federal requirements.

During this Administration, we have built on this progress. We

have advanced these partnerships.

Under the unprecedented continuity of leadership provided by EPA Administrator Carol Browner and senior EPA leadership with strong State background and experience, new ways of thinking are reshaping the Agency and transforming the organizational culture that marked our first two decades.

Nontraditional thinking has strengthened our relationship with State and local governments, as well as the American public, as a whole. We are forging a culture of collaboration rooted in mutual respect, mutual trust, and a shared sense of obligation to future

State governments have become far more than conduits for Federal policy. Together, EPA and the States are now developing new, more-effective, and less-costly ways of achieving environmental goals. Together, we are testing and retesting those ideas. Together, we are providing the American people with the information they need to better understand their local environment and act to protect it.

In brief, Mr. Chairman, we have laid to rest the "us versus them"

approach that characterized EPA's first 20 years.

Five years ago, in recognition of the critical role States have come to play, EPA joined with our State partners to establish the National Environmental Performance Partnerships System, NEPPS. NEPPS is built on our shared commitment to the continuous improvement of environmental programs. It provides the foundation for flexible partnerships with the capacity to adapt to changing priorities. NEPPS focuses us on performance rather than process, on environmental results rather than procedural details. In doing so, it frees the States to work with EPA to target their highest environmental priorities. An underlying theme of NEPPS is the importance of earning public trust by achieving measurable environmental results.

I know that you will be talking about some of the innovations and accomplishments under NEPPS. I won't go into that in my tes-

timony, but it is in my written statement.

Our progress has been substantial, but more needs to be done. As the Environmental Protection Agency nears its 30th anniversary, we are an organization in transition. New ways of thinking permeate the EPA culture, even as we aggressively meet our tradi-

tional responsibilities.

Innovative ways of protecting the environment are flourishing at EPA, States, towns, cities, and in businesses throughout the Nation. So, too, is the spirit of partnership. These two forces—innovation and collaboration—as you mentioned, Mr. Chairman, are converging to prepare EPA, in concert with our State partners, to respond more effectively to the environmental challenges of this new century. Together, I am confident we are poised to continue a remarkable record of remarkable progress.

Thank you.

Senator Smith. Thank you very much, Mr. McCabe.

Mr. Guerrero?

STATEMENT OF PETER F. GUERRERO, DIRECTOR, ENVIRON-MENTAL PROTECTION ISSUES, GENERAL ACCOUNTING OF-FICE

Mr. Guerrero. Thank you, Mr. Chairman.

I'm pleased to be here to discuss our recent assessment of the national environmental performance partnership system, or NEPPS. NEPPS, as you heard, was established 5 years ago this month as a framework for improving the EPA/State relationship and for improving the effectiveness of State environmental programs.

NEPPS was intended to address longstanding issues affecting the EPA/State relationship. Among these issues were concerns that EPA had been inconsistent in its oversight of State programs, that it had micromanaged State programs, that it had provided insufficient technical support, and that it had inadequately consulted the States before making key decisions affecting them.

One key element of NEPPS is EPA's commitment to give States with strong environmental performance greater flexibility and au-

tonomy in running their environmental programs.

A second key element is the agreement among EPA and the States to develop core performance measures that could be used to identify whether State programs are achieving their intended results.

Given the expectation among participants that NEPPS could deal with many of the issues that have long hampered effective EPA/ State relations, we were asked by the chairman of the House Subcommittee on VA, HUD and Independent Agencies to examine the progress made by EPA in the States since the 1995 agreement. Our

analysis, issued last year, addressed four questions.

The first question asked us to identify the status of grants and agreements made under NEPPS between EPA and the participating States. When NEPPS was initially tested on a pilot basis, there were six States that were participating. EPA and the States viewed the first year as a time to experiment with the new system in various ways to implement it. The number of participating States subsequently increased to 45 in fiscal year 1998, although the extent of program participation varied widely from State to State. EPA's most recent date show that State participation in NEPPS has remained about the same since our report was issued last year.

The second question we were asked was: what progress has EPA and the States made in developing results-oriented performance measures for NEPPS and grants? Both EPA and States agree on the importance of measuring outcomes in environmental activities rather than just measuring the activities, themselves. In attempting to develop these types of outcome measures, EPA and the

States have faced a number of challenges.

In particular, it is inherently difficult to quantify environmental results. Results of activities designed to improve water quality, for example, can take years to appear, and the capacity of most States to monitor a significant share of their waters is limited. And even when environmental conditions are reliably and consistently measured, it is difficult to demonstrate the extent to which a particular environmental regulation or program resulted in the observed out-

These challenges were compounded by disagreements initially between EPA and the States on such matters as the degree to which States should be allowed to vary from national measures. Nonetheless, EPA and State leaders managed to agree on a set of core measures for fiscal year 2000 that are widely regarded by EPA and the States as significantly improved from those negotiated in pre-

vious years.

The third question we addressed in our report, and perhaps the most controversial, involves whether the extent of EPA oversight is changing in States that are participating in NEPPS. Overall, the large majority of State officials we contacted generally maintain that participation in NEPPS has not yet brought about a significant reduction in EPA oversight, nor has it resulted in significant opportunities for States to focus on other priorities or to shift resources to weaker program areas.

EPA officials generally acknowledged this point, but provided us specific reasons why oversight of State programs has not significantly decreased. They pointed out, for example, that environmental statutes or regulations sometimes prescribe the level of oversight required which, according to some headquarters and regional officials, leaves the Agency with little room to scale it back.

These officials also pointed to the difficulty in scaling back oversight without measurable assurance that alternative approaches

are achieving the desired results.

At the same time, we found a number of barriers preventing greater State flexibility that could be more readily addressed. For example, senior EPA officials in three of the four regional offices we visited acknowledged that the support for NEPPS within EPA varies. One senior regional official explained that many regional managers and staff are often more comfortable with pre-existing ways of doing business and are unsure of how they can accomplish their work in the context of the partnership under NEPPS. He voiced the opinion that there may be a need for training regional staff.

Another senior official said that some agency staff will only take NEPPS seriously when EPA's rewards and incentives are more closely tied to staff performance in implementing the program.

The last question we addressed dealt with whether the performance partnership agreements and grants had thus far achieved the

other benefits envisioned.

EPA and State participants cited a number of benefits associated with NEPPS, widely crediting the process for improving communications and forging closer working relationships among EPA and the States.

In addition, NEPPS has provided a means of getting buy-in for innovative or unique projects and has served as a tool to divide an often burdensome work load more efficiently between Federal and State agencies.

Yet, while State participants indicated that their participation in the voluntary program would probably continue, they also consistently expressed the view that the benefits of the program should be greater, that the program has yet to achieve its potential, and that improvements are needed.

Anticipating the need for continuous improvement of the NEPPS process, the 1995 agreement called for a joint evaluation by EPA and the States. In recent months, a number of assessments have been completed, including our own, that point the way toward im-

proving the program. Others will soon be completed.

For the NEPPS process to realize its potential, it will be critical that EPA and the States respond to these studies in ways that address the impediments identified. For example, when we did our work, we recommended that EPA develop a set of flexible guidelines that could be used to help clarify, among other things, the conditions that States must meet to achieve reduced oversight by EPA. We think this would be an important step in the right direction, and look forward to seeing how well EPA follows through on our recommendations and those by the others who are currently studying this issue.

That concludes my remarks, Mr. Chairman. I would be pleased

to answer any questions you may have.

Senator Smith. Thank you very much, Mr. Guerrero.

Mr. McCabe, let me start with your point that a new relationship is evolving with the States, that it allows EPA to adapt to changing

priorities and experiment with new ideas. I think that sounds like we are conceptually in agreement.

Can you specifically identify some approaches that EPA has taken to allow the States to adapt to these new, changing priorities?

Mr. McCabe. Yes. In fact, some of the results of the NEPPS framework which I have in my testimony offer some examples. We have seen in the State of Maryland, for example, that its administrative reporting requirements have been cut in 13 areas, and the goals that were identified through NEPPS for the evaluation that was done in conjunction with the State and EPA are really at the core of these results, but also at the core of the State's strategic plan.

Florida has developed a new performance measurement and tracking system that actually received an Innovations in Government Award from the Ford Foundation and the Kennedy School of Government at Harvard.

Minnesota has shifted staff resources from the main office closer to where the real issues are in the State, the district offices, as a result of the evaluations that they've done.

And the State of Washington has seen a paperwork reduction associated with its annual work plan for grants falling from 40 pages to four pages.

These are just some of the examples. This doesn't mean that these are all the examples. I would point to other areas of State/EPA cooperation as broadly based, perhaps, as the Chesapeake Bay program, where EPA and three States have a multimedia outcome-based approach to dealing with this large estuary.

Senator SMITH. The examples that you gave are good, but I think they may be more process-oriented or paperwork-oriented than they are really substantive.

Most of the time, in the conversations I have with State officials and a lot of the testimony we've had here in the past over the years, the States would say that, although perhaps it may happen from time to time, the Federal statutes, themselves, sometimes interfere with what they want to accomplish.

Do you have a specific recommendation on a statutory change at EPA that would help us enhance the State flexibility and prioritization?

Mr. McCabe. Well, I would certainly agree, and I think that both Administrator Browner and I have stated on this issue that there needs to be more flexibility, there needs to be a review of our national environmental statutes, many of which were created 30 years ago. There has not been that discussion, that broad, public discussion on what the environmental outcomes ought to be as a result of 30 years of extraordinary progress. We would encourage that discussion to take place both in Congress and in the public, in general, to see how we might reform some of those laws.

Senator SMITH. No specific recommendations at this point?

Mr. McCabe. At this point I think we need to look at the big picture. We need to look at where we are going as a country from an environmental perspective and also where we have evolved in the State/Federal relationship.

Senator SMITH. Mr. Guerrero, you talk about the inherent difficulty in "letting go," which is, I think, the term you used with reference to some regulators. One of your recommendations is to reduce that resistance toward the implementation of the NEPPS through training and strategies.

What do you have in mind in regard to that type of strategy that could produce more cooperation between State and EPA on these

issuesí

Mr. Guerrero. Mr. Chairman, there are some things that we feel can address the cultural issues at EPA—and also at the State level, too, because this represents a cumulative three decades of doing business in a particular way that States and EPA are now trying to change through NEPPS: Training, in terms of skills and team-building, teaching both State and EPA regional staff how to productively engage in setting goals, common goals, and agreeing upon that, providing information, sharing information, showing what works, what has worked in one State that could be adopted

by other States, success examples.

Most importantly I think is putting in place a set of incentives and rewards that encourages behavior so that EPA employees are rewarded for using NEPPS and using it to the extent that it allows greater flexibility and more cooperative working arrangement, that they get rewarded, as opposed to being rewarded for the enforcement bean or the inspection bean and what traditionally they have been rewarded for. It is going to be very hard for the culture to change if people continue to be measured by indicators that measure more traditional kinds of results that involve the kind of stovepipe approach that you talked about in your introductory remarks.

Senator Sмітн. Thank you, Mr. Guerrero.

Mr. Baucus?

Senator Baucus. Thank you, Mr. Chairman.

Tell us what are the keys to success in reaching more flexibility. Is it an air/water tradeoff or something else? Remember the Yorktown benzine plant issue a few years ago, where it turned out that the laws were so specific it required a result that allowed more benzine to be emitted, whereas if the company were to look at the whole plant together, including the loading docks, they would have much less cost to achieve that result.

The chairman mentioned stovepipe application to our environmental regulations—Clean Air Act, Clean Water Act, and so forth—and it is true that a lot of companies find that the air person comes in or the water person or the waste person comes into the plant. Some of the stuff they ask for is contradictory, but with lots of flexibility and coordinating, as the chairman says, a more holistic approach, you could arguably achieve a much more efficient result—less pollution at less cost.

What are the keys to achieving that? Let me ask each of you, what are three of the main standards, keys, approaches, or guide-

lines that come to mind to achieve that?

Mr. McCabe. Well, Senator, I think administratively we have tried to do as much as we can, given limited resources, because any time you look at an individual case it requires an incredible commitment of resources to deal with that individual situation, as opposed to sort of the broad, generic issue. But administratively I

think that we tried to adapt flexibility through a number of EPA programs—Project XL, CSI.

Senator BAUCUS. I'm not really asking what you've done, but what are three rules of thumb that you use to make this work?

Mr. McCabe. Well, one is what the standard is, what the re-

quirement is that we are actually looking at.

In the instance of perhaps a manufacturing facility or a plant, whether it is an emissions standard or an effluent standard, you look at that standard and work with the facility to see if they have ways of meeting the standard but in a more efficient and effective way.

Senator BAUCUS. So one would be to ask the manager of the facility or the company for their suggestions?

Mr. McCabe. Often we do that.

Senator BAUCUS. OK. What are some other ways?

Mr. McCabe. The other ways are better communications, more frequent communications with our partners, whether they are the States or the regulated entity, to find out what the issues are and to avoid any kind of specific problems.

Senator BAUCUS. I've got a couple of questions here, so we need to cut it short.

Mr. Guerrero, what do you think?

Mr. Guerrero. Yes, Senator, a couple things. I completely agree with Mike that improved communications is central. A key element to—

Senator BAUCUS. Communications between?

Mr. Guerrero. Between States and EPA regions, and, in particular, States and EPA's headquarters program managers, where communications have not always been as good as they can be. And that's a reflection of the EPA organizational structure. It is like pushing a string to get things done.

So communications is key, because that builds trust. The one thing we've heard is, if the NEPPS process to date has been successful for anything, in particular it is improving communications

Senator Baucus. Why is there insufficient communications and trust? What is the impediment?

Mr. GUERRERO. I think it stems from the origin of the environmental protection program, where the Federal Government put in place programs, delegated those to the States, and then held the States accountable and measured what the States were doing by setting annual targets or goals and measuring those in terms of

outputs, such as numbers of permits issued or enforcement actions taken.

Senator BAUCUS. So what would you——

Mr. Guerrero. And it was a very directed kind of process, and now that has changed significantly. The States are a major player now in environmental protection. It's where the vast bulk of the resources are. It is where most of the responsibilities for carrying out these laws reside. The EPA-State relationship has to change, as a result. And to make that change, you have to change the communications and the trust involved in the process.

Senator BAUCUS. Very briefly, the three most common mistakes that we should try to avoid as we strive toward, generically, flexibility

Mr. McCabe. I think that we should avoid the one-size-fits-all approach. I think that we need to develop good information, because if we don't have good information we don't know what the baseline is that we are operating from, and effective measures to figure out whether we have done a good job. In fact, that is part of what NEPPS has been trying to accomplish is performance measures.

Senator BAUCUS. How about enforcement? I mean, there's a lot of tension between States and EPA over enforcements. In fact, as I understand it, in your testimony, Mr. Guerrero, you talk about an audit which State administrators often refer to as—they say that they don't back off on enforcement, because audits have shown that State enforcement is perhaps not what it could and should be.

Mr. McCabe. Right.

Senator BAUCUS. And there's this over-filing issue, for example. There is a lot of tension between States and EPA on enforcement. How do we clear that up?

Mr. McCabe. I think that there was more tension several years ago between the States and EPA on enforcement than there is now. I think that it has improved.

In the case of over-filing, in fiscal year 1999 we had 3,935 administrative and judicial actions, and there were only four instances of over-filing, so it really—

Senator Baucus. So you don't think there is tension—

Mr. McCabe. There is——

Senator BAUCUS.—so significant today that we should get worked

up about it?

Mr. McCabe. No. I think that there is a tension. Clearly, there is a tension when the Federal Government feels that the minimum standards are not being met, or perhaps the States are not being as aggressive on pushing certain companies, certain members of the regulated community to meet those standards, and that is our role. It is our role to—

Senator BAUCUS. Mr. Guerrero, your thoughts on Federal/State enforcement tension.

Mr. Guerrero. I think the key is to provide EPA this measurable assurance that it needs to satisfy the American public that these laws are being carried out as intended by the Congress. Ultimately I agree with Mike that what is needed is better information and better data, especially results-oriented data that would help address these concerns.

Very often these misunderstandings occur because the data just are not good, and so focusing on the issue of better data and data

management at EPA is critical.

We also say that the whole process under the Results Act, where EPA has set some 187 goals and 364 measures to measure environmental progress in this country is burdensome, and the core performance measures that EPA has negotiated with the States need to be integrated with that process. We need to figure out how to focus on what the key goals are or what the key kinds of measures are.

Senator BAUCUS. The core performance provisions in NEPPS I think is going in the right direction, you are saying?

Mr. GUERRERO. I think the assessment that—what we've heard from both the States and EPA is that they have made progress. The core performance measures are vastly improved.

Senator BAUCUS. It sounds like we need more resources, then.

Mr. Guerrero. And the third point that I would make to address what are the three things, I would completely agree. I think there were two comments made in the chairman's opening remarks and in yours that really fundamentally we need to be realistic about what NEPPS can accomplish, because it is in the framework of, as Chairman Smith said, a set of stovepipe laws that have accrued over time that don't allow the kind of flexibility that perhaps now we would like to see, and certainly all of these programs are stressed and taxed and limited in terms of the resources they have to get the job done, and those are two fundamental issues.

Senator BAUCUS. I thank you. I've encroached upon a lot of time

here, and I apologize very much to my colleagues.

Senator Lautenberg. If I may, Mr. Chairman, not meaning to interrupt the Senator from Rhode Island, I would like to stay. I can't. I have another committee meeting starting at 11 and I'm an integral part of that discussion, so I would ask, Mr. Chairman, that the questions that I will submit in writing be answered as promptly as we can, to see if there are things that we can do to make the adjustments that seem to be required to have this cooperative venture continue and improve.

I thank you very much and I thank the witnesses.

Senator SMITH. The record will be left open for questions. I have some that I will be submitting, as well.

Senator Lautenberg. Thank you very much.

Senator Smith. Senator Chafee?

Senator CHAFEE. Yes. Thank you, Senator Smith.

My experience in Rhode Island in visiting various Superfund brownfield sites has been it is a positive relationship with EPA and the State DEM and on down to the local communities, and, indeed, the local activists—nothing but positive. So, as you have said, we've come a long way through the years from heavy-handed, micromanaging by EPA to the situation we are in.

I am sure that you, as the Regional Administrator in the mid-Atlantic States, have shared that experience. Is that accurate, Mr.

McCabe?

Mr. McCabe. Yes, it is. In fact, my colleague, Jim Seif, who represented the biggest State in the mid-Atlantic States, is here today

to talk about some of his experiences.

I truly believe that the relationships between EPA and the States have improved. I think that it really is based on mutual respect. I think that the important issues of enforcing Federal laws uniformly, making sure that there is consistency among the States, is one of the key roles that the Federal Government can play, but there needs to be some flexibility above those minimums for the State to meet them. I think increasingly we have incorporated that into our collaborative roles and responsibilities.

Senator Chafee. As long as that flexibility doesn't include letting off those States that are either upstream or upwind. Those downstream and downwind see the negative aspects of any flexibility.

Thank you.

Mr. McCabe. We need to meet the standards.

Senator SMITH. Thank you, Senator Chafee and Senator Baucus. As we said we have no further questions, I think we will move to the next panel. Thank you, gentlemen, for your testimony. I know that several members do have questions in writing to submit, and we'd appreciate as prompt a response as possible to those questions.

Bring the second panel up: Mr. R. Lewis Shaw is the Deputy Commissioner of Environmental Quality Control, South Carolina Department of Health and Environmental Control and the president of the Environmental Council of the States; Mr. Robert Varney, Commissioner of New Hampshire Department of Environmental Services; Mr. James Seif, Secretary of the Pennsylvania Department of Environmental Protection; and Mr. Brent C. Bradford, the Deputy Director of the Utah Department of Environmental Quality.

We'll just move down the panel from left to right. Gentlemen, the same information as to the last panel—your full statements will be made part of the record. If you could summarize in 3 or 4 minutes, it would be appreciated, since we do have another panel.

Mr. Shaw, we will begin with you.

STATEMENT OF R. LEWIS SHAW, DEPUTY COMMISSIONER, EN-VIRONMENTAL QUALITY CONTROL, SOUTH CAROLINA DE-PARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL, AND PRESIDENT, ENVIRONMENTAL COUNCIL OF THE STATES

Mr. Shaw. Mr. Chairman, members of the committee, thank you

for the opportunity to appear before you today.

My name is Lewis Shaw. I am the deputy commissioner of the South Carolina Department of Health and Environmental Control. I have 29 years of service to my State, with the last 16 of those in my current position as the State's environmental director.

Today, however, I am here representing the views of the Environmental Council of the States, known as ECOS, of which I am

president.

ECOS is the national, nonprofit, nonpartisan association of the State and territorial environmental agencies. The States and territories are our members, and the people we represent are the leaders of the various State environmental agencies. Other details about our association are provided in the attachments to this testimony, which I ask be entered into the record.

I am here to tell you of some of the accomplishments that States have made in environmental protection—accomplishments that are

not widely known. I will make four main points.

First, States now implement most of the delegable environmental programs. This is good news, because this is what Congress had intended when it enacted laws such as the Clean Air Act and Clean Water Act.

States now have primary responsibility for carrying out those laws. You heard Mr. McCabe mention that about 70 percent of the major programs that could be delegated to the States have been delegated. This means States are running most of the clean water, clean air, safe drinking water, and waste cleanup programs that Congress created.

As you can see from chart one, much of this growth was in the 1990's, and, in particular, between 1993 and 1998, a 5-year period

in which State delegations grew by almost 75 percent.

As part of this responsibility, States are also collecting most of the environmental quality data. Brent Bradford, my colleague from

the State of Utah, will be speaking more about this later.

We also conduct most of the environmental enforcement activities. In recent years, States have averaged between 75 and 80 percent of all enforcement actions taken by EPA and the States, combined. We conduct at least 97 percent of all enforcement inspections, but we also conduct many other enforcement actions and compliance assistance that EPA may not count for one reason or another.

Last year, Congress directed ECOS to conduct research on the issues of counting enforcement and compliance activities and report the results to Congress. We are working on this project now and

expect to report to you early next year.

A second point is that States are paying for most of this environmental protection. As you can see in chart two, State spending for environmental protection has grown dramatically since 1986. In 1986, States spent \$5.2 billion on environmental protection and natural resources. Congress, through EPA, provided just over \$3 billion of that, almost 58 percent. But by fiscal year 1996, a very different story has emerged. States spent about \$12.5 billion, with the EPA providing about \$2.5 billion, or about 20 percent.

During the 10-year period from 1986 to 1996, State spending on

During the 10-year period from 1986 to 1996, State spending on the environment increased about 140 percent, while total EPA funding to the States decreased about 17 percent. Most of this decline is attributable to the reduction in the water infrastructure support programs. In 1996, the States spent nearly twice as much on environment and natural resources as the entire EPA budget.

My third point is that States conduct many other nondelegated programs on their own, and that we are great at innovation. For example, in South Carolina we have our own laws, rules, and practices on the protection of shellfish beds that are not part of the delegated Federal system but are very important to our State. Obviously, these kinds of laws vary from State to State, but they show the commitment of the States to the environment.

According to the National Conference of State Legislators, States passed into law over 700 environmental bills in 1997, alone. At least half of these dealt with nondelegated environmental programs such as pollution prevention and solid waste management.

As chart No. 3 shows, for example, most of the hazardous waste sites in the country are actually being regulated and cleaned up

under State authority.

Another study by the Council of State Governments found that 80 percent of the States had at least one clean air standard that exceeded the Federal minimum standard. In South Carolina, for in-

stance, our air toxics list includes 256 constituents, compared to 188 on the Federal list.

States implement most environmental protection programs, so we are often the first to recognize innovative solutions for environmental problems.

Each year for the past 3 years, ECOS has compiled State programs and implementation innovations. These cover the complete range of environmental protection, including delegated and non-delegated programs. ECOS has now compiled hundreds of these innovations. Some of these States' ideas have been nationally recognized by innovations awards programs such as those of the Council of State Governments and Harvard University.

My final point is that States are committed to the State/Federal partnership in environmental protection. We believe that the time for command and control, top-down programs has ended, however. Perhaps it should be replaced by a set of mutually agreed-upon national goals and standards which would be achieved by the States in the manner we deem most appropriate and supplemented by local goals and standards that meet the specific needs of the States. After all, you are not likely to see the same environmental problems in South Carolina as you would in Utah because the States have such different ecologies.

Our final chart shows some of the differences that we think will lead to a more harmonious relationship and better environmental protection.

Some people still believe that it is 1970's and that the States cannot be trusted to protect the environment. We believe the facts presented here today give the real story. States are leaders in environmental protection and are committed to protecting the health and the environment of the citizens we serve.

Mr. Chairman, I would be glad to answer any questions. Thank you for letting me appear here today.

[The charts referenced in Mr. Shaw's statement follow:]

RUNNING DELEGATED PROGRAMS

States now implement most of the nation's major environmental protection programs.

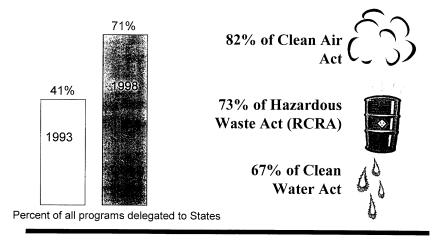
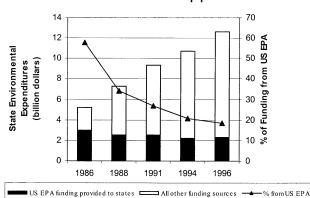


Chart 1

MAKING ENVIRONMENTAL PROTECTION HIGH PRIORITY

States have increased funding for environmental programs and decreased their reliance on Federal support.

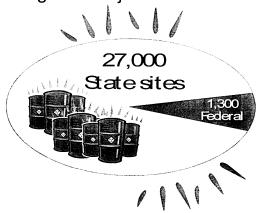


- State spending increased.
- Funding to States from EPA dropped.
- In 1996, States spent nearly twice as much as EPA.

Chart 2

IMPLEMENTING STATE INITIATIVES

At least half of the 700 environmental bills that States passed in 1997 dealt with non-delegated subjects.



Over 40 States have enacted their own hazardous waste site cleanup programs.

STATES, EPA PLAY DISTINCT AND COMPLEMENTARY ROLES

EPA'S ROLE STATES' ROLE

Set national minimal Increase standards where needed

standards

Implement non-delegated Implement most federal programs

programs

Oversee delegated Supplement delegated programs

programs

Address international Solve local challenges

challenges

Facilitate interstate issues Integrate environmental,

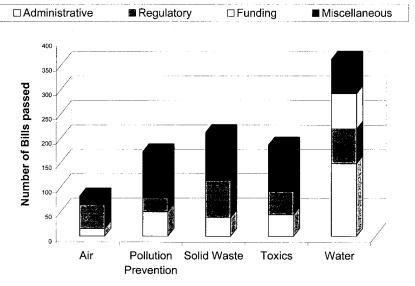
natural resources and

human health

Fund research and

Interact in innovative ways with development the public and regulated facilities

1997 ENVIRONMENTAL LEGISLATION



Source: National Conference of State Legislatures, 1998

Senator SMITH. Thank you, Mr. Shaw. Mr. Varney, welcome.

STATEMENT OF ROBERT W. VARNEY, COMMISSIONER, NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

Mr. Varney. Good morning, Mr. Chairman and members of the committee. My name is Bob Varney. I'm commissioner of the New Hampshire Department of Environmental Services. I've held that position for the last 11 years under three different Governors of both political parties. I am here today as the past president of the Environmental Council of the States. I am here to highlight the success of two cooperative programs that ECOS and EPA have developed jointly, those being the national environmental performance partnership system, or NEPPS, and the ECOS EPA regulatory innovations program.

As you know, NEPPS was created 5 years ago and grew out of

As you know, NEPPS was created 5 years ago and grew out of an awareness that Federal and State government could be more effective and efficient if they cooperated as equal partners in planning, implementing, and reporting environmental protection.

The NEPPS agreements are called "performance partnership agreements," and in New Hampshire we just signed a performance partnership agreement with the regional office of EPA. Our comprehensive agreement sets forth the goals, activities, and measures of progress for a full range of Federal and State programs, which represents a comprehensive plan for all of our agency's programs. Before NEPPS existed, no such document existed.

I should mention that our full agreement is available to the public on our department's website, and ECOS is linking its home page to many other State NEPPS agreements, which are also available

electronically. This means that any member of the public can review and comment on any of our State's goals, objectives, and allocation of resources, and so it is truly a transparent process with

the public that emphasizes public participation.

To date, 38 States have performance partnership agreements under the NEPPS system. Many have been accompanied by performance partnership grants, which allow for realignment of the EPA funds so that limited resources can be used to address the most pressing State problems facing the individual State.

We recognize, at the same time, that the NEPPS process is not

perfect, and have been working to try to improve the process.

We had a third national meeting in Baltimore, Maryland, last fall to further evaluate NEPPS and develop recommendations for

improvement.

ÉCOS and EPA have recommitted to improving this process by trying to implement the many recommendations that are in this plan, and this was further renewed through the adoption of a resolution at our recent national meeting held in April in Philadelphia.

We very much appreciate the work of Deputy Administrator McCabe, who is trying to ensure that all EPA staff understand and work toward the continuous improvement of the NEPPS process.

I would like to now talk about another cooperative State/EPA program designed to stimulate innovative approaches to regulation. Here I distinguish innovative approaches to regulation from technical innovation, which will be addressed by another witness.

The States have been a well-stream for inventiveness. In dealing with specific circumstances unique to State location or problem, we are forced to develop innovative approaches. These documents contain hundreds of State innovations which have been developed and are shared with other States, are available in published form and are also available on the ECOS website.

ECOS and EPA recognize that some of these innovations might be transferrable to other locations with similar issues, and we wanted to provide a process for dealing with regulatory innovation by establish a reg innovation agreement, which was signed in April 1998

In the words of the agreement, itself, "This agreement presumes that EPA and the States will find ways to help good ideas succeed, and that joint EPA and State efforts to promote and test new ideas will result in the maximum benefit to the American people and their environment."

Texas was the first State to submit a project under the reg innovation agreement. It involved opacity testing. As a result of that agreement, they were able to reduce the number of certified inspectors from 100 to 50 each year, which freed up more than 75 staff days to do additional facility inspections and better protect the environment. This innovative tradeoff is now transferrable to other States who can take advantage of this idea.

This simple example demonstrates the goal of identifying innovative approaches to make available faster, cheaper, and better approaches to environmental protection. It is especially useful when, as in this instance, the approach can be tailored by other States

to meet their own needs.

At the spring meeting of ECOS, it was reported that, to date, five proposals have been submitted to EPA. Four out of the five have been approved, and an additional five or six have been submitted and are pending approval by EPA.

This fall, EPA and the States will conduct a national workshop on regulatory innovations, with an emphasis on case studies pre-

sented by the States.

I have provided for the committee's use several other ECOS publications describing State innovations, and they fully demonstrate the accomplishments of the States and the ability of the States to carry out innovations in an appropriate way and one that is responsive to the needs of the public and is responsive to the laws that have been set by our legislatures and by Congress.

Thank you.

Senator Smith. Thank you, Mr. Varney.

Mr. Seif?

STATEMENT OF JAMES SEIF, SECRETARY, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. Seif. Good morning. Thank you for this opportunity to be here. I am the Secretary of environmental protection in Pennsylvania. I have also been a member of the ECOS board and was a Regional Administrator in Philadelphia for a number of years and an environmental prosecutor way back in the 1970's, when everybody was an environmental prosecutor, because that was the only tool we had.

I have been before this committee six times now, and with continued patience I will keep doing it until I get it right.

Senator Smith. Do you think you've taught us anything yet?

Mr. SEIF. I always learn more on the way here than I do by way of teaching.

This morning there are 17,000 Pennsylvanians at work on 650 sites in our States that were, 5 years ago, behind cyclone fences. Maybe Alan Greenspan gets some credit for that, as well, but I do believe that a very innovative program, which many of our States have used, the brownfields program, can also get some credit.

You'll see in the testimony, and in some materials that I would be happy to provide, some statistics, lists of awards, numbers of sites, how many counties, rural, urban, and all of that. It can get kind of tiresome, I remind myself, but we are very proud of it. These are real cleanups, by the way, and not the Secretary of

These are real cleanups, by the way, and not the Secretary of Commerce trying to build stuff, but the Secretary of the Environment trying to clean up stuff. That's how many cleanups we have,

with hundreds more in the pipeline.

I would call your attention to four elements of the main recipe of a successful brownfields bill. One is that you have uniform and real cleanup standards, standards that you can know about in advance and don't have to argue ad hoc with the GS-14 at the regional office of EPA. You know what they are: they are published; the public agreed to them, and they meet Federal requirements for groundwater, soil, and the like.

Second, rapid, well-known, agreed-upon, simple procedures. If you are a commercial developer, you know what the pathway is and you know you can get there before your money runs out.

Third, a liability release. If you don't get a liability release, you don't have a negotiable asset. You can't sell it. You can't rent it. You don't want to occupy it. The release gives you that capacity. It puts the property in play and unleashes private sector money,

which is how we got all those sites cleaned up.

We do have financial assistance, and that's the fourth element. We spent about \$20 million for site assessments, not for cleanups. The private sector cleans it up because the property has value if you can get a real cleanup and a real release. The \$20 million is for assessments for redevelopment authorities and municipalities to find out what is underneath the ground in the first place, to see if the property should be put in commercial play.

Let me talk about some of the lessons that have come out of

what I think we have learned.

We've talked a lot about delegation this morning. Brownfields are the one major State program that is not delegated. There is no provision in Superfund to delegate programs. The fact is, they were born out of necessity to get around the big gorilla in the closet, Superfund, which is, I think, the least-successful Federal statute in environmental history.

And I don't mean to argue the numbers about EPA. "Only X number of sites cleaned up, while we cleaned up many more," and all that. Those numbers are not the point. I think each of those two statutes—the State brownfield statutes and the Superfund—have a role. The sites we cleaned up aren't the big, messy sites that some Superfund cleanups are designed for.

But the fact is, the uneven borderline between those two statutes

needs to be, and I hope will be cleared up legislatively.

When Richard Nixon made the choice in December 1970 about the basic shape of EPA, it was, "Should it be the National Institute of Health, a standards-setting organization, or should it be operational?" The statutes passed required that it be operational, and it has been. I think it is time to revisit that, however.

Second, with respect to the regional offices, we have 10 of them, each with about 1,000 people, managing programs. I think, as Lewis Shaw has mentioned, we actually really have 50 regional offices in each of the State capitals and around. Maybe we don't need to have people patrolling delegation, and that would be especially true in the brownfield area, where delegation was not even contemplated.

I want to mention also some unexpected consequences of the law. Once it became possible to find out what was underneath a site and you weren't scared to do so because Superfund might apply, we went looking. What we found was not much. We don't have pandemonium trichloride and methelethyl megadeath under every site. You can clean them up, and we do, if you're not worried about, as a commercial developer, what might happen under Superfund.

You also have some other developments: the skill mix inside the agency changes. You get deal-makers, not enforcers. That's how you get a site cleaned up. You bring money, you bring scientists, you bring the community, and you get it done—not an attorney figuring out who he can sue because in 1958 the predecessor corporation dumped a drum there

tion dumped a drum there.

We also saved a lot of greenfields in Pennsylvania. Those 17,000 people would be working somewhere, I assume, instead of in the

inner city, typically, where they are.

Finally, there is the resource issue, which has been much mentioned here. We do need more resources in some areas. We probably don't need more resources in the brownfield area. The economy provides the resource and has provided it well, and it makes the choices about what sites to clean up, not a 1,200 page National Contingency Plan which ranks every site and gives a long recipe for what to do next. That's agility. That's what the States, among other things, are good for.

EPA needs to be there. I say that as a former Regional Administrator and I say as a proud colleague of Mike McCabe, who has done a particularly good job at curing a lot of sore problems. But in this area I think some of the basic relationships between delegation and between States and the regions are shown up to be ripe

for reexamination.

Thank you.

Senator SMITH. Thank you, Mr. Seif.

Mr. Bradford?

STATEMENT OF BRENT C. BRADFORD, DEPUTY DIRECTOR, UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. Bradford. Thank you, Mr. Chairman. I appreciate the op-

portunity to appear before you today.

Mr. Chairman and members of the committee, my name is Brent Bradford. I am the deputy director of the Utah Department of Environmental Quality. I am here representing the views of the Environmental Council of the States, of which I am a member, and immediate past chairman of the State EPA Information Management Work Group and the current vice chairman of the ECOS Strategic Planning Committee.

I want to speak to you today regarding State activities and initiatives in managing environmental information. I'd like to give you four messages: first, States generate most of the data in EPA's national data systems; second, States are driven to manage this data effectively because they must have it to operate their own programs; third, States have become the greatest innovators in the management of environmental data; and, last, States are working with EPA and the public to make this data available.

First, States collect and provide about 94 percent of the environmental pollutant information contained in Federal program data systems. This includes data from the regulated community and direct measurements of environmental quality, which include data

for air, water, waste, and drinking water.

States provide EPA nearly all the environmental pollutant and compliance data it uses to manage the environment. Data that EPA passes on to the public through programs such as Envirofacts

often originates in State environmental agencies.

Second, States use this data, themselves, to manage their own programs, and so are driven to be sure that the data is managed appropriately. This became especially true during the 1990's, as States assumed more and more of the delegated programs from EPA.

More States over the past several years have improved quality and improved public access to data as they've invested in information technology and moved toward data integration.

Some States have made significant investments of State funds, and others have relied heavily on Federal funds coming through EPA's one-stop program. Such Federal funding has been particu-

larly helpful to smaller States, such as ours.

My third point is that the conditions I've already mentioned have led States to become great innovators in environmental data management. In my home State of Utah, our agency has developed a standard used by all programs to identify facilities and link them to program data bases. We've also established a global data catalog to allow public access to information contained within our data bases. We've developed an electronic reporting capability, and we've also developed an Internet access capability that will allow public access to information 24 hours a day, 7 days a week.

Other States have also made remarkable progress in this area. A few examples are Pennsylvania, No. 1. This was one of the first States to present timely multimedia compliance information facilities on line to the public. They are now sharing that system with

other States.

The State of Washington led States in developing a de facto national standard. Its facility identification template for States is now in its second version and is being used by at least 25 States to help them jump start their data reinvention efforts. This saves each State about a \$.25 million.

New Jersey's environmental management system fully integrates all regulatory and permitting systems, one of the first anywhere to

do so. It will be completed later this year.

Virginia's centralized enterprise data system, created in 18 months, merged 77 legacy systems that were not compatible into a single integrated system. The State, itself, invested \$12 million of its own resources to create this system. Virginia is now offering that system to other States at no cost.

New Hampshire is integrating its environmental data bases by linking facility and site data, and has begun making site remediation, underground storage tank, and air permitting information

accessible via the Internet.

My fourth and final point is that States are committed to working with our Federal partners in making our data available to the public. The States and EPA created the State EPA Data Management Work Group in January 1998. We developed a vision statement and a set of operating principles. These define a framework for a new way for States and EPA to do business together. They commit States and EPA to a partnership in building locally and nationally accessible information systems.

Some major accomplishments of the work group include the creation of the Data Standards Council, the development of a vision for a national data exchange network, the establishment of a joint process for addressing burden reduction in data reporting, and a discussion forum and action plan for public access to environmental

information.

States are making significant accomplishments in environmental data management, but the cost is high. Currently, the President's

budget proposes \$30 million for environmental information management—\$16 million for States and \$14 million for EPA. States believe that this funding is essential in addressing a new vision of environmental information management.

Continued Federal investment is critical for this vision to be realized, and we need to make sure that all States have a full opportunity to participate. Collective investments and standards develop-

ment will be needed to make such a network viable.

States envision a national environmental information exchange which recognizes that the agencies that collect information will be responsible for its stewardship and will provide access to such information through the network. Such a network is based on common standards and would provide a common base of information access, exchange, and use that would allow flexibility in meeting individual State and EPA needs regarding data housing and data handling. This would move focus away from a common national data system toward a focus on data quality and interpretation.

This will require both State and EPA effort to make such an exchange work and must be developed in such a way that all States, both large and small, can participate in the exchange. Given the impact of decisions made based on environmental information and the need to assure its accuracy and accessibility, it is important that States and the Federal Government continue to work together to develop and utilize data management technology in a sound, re-

sponsible, and efficient way.

There is a long way to go, but significant progress is being made. States have provided leadership in this important effort and are committed to continuing to do so to assure that the ever-increasing demands for information are met and that the necessary information is available for responsible environmental decisionmaking.

Thank you, Mr. Chairman.

Senator Smith. Thank you very much, Mr. Bradford.

Each one of you, in your own way, with a different perspective, talk about greater control and authority to the States and the fact that the one-size-fits-all, top-down approach doesn't work. Let me just ask each one of you for a real quick response, just go right down the panel from Mr. Shaw right down. Is this happening in spite of the EPA or are they working with you to make these things happen?

We hear a lot of stories both way, frankly—a lot of focus on what the States are doing, successes with the State. If they are helping you, tell us how they are, briefly. If they are not, tell me then where you think we need to make a change in the structure to help us get where we need to get—just briefly, so I can get a quick re-

sponse from each one of you.

Mr. SHAW.

Mr. Shaw. Speaking for myself, from my perspective, I do think that EPA is genuinely interested in having a better system. We have been working with them in a number of instances to do just that. However, sometimes they just don't get it. Now, maybe they just don't get it because the laws don't allow them to. We have heard some discussion of that. But I do think there is a genuine interest on their part to do things better and do them along with the States.

You mentioned the enforcement piece and some of the problems the State has there. We are very sensitive in South Carolina to who does enforcement in our State, but we have worked out an agreement with our EPA regional office to share some of that enforcement responsibility. Not all States do that. Not all States wish to do that. But in our case, we saw it as beneficial to both sides, so we have been doing some joint enforcement actions in our State. That's an example of where we have been able to work together.

Senator SMITH. Mr. Varney?

Mr. VARNEY. I would say that there is a period of cultural change that is taking place, both within EPA and within the State agencies. I think some of the mid-level managers in our own agencies, as well as in EPA, don't like change, don't want to embrace the new way of doing things, don't want us questioning their prioritization or perhaps considering that we'll take resources away from this manager and reassign them to a different manager. That's very threatening to our own staff and to EPA's staff. So there is this temporal aspect, this cultural change that is taking

place gradually over time.

Let me also say that I think we have to be very careful to make sure that we do not have regulatory or legislative barriers in terms of flexibility. An example that I would give is in the SRF programs. I think there is a lot to be gained by giving States maximum flexibility in shifting resources within the State revolving loan fund programs, the SRF for the Clean Water Act, the SRF for Safe Drinking Water Act, and even perhaps brownfields SRF funding, so that we can shift the money around based on the changing needs of the State, and to even look at innovative approaches, like using SRF money for water conservation, and water storage to achieve in-stream flow protections—those kinds of innovative things that may have obstacles associated with them because of statutory requirements.

Senator Smith. Moving from one stovepipe to the other?

Mr. Varney. Yes.

Senator SMITH. That's what it is. Mr. VARNEY. Exactly, Senator.

Senator SMITH. Mr. Seif?

Mr. SEIF. It's getting better, Mr. Chairman, I think. You have to remember, though, that the founding fathers set up a Federal system which is inherently complicated, and when you add new science, modern industrial organization, and 250 million people, it is never going to run like a Swiss watch. It will have its rough

I think, in the broad sweep of history, if we take the Great Society as the height of Federal power, it is moving to the States. It

is leaching, or running, or whatever, to the States.

We do have two block points. The statutes do freeze processes in place, and that's one, and the culture on both sides, as Bob makes a very good point about my own bureaucracy, as well, do tend to retard growth.

The thing that retards it most—and we can thank Brent for helping the most with this—is the metrics. Senator Baucus asked what are the things we really need to do, and metrics is one of the three things that would really make the system best.

What can we agree on that we should measure? And what makes a measurement improve or not? And can we alter our resource mix to go after improvement in that measure? We can't with the culture, the statutes, and so on, being as they are.

We need from the committee a holistic, integrated environmental approach—if not a single, big statute, which some have talked

about, certainly a great, wide duct as opposed to 50 stovepipes. Senator SMITH. But you do believe that some codification modifications are required, some modifications in the law?

Mr. Seif. Or uncodification. Senator SMITH. Decodification.

Mr. SEIF. Right. Yes, sir.

Senator SMITH. All right. Mr. Bradford? Mr. Bradford. Thank you, Mr. Chairman.

In Utah we developed, with EPA and local government, a southwestern Utah partnership that I believe was probably the most successful environmental activity that I have seen undertaken in my 28 years in the State of Utah in environmental programs, so

the system can work, and it worked very well.

There were a couple of key things that made that happen, I believe. First of all, we used a model that said we were going to put the problem in the middle of the table and then see what each of us brings to it. What is the strength that each of us brings? We're not going to worry about oversight jurisdiction. We'll just worry about focusing in on the issue.

We were able to do that, and in doing that we got some local ordinances. We determined that the local ordinance was the best way to go and the most effective way. We got some local ordinances in place we had been trying for over 15 years to get in place relating to individual wastewater and to drinking water. So the system

worked, and it worked very well.

I think this model of performance partnership and State/EPA partnership can work. It took a great amount of leadership from the top to do that, and there was a lot of distrust at the staff level to begin with and real concerns on the part of those people that somehow their job was going to be impacted and the traditional role was not going to be in place, and it wasn't. And once we could

change that attitude, some nice things began to happen.
I think our biggest problem in the State of Utah still deals with the enforcement, in that the partnership doesn't seem to carry over into that area, but in the areas of the program management, itself, it can work and it has worked, and I think we have actually established somewhat of a national model relative to this performance partnership agreement, and it did develop a lot of trust between our agency, the local government, and the Federal Government. In working that, that strengthened all three of us, I believe, in that

Now we are attempting another partnership right now in another portion of our State which will involve tribal governments, also, so it will be a four-way partnership. We'll see if that one works. It is just underway now. But that one may be a little bit more difficult.

But the system can work. It does require a lot of attention and it does require a lot of management in order to make it work.

Senator SMITH. Thank you.

Senator BAUCUS. Mr. Seif made a point that I think is worth remembering: we have a messy system in this country. We have a democracy, and it's just the nature of the beast. Winston Churchill's oft-repeated statement comes to mind: "It's the world's worst

form of government, except there is none better.'

From your testimony I sensed that the drift is going in the right direction with NEPPS. So how big of a problem do we currently have? As administrators, do you spend 80 percent of your time saying, "My gosh, I can't get my job done because of "block points" and the culture." Or do you spend 5 percent of your time saying, "Gee, this isn't working that great, but I can do what I need to do without it." How big of a problem are these block points, whether they are cultural or statutory?

Mr. Shaw. Let me maybe start out my comment on that. You know, in my case it is not the most pressing problem I have. My legislature is probably the most pressing problem that I have.

[Laughter.]

Mr. SHAW. But, you know, EPA is something that we have to deal with day in and day out.

Senator BAUCUS. Yes.

Mr. Shaw. So it does take our attention.

One thing I would like to say is, every time we have had a State's early involvement in the decisionmaking process with EPA, we have come out with successes.

Senator Baucus. Yes.

Mr. Shaw. Where we have been blind-sided or surprised by situations is where we have most of our problems. That's where I spend most of my time.

Senator BAUCUS. In an ideal world there would be some statutory changes, but it is my experience that very often, with great leadership, a lot of these problems can be dealt with without changing the law.

Let's take Superfund, for example. I agree with Mr. Seif that Superfund has its problems, but I think you'll agree that the EPA, through administrative action, is able to solve some of those problems. But still, I mean, how much of this can be relatively solved with the right attitude?

Mr. SEIF. I think it is right. College sophomores debate process

versus people, when it turns out people can override process.

Senator BAUCUS. Right.

Mr. Seif. And we do every day.

Senator BAUCUS. Yes.

Mr. SEIF. I don't consider the time I'm doing today as the 85 percent worrying about the system. This is part of the solution—that is, bringing this message, the statistics and such insight as we have been able to provide, encouraging devolution, which is, I think, historically inevitable and appropriate, given the nature of the environmental problems, which are now much smaller, more retail, and the advance of the information systems which would give us the metrics which will eventually get us there.

So I don't consider myself being blocked by all of this. These are

inevitable challenges, but we're going to get there.

The public still believes in the most important message that we have, which is: let's keep after the environment. I think environmental mood in the country is as strong as it was on the first Earth Day. It's just more sophisticated. There are more tools.

There are more problems. But we are going to get there.

Senator BAUCUS. The tone of this hearing is constructive and helpful. The Constitution contains the Supremacy Clause and I don't think it is going to be repealed soon. I'd like to read to you some testimony of Mr. Jorling, who was the EPA administrator in New York, I think, in years past.

Mr. Seif. In the 1980's. Yes, sir.

Senator Baucus. The New York commissioner. In 1993, we held hearings on roughly the same subject, and this is what he said at that time: "It is clear that the three principal responsibilities of the Federal Government should be: one, setting national minimum standards for health and technology; two, being the gorilla in the closet to assure the integrity and steadfastness of the Federal program; and, three, assuring there is a level playing field across the States by focusing on the States that are not performing as well as the other States."

I'm curious what reaction you have to each of those three points. Mr. Seif. I might mention Mr. Jorling is now senior vice president for environmental programs at International Paper, a career progression which is not to be smirked at, frankly. I, myself, was at Earth Day in 1970 with my beard and the usual buttons, balloons, and baloney. The movement has matured. It is integrated. It is people like Jorling who are pioneers in enforcement now doing it in the private sector, which is where the real action is going to be in the next generation of environmental improvement.

He's right. We don't want to compete against the State. That's cutting corners. We want to have a strong enforcement program in our State so that the polluter who is cutting corners isn't an unfair competitor with people who are doing the right thing. So a floor is

important.

But it has been said—and the Benzine study at Yorktown is an example—in which a modern enterprise is subjected to all of the environmental laws. If the Baucus Widget Company, for example, did absolutely everything it was supposed to—no more and no less—it couldn't operate. It would be like the game of Twister: randomly you put your hand down on the yellow and your knee down on the green, and pretty soon you can't move—you can't make widgets.

We need to get out around these historic 30-year cluster of constraints—and Jorling has spoken about this very thing wearing his new hat. The laws were designed to achieve spot results, and did, and they now are in the way of the broader result of integration of environmental concerns into everything we do, as opposed to just being another regulatory headache. That's the step we need to

take.

Consensus is emerging on that, I hope.

Senator BAUCUS. Well, how do we advance the ball? You haven't come here with a list—nor were you asked to—of recommendations to change the statutes.

Mr. ŠEIF. I would be pleased to participate in that process. But you're right—I don't think the time is politically ripe to do that.

Senator BAUCUS. That's my sense.

Mr. Seif. I think that, ironically, EPA is doing a large number of things that are very good ideas, often in the shadow of the corporate culture there, which is still in a "1970 shoot-em-up" enforcement mode. It's still, "Roll out the stats. Get out the press releases."

The fact is, the bulk of what EPA does makes a lot of sense, and

we're working with them.

It occurs to me that the next President is going to have an EPA ready to roll into the 21st century and do this stuff. The irony will be that if Gore does it, everybody will say, "Boy, it's about time someone did that," and if Bush does the very same thing, the Beltway environmentalists will scream bloody murder about backsliding. It will be the same stuff. It will just be a de-emphasis of the one tool, enforcement, in favor of the broad number of tools that actually work.

Senator BAUCUS. I'd like to ask the remaining three for reactions

to Mr. Jorling's statement.

Mr. Shaw. I agree with Mr. Jorling's principal statements. I do think that the States need to have involvement in all three of those issues. I mean, we need to have some involvement in setting the floor. I'd like to have some knowledge of when the gorilla is coming out of the closet. But I don't disagree with what he says in principle.

Senator BAUCUS. Mr. Varney?

Mr. VARNEY. I'd say I also agree, but would just emphasize the need for flexibility. Just as if one is cutting a budget and you say, "Keep your sights set on the bottom line," we need to keep our sights set on the environmental and public health outcomes and give EPA and the States maximum flexibility to achieve those goals.

In the interest of being uniform in our application of requirements, some of the requirements are overly prescriptive, which then get in the way of the best solution or the most cost-effective or environmentally sound solution, and those are the items that we should be seeking out, identifying, and addressing.

Senator BAUCUS. But NEPPS is helping a little bit, isn't it?

Mr. VARNEY. Yes, it is.

Senator BAUCUS. Mr. Bradford?

Mr. Bradford. Yes. I would agree with his statement, although I think we have evolved in some regard beyond part of it. The need for national standards is important. There is no question about that. I think all States have come to a realization—we certainly have in Utah—that environment and enforcement is important. There are different ways and different approaches to get there.

Our State legislature is notorious for saying that we ought not to treat people like criminals when, in fact, what they're trying to do is comply in a very complex system, and that we ought to be providing some assistance to them to try to help them get there if,

in fact, the goal is compliance.

So the need for a gorilla may not be there as much as it was early on, because there seems to be a recognition, at least in our State, that environment is important and that we need to be able to deal with these issues, and there is an honest attempt to do that.

Senator BAUCUS. I understand that. I think a subsequent panelist is going to say something to the effect that 17 or 18 States just do not rise above the minimum. A lot of States have some environmental standards which are above the Federal minimums, but for about 17 or 18 just-it's a ceiling. It's not a floor, it's a ceiling, which may mean that the gorilla is needed. I'm just speculating. Maybe the administrators in those States may want the gorilla to tell their legislatures to do a little more. I don't know.

Mr. Bradford. They may. And there certainly is an appropriate role for EPA to enforce statutes, but it doesn't all have to be done

the same way.

Senator BAUCUS. I know. I agree completely.

Mr. Bradford. If we are going to achieve results, compliance is

the goal. There are lots of ways to get there.

Senator Baucus. Yes. My experience, too, is that solutions generally are reached when so-called "adversaries" or stakeholders are all in the same room talking together, with some kind of enforcer there as well. It may be a Governor, or somebody to get them talk-

ing and find a solution.

Mr. Bradford. One key point, I think, again coming back to the experience we had in our State, is that if there is a recognition on the part of all of the players involved that each one brings something unique to the table to help solve the problem—and if we can focus on solving the problem and use the strengths of each of the players—that is, the States and EPA and, in our case, local government—you can get there. It's when one of them tries to say, "We know how to run this," and the other is not important that you have the problem.

Senator BAUCUS. Right. Same old story. Senator SMITH. Is there anyone who disagrees with the statement that State finality would enhance your ability to get the job done on these various environmental problems that you face?

Mr. SEIF. State finality is always desirable in any given transaction. As a national policy matter, however, it depends on what the final outcomes are in aggregate of whether that's a good thing or not, and so we are back again to who sets ultimately the standard. I think the Federal Government has that obligation ultimately. And then finality when the standard is reached—no second guessing and a lot of things that can happen—is the key.

Senator SMITH. Mr. Varney, one final question. In those performance partnership agreements that we have in New Hampshire, what specifically in those agreements allows the States-in this case, New Hampshire—to prioritize specifically on its resources? I mean, it might be a good thing to look at. I know other States have

them, as well.

Mr. Varney. Yes.

Senator Smith. But what is the most important of all of those requirements in those agreements that allow the States to

prioritize their own environmental problems?

Mr. VARNEY. Well, in the development of our agreement, we are essentially putting our strategic plan for the agency with our goals and objectives and action items and then putting our resources and annual work program in alignment with that strategic direction for the department, and then forcing a dialog, which is sometimes somewhat painful, forcing a dialog internally and with EPA and other stakeholders about what those priorities ought to be, and

seeking feedback so that we can then make adjustments.

We have seen this process to be extremely beneficial, not only in terms of developing an annual program but also in the use of carry-over dollars. For example, we have been able to reallocate funding to address issues of sprawl, to address implementation of our mercury strategy for New Hampshire and actually make sure we implement it to restore shellfish beds and to address in-stream flow protection requirements in our State.

Having that kind of flexibility is really critical, especially to a small State where we have limited resources to deal with a problem, and that flexibility becomes crucial to us and enables us to get the biggest bang for the buck and to make sure that those Federal dollars are used as wisely as possible and used within the context of this 75 percent of funding which is State dollars. It is only 25 percent Federal, 75 percent State, so it enables us to look at the complete picture of everything that we do and put it all in one document and enable us to look at it from a strategic direction, standpoint, and to me that's the right way to allocate resources, it's the right way to seek public input and involvement, and the right way

to manage an agency.

Senator SMITH. Well, I think, as a Congress, I think we are beginning finally to move in the direction that you are all advocating; however, it seems like you're moving there fairly quickly, and then you'll get an issue such as the TMDL issue which will pop up on the screen, where, again, a rule proposed with a deadline which stirs everybody up and shows the heavy hand again without, in my view, at least, the appropriate cooperation or discussion before doing such a thing, so now we're faced with an implementation of a rule, I think by June 30th, that everybody is upset about, and meetings all over the country on these things. There will be a hearing in New Hampshire next week on it.

In any case, I appreciate your time here.

Does anybody have a final comment on this panel?

[No response.]

Senator SMITH. We thank the witnesses for their time.

The committee will take a 5-minute recess as the next panel comes up.

[Recess.]

Senator SMITH. The hearing will reconvene.

I'd like to welcome the third panel: Ms Lynn Scarlett, the executive director of the Reason Public Policy Institute; Mr. Erik Olson, the senior attorney for the Natural Resources Defense Counsel; and Mr. Jason Grumet, the executive director of the Northeast States for Coordinated Air Use Management.

Welcome each of you. Thank you all for coming.

We'll start with you, Ms. Scarlett.

STATEMENT OF LYNN SCARLETT, EXECUTIVE DIRECTOR, REASON PUBLIC POLICY INSTITUTE

Ms. Scarlett. Thank you, Senator Smith, for holding these hearings. I'm delighted to be here.

As indicated, my name is Lynn Scarlett. I am executive director of Reason Public Policy Institute. We are a Los Angeles-based policy research organization.

To sort of stitch together some of what you've heard today, I'd suggest to you that we have four recurring challenges that confront environmental policymakers in order to get to 21st century envi-

ronmental improvement.

First is how can policies better ensure environmental innovation. Second is how can they better focus on results and take into account the multiple stovepipes in an integrated way, as Senator Smith suggested. Third, how can policies better foster incentives for private stewardship? I think what we are all after ultimately is a Nation of self-motivated environmental stewards. Fourth, how might policies better take into account specific local knowledge—the knowledge of time, place, and circumstance, those devilish details that vary from site to site?

There are an array of State initiatives. They, indeed, are at the forefront of a search for a new environmentalism that addresses or attempts to address these four questions. There are four features of these programs. You have heard two of those features this morn-

ing. I want to add two others.

The first feature is flexibility—that is, States moving toward greater flexibility in the options and ways that they achieve the goals they are pursuing.

Second is the focus on performance rather than process.

But, third, I want to add an additional element, and that is the greater use of incentives rather than punishment as the first order of effort.

And, finally, there is a move toward greater place-based decision-making—that is, looping local folks into decisions at watersheds and so forth.

Let me just give you a little flavor of some of these examples and

then get to some of the challenges, as I see them.

On the flexibility front, I think it is worth underscoring this is not about roll-back. Indeed, it is about extending the performance envelope both upward and outward. Let me give you an example of Wisconsin. They have a green tier permit program underway. Firms with high levels of performance qualify, not just anybody. With this endeavor, they actually develop an overall performance compact. That compact is a multiple stovepipe, integrated, facility-wide permit and allows that firm to look at the entire holistic setting in which they operate.

Oregon has a green permits program very similar. Massachusetts has an environmental results program. Frustrated with simply spending a lot of time issuing permits, they, instead, developed an industry-wide standard, particularly for small- and medium-sized businesses—for example, dry cleaners and photo processors. With this result, they were able to yield dramatic reductions in emissions—43 percent reductions for the dry cleaners, 99 percent reduc-

tions of silver discharges by the photo processors.

Incidentally, speaking to something that Senator Baucus indicated, all of this was done with fewer, not more, resources—I think this is something worth paying attention to.

On the performance focus front, you've heard mention of Florida's performance indicators. Let me give you a little greater sense of what those look like. They are moving away from the enforcement bean counting and, instead, have three tiers of indicators. One is the plum—actual ambient ecological performance.

Second is behavioral, but, rather than simply looking at compliance, they are also looking at things like how many voluntary pollution prevention initiatives they there so that they get beyond

simply the rule focus.

And, third, their traditional enforcement tier of indicators is not simply a bean counting, but rather tied to effectiveness. That is, are these enforcement endeavors actually yielding substantial results, and at what cost?

The third type of innovation is incentives. I want to mention one, but there are many, many programs. Texas has a clean industries 2000 program—over 140 participating firms after one year, 43,000 tons of reductions in hazardous waste that was off the radar chart and not attended to in the more traditional regulations.

Pennsylvania, Jim Seif, has a pollution prevention site assessment grant program which helps small businesses and others actu-

ally invest in pollution prevention.

Finally, turn to place-based decisionmaking. One of the most fertile areas here is in watershed management. There are literally hundreds of efforts by cooperative State, county, Federal agencies coming together, bringing all interested stakeholders to cooperatively determine what priorities for a watershed will be and how to address those problems in a nonadversarial fashion.

Minnesota, for example, has one chain of lakes, all brought under a cooperative management system with multiple jurisdictions tak-

ing part in that multiple problem solving focus.

Senator Baucus might be interested in the Upper Clark Fork River, Montana experience. They had an enormous adversarial situation over in-stream flows, ranchers, and so forth in contest against the environmentalists on this issue, but, instead, came to place-based decisionmaking, sat down, and worked out a plan.

Quickly on the challenges, I think there are three. You've heard about the technical challenges-that is, simply developing measurement tools and so forth. Second, there is a set of challenges regarding fitting the new regulatory structures in the old context, and perhaps in the questions we can pursue that a little bit more.

The third set of challenges actually relates to stakeholder interests and concerns. Who is at the decision table, particularly in

these place-based decisionmaking?

With that, I'll conclude and say that the new environmentalism is a discovery process. There is no reason to think we got things just exactly right our first go-round, and we're now underway trying to figure out ways to do better.

Thank you.

Senator SMITH. Thank you.

Mr. Olson?

STATEMENT OF ERIK D. OLSON, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

Mr. Olson. Good morning. My name is Erik Olson. I'm with the Natural Resources Defense Council. I guess I'll stand convicted of

being a beltway environmentalist.

We believe that it is important that there are millions of Americans who believe that there is an important Federal role in environmental protection, and we're glad the committee is holding this

hearing today.

As you know, this debate has been going on for over 30 years, certainly since before the EPA was created. I think that this committee has struck a bipartisan balance over the last 30 years that has formed a set of laws that are international models for how environmental protection should work, which is not to say that changes are unnecessary or that the State/Federal relations are perfect.

We believe that cooperative federalism is a construct that is very important and deserves re-evaluation constantly. I think a lot of what the previous panel said from the States was very constructive, and we are pleased to hear many of the comments that were

made.

Certainly, the States have an important role. They have more local information, very often, about the local environment. They are much more expert on local politics and what the local situation is very often. In addition, States have the role of the laboratories of democracy, and they certainly have a great deal of creativity in many cases to address local problems.

The Federal Government, however, does have a significant role that has to be considered. I think Chairman Smith and your predecessors, including Senator Chafee, Senator Stafford, and many others have recognized this important Federal role.

First of all, there have been many situations where State inaction simply necessitated Federal intervention. We know about many of the rivers catching on fire, and so forth, from the 1970's, but there still are examples today.

Second, there is, as we've heard States say just moments ago, a

need for a level playing field to avoid the race to the bottom.

I wanted to read just briefly from page three of my testimony, which quotes a brief filed by five States in which they were opposing, strangely enough, a recent court decision that said that a State can step in and override an EPA enforcement action. Those five States said that, "By making it harder for EPA to maintain a level playing field nationally, the panel's decision opens up States to risks that they will suffer the adverse effects of pollution generated in neighboring States, and that the regulated entities in other States will gain an unfair competitive advantage over another State's law-abiding competitors."

I think that is a significant statement coming from five States, ranging from the State of Louisiana to the State of New York and California. They are saying that there is a very significant, important Federal role to assure that there is a baseline Federal mini-

mum set of standards.

I think it is also important to note that now 19 States have adopted "no more stringent than" clauses. This shows that the race to the bottom is not a theoretical problem. In 19 States, at least for one or more environmental programs, the State is not authorized—in fact, the State legislature has prohibited the State—to be any more stringent in any regulation than the Federal Government. That suggests that a lot of States have their own statutory impediments to creative activities.

I won't discuss it in detail, but it is mentioned in some of the law review articles that I cited in my testimony, that several court decisions that have prohibited States from using their creative juices to adopt stronger programs than the Federal Government has, be-

cause of these types of clauses.

In addition, very often only the Federal Government has the resources, including the technical and scientific expertise and the economies of scale, to address some of the large national problems that we are addressing.

I want to say briefly that we believe there are opportunities for more creative and innovative interactions between State and Federal authorities. In the future, we think programs like NEPPS, per-

haps amended, could provide that kind of flexibility.

The Federal Government does need to maintain an important role of setting goals and standards and procedural safeguards to protect citizens and the environment; however, if the States show that they have the resources, show that they have agreed-upon core measures of performance that are adequate through a public process, show that they have the openness to track those accomplishments that they are achieving, and are assuring enforcement of the State and Federal law, that there are opportunities for greater flexibility at the State level.

We do not believe that there is a need for an overhaul of all the statutes. In fact, there are many opportunities under current law to use the flexibility inherent in existing statutes in order to im-

prove State and Federal relations.

Thank you very much. Senator SMITH. Certainly.

Mr. Grumet?

STATEMENT OF JASON S. GRUMET, EXECUTIVE DIRECTOR, NORTHEAST STATES FOR COORDINATED AIR USE MANAGEMENT

Mr. Grumet. Thank you, Chairman Smith.

My name, again, is Jason Grumet, and I am the executive director of the Northeast States for Coordinated Air Use management, or NSCAUM, which is an association of the air pollution control agencies representing Connecticut, Maine, Massachusetts, New Jersey, New York, Rhode Island, Vermont, and, of course, New

Hampshire.

Mr. Chairman, we appreciate the opportunity to address this committee regarding innovative efforts to reduce air pollution in our region. I should tell you that my challenge to innovate begins now, as I try to distill 5,000 words of written testimony into 5 minutes. But what I'll endeavor to do, Mr. Chairman, is to start out by posing the challenge to innovate within our clean air regulatory regime; in the second half of my testimony I will then focus on some of the exciting projects that we are undertaking, such as die-

sel pollution, red light permitting, Mr. Chairman; and in the "third half" of my testimony I will say a few words about pollution prevention.

As we approach the 30th anniversary of the passage of the Clean Air Act, it is appropriate, we think, to reflect upon the tremendous achievements that both government and industry have made in reducing air pollution and protecting public health and welfare.

The desire to provide all citizens with minimum standards of protection and to provide industry with consistent national obligations compelled Congress in 1970 and in every reauthorization of the act since to establish substantial Federal oversight and enforce-

ment of our Nation's clean air strategy.

At the same time, however, through the creation of State implementation plans, Congress recognized that States must bear the ultimate responsibility and, in fact, represent the best hope to design

and implement effective clean air laws.

I think it is useful to reflect upon this most basic tension between the desires for national consistency, on one hand, and the desire for State autonomy on the other, when exploring how to promote and honor effective State innovation.

One of the central challenges, I believe, in a democracy is to communicate complicated ideas in simple and ultimately popular terms. In this discussion, the subtle complexities of federalism are often described as a simple choice between command and control Federal prescription, on one hand, and innovation and State flexibility on the other.

This construction, which I often use, results from frustration that many of us maintain as we watch government erect seemingly nonsensical barriers to the creative, well-intentioned efforts of business owners and local officials who have the courage and the ingenuity to suggest a different approach or a better way to achieve a clean environment.

Even worse, Mr. Chairman, under the time-honored theme that no good deed goes unpunished, many of us can cite many examples of situations where people who have gone beyond requirements are actually undermined by the very regulatory system they are trying to improve.

While my members live this frustration each and every day, we recognize that these are not problems born of incompetence or malice at any level of government, but rather that these moments of apparent insanity flow inherently from a regulatory regime necessarily designed to protect the public in situations where private economic incentives and volunteerism are inadequate.

While command and control versus innovation is, we believe, a rhetorically powerful construct, the polemic in this description suggests a false choice, and I do believe that a more productive inquiry will flow from the premise that national standards, while essential, often fail to capture the ingenuity of local government and indus-

In this light, improving our environmental regulatory system is a pursuit to refine and not replace enforceable Federal require-

ments.

Let me now transition, if I can, from the abstract to the particular and touch on two innovative efforts in the northeast.

The first area I want to discuss are some exciting projects relating to the retrofit of heavy-duty diesel equipment, and then I'd like to say a word, if I can, about the innovative efforts to actually reduce pollution before we ever create it by employing pollution pre-

vention techniques.

It is also worth noting that, while we have made tremendous success, we have a lot of work left to do. While we've created substantial beachheads within the EPA, where there is robust collaboration, the EPA, like any mega-entity, has a host of corporate cultures. Suffice it to say that those offices within EPA charged with the obligation of enforcing the statute and EPA regulations are struggling—at times awkwardly struggling—to maintain a coherent regulatory regime that rewards innovation.

Let me now turn to diesel retrofits. I hope that the pretty charts and graphs have been submitted to the record. In this kind of "boy meets truck" story, Mr. Chairman, it is a bad news/good news, bad

news/good news story.

The bad news is that diesel engines are, in fact, creating an assault to public health in this country, and the problem will actually get worse before it gets better. The good news is that technology exists today to achieve tremendous improvements, and, so long as the Administration does not weaken EPA's proposal to cap diesel sulfur at 15 parts per million, we will have an opportunity in the future to have the words "clean" and "diesel" truly belong together in the same sentence.

Again, though, the bad news is that the existing fleet of diesel vehicles will be on the road for 25 years or more, accumulating up to one million miles a truck, and the current Clean Air Act and the regulation and litigation that describes it has erected barriers that

actually prevent States from requiring retrofits.

Without creativity, this would be the end of the story. The good news, however, is that the Northeast States, working with the manufacturers and emission controls associations, the engine manufacturers, and EPA have joined together to create a strategy that embraces the substantial social desire for change. The desire to comply with environmental regulations is being enabled through a project called VMEP, which is enabling Manchester Airport and the New York City Transit Authority to achieve substantial SIP credit reductions toward their conformity obligations. The desire of private developers to move forward in ways that are socially benignyou are certainly aware, Mr. Chairman, that we are building the Panama Canal in downtown Boston with the affectionate title, the "Big Dig." This project has created a tremendous desire among corporations in the Boston area-

Senator Smith. Don't say "you." Mr. Grumet. The royal "we," Mr. Chairman. I live the Big Dig.

I just don't have to pay for it.

It is the desire to make sure that that construction happens in a way that is accepted by the community that has created a commitment among all those engine manufacturers and construction companies to retrofit their equipment.

Finally, there is a selfless desire among some to actually just clean things up. We are working with school districts to try to ret-

rofit school buses and a host of other efforts.

I will only say about pollution prevention that the opportunities are robust and so are the barriers.

I will note the one barrier that I think is probably the paradigm of absurdity, which is the "once in, always in" policy. This is a policy, Mr. Chairman, which suggests that if a facility changes its operation from using hydrochloric acid to berry juice, they don't get any benefits of reduced regulatory obligations. The "once in, always in" policy suggests that once you've used a toxic chemical, we will treat you as if you always use toxic chemicals. That is, of course, not an incentive for change.

In conclusion, Mr. Chairman, I've spoken a lot about the States and EPA. There are two roles that Congress can fulfill to enable this evolution. The first has been mentioned several times, and that is to provide resources and the flexibility to use those resources. Change is always held to a higher standard that the status quo, and we have to take on that test collectively, with the oppor-

funity to succeed.

Finally, innovation requires trust. We have found that trust is ample in the face of success. In order for innovation to flourish, that trust has to be equally dependable in those rare moments when credible and innovative efforts fall short of their desired

I want to thank you and the committee staff for initiating this dialog and welcoming us into it, and certainly hope that we have opportunities to explore it further in the months ahead.

Senator Smith. Thank you very much, Mr. Grumet.

Mr. Olson, let me begin with you. In my view, there is no question that 30 years ago or so, when these laws were put on the books, they were desperate measures for a desperate situation. They were needed. It was an end-of-pipe solution, if you will, for environmental laws, and I think it is obvious that a lot of the participants were not willing. They were dragged, kicking and screaming, to the altar of environmental cleanup.

In some environmental programs, such as the Everglades restoration plan that we worked on in the committee, the term "adaptive management" is used. I might just use that in a different perspective here to say we need to be able to adapt to changes.

I think people today—many companies, corporations, States, other individuals in the private sector from various environmental groups, to others who may not be considered "environmental groups," have adapted and have changed. They have realized now that the mess we did create needs to be cleaned up. We're not there

The question, though, is, as we move into the future, how do we get it done so that we don't create more 1970's reactions, necessary

When you hear about such things as performance partnership agreements, as you heard Mr. Varney talk about and others-I think 38 States have similar programs—wouldn't you agree that these programs and approaches do enhance environmental protection?

Mr. Olson. Certainly they can, and—— Senator SMITH. But do they?

Mr. OLSON.—in many cases they have. The question really is, are there resources there? And we believe that in many States the resources are there to make this kind of thing work. Is the commitment there? And do we have a way to measure to make sure that, as there is greater flexibility, in our view there is more accountability. As you start to loosen the reins, you want to make sure the horse is running in the right direction.

Our concern is that we need to be able to measure that success is actually occurring, that we're not just devolving for the purpose of devolving and ending up not gaining the environmental protection that I think most of us, and virtually all of us involved in the

process, want.

Our concern would be that we make sure that, through an open process, that we are able to measure the success, and that we are

not simply using this as an excuse to waive standards.

We think that most States really do have much more commitment than they did 30 years ago. Our concern, as I mentioned, is that, although that is true of most, perhaps virtually all States, there are a few stragglers. I cited in my testimony some States that spend 38 times less per ton of waste than some of their colleague States.

There are States that are stragglers, and the same is true in industry, although there has been a corporate culture change in many companies, and certainly a change in a lot of State attitudes. There are always the stragglers, and those are the ones that we worry about.

Senator SMITH. I would agree with you, which is one of the reasons why I don't believe in the one-size-fits-all concept. There are some States that are better at dealing with these problems, have been much more innovative than others. I think that is a good reason to provide programs like the performance partnership, because it gives a State who deserves it at least the opportunity to shine, if you will, and to use that kind of innovation to get things done.

Ms. Scarlett, in your term "new environmentalism," if I could compare and contrast the testimony from the two of you here for a moment, I think you might say that in the Federal/State relationship, maybe it is the Feds that are lagging, that they have not evolved to the point of where the States are. Where the States are moving out forward, it is the Federal Government that is hanging back, not wanting to try innovation: a new technique, or an opportunity to deal with the current environmental problems, and to not create more.

Ms. Scarlett. Yes. In fact, as Mr. Olson was speaking, and particularly his emphasis on measurement and the importance of measurement, I could not help but think that the last three decades of environmental performance we have tended to use as a proxy for success whether someone had a permit or a series of permits and so forth. What really is happening in the States, in fact, is to say, "Well, that might have been OK when we didn't have really very good ambient air quality measuring tools. But we really now need to actually measure real results." That's what Florida's performance indicators and what Oregon's performance indicators are about.

So I think actually U.S. EPA—and they are working themselves in this direction, but I think they have a page, something to learn from the States in that regard.

Senator SMITH. Any specific changes that you would propose to bring the Federal role into this new environmentalism you're talk-

ing about?

Ms. Scarlett. Yes. I would put them in three categories: cultural, regulatory, and resources. On the resources front, I think one change would be—and you heard some of the State regulators say this—to allow in the resources that are allocated to the States for environmental performance, allow broader latitude in how they expend those.

Right now, there are some quasi-block grants, but they must be spent within a particular medium or particular problem set. Give

them more latitude to prioritize and direct.

Second, while it is true that States are moving forward with NEPPS and Project XL and so forth, we have done a lot of interviewing, both of industry and also of State regulators, finding out, well, why are there only 8 or 9 of these examples, or 10 or 12, or, in the case of XL, about 50, when you've got really thousands of

potential facilities that might participate.

What you hear is really one primary point: if you are a company in the Midwest and you must sit down and hammer out with your local regional EPA and with your State a performance compact for your entire facility, but then you have to justify with the Federal EPA, say, "Well, we get to waive this permit and that permit." Then you're really back on a case-by-case basis and a source-by-source-by-source negotiation and analysis, which really defeats the purpose.

That has given some industries cold feet in participating, and it also has been a deterrent to State regulators in also proceeding.

And the third thing I would do on the performance front is to actually really work with EPA to develop something much more like Florida's performance indicators, because it has a way of changing the internal corporate culture of EPA.

If you are measuring real results, that tends to be what you spend your time on, rather than on bean counting and so forth.

Senator SMITH. I get the sense that the States—not all—are not moving as quickly as others. But I think the States may be way out in front in the sense that they represent the people who are the closest to the Superfund sites and the dirty air and the dirty water and the contaminated wells, and so forth. I think that's why you've seen in the last 25 or 30 years a tremendous growth in expertise by the Departments of Environmental Services.

Mr. Grumet, I want to go back to a point you made in your testimony about trust. It is almost, to me, as if it is distrust. In the Federal Government, the EPA seems to have some distrust—Mr. Olson referred to it—in some States, in fairness, not to all—that they won't have the ability, or maybe not even the intention, to move forward and resolve some of these problems. On the other hand, you see the distrust by the States for the Federal Government, because the EPA doesn't want to let go.

How do we resolve this? I think we are at a critical point here. I think we have an opportunity now to break out of the past and

move forward into the future, a bright future, a clean future, if you will, and we just need to be able to de-couple here in a way that gets both sides to remove themselves from the distrust and start trusting one another. How do we do that? What's your recommendation?

Mr. Grumet. A couple of thoughts, Mr. Chairman.

Obviously, I think the aspiration for the States is that together we can start to evolve from a bureaucracy to more of a meritocracy, and for that to work there needs to be, I think, the old adage of trust, but verify.

I think that we have an obligation to earn the public's trust by providing a transparency of process and an access to data so that the public can understand and watch as we make these transitions

and as we ask for these kinds of changes.

Similarly, I would say that my colleague, Mr. Olson, and many colleagues in the environmental community, with the basis of that earned trust, have to have the discipline to join us in not romanticizing the status quo and holding change to a standard of perfec-

tion which, of course, is disabling.

We all have a tendency to think about the good old days, but I would suggest to you that within our command and control system there are a lot of loopholes, and those are loopholes that will only be closed by innovation. Right now, for example, in every State in the country, if there is a source that in a year or two is going to close down and there's a new sweep of environmental laws coming through, those controls don't go on a source that's got 2 years of life left in them. They basically get an AEL—an alternative emissions limitation—also known as a "free pass."

With innovative programs like market-based controls, where people have credit trading and the like, you can ensure that, while not forcing a facility that's going to go out of business in 2 years to go out of business right now by spending \$100 million on pollution control, you have an option other than just giving them a free ride by enabling them to offset other emission increases somewhere else. So there are gaps in the existing system that I think certainly

the environment would benefit from plugging.

Senator SMITH. Sounds like a pretty good commercial for the bubble bill to me.

Mr. GRUMET. I wouldn't call it a bubble bill, necessarily, but with strong caps not unlike those that I know you are contemplating for the utility industry, Mr. Chairman, I think that we then enable a degree of flexibility that is otherwise not possible.

Senator SMITH. Does anyone have a further comment they wish

Mr. OLSON. I'd just like to note one area where I think distrust has been defused.

We have been involved in a few regulatory negotiations where EPA brings together State officials, industry people, environmentalists, others in a room to negotiate a regulation. Now, this can't be the model for every single rule that is issued, and it does require much more resources for EPA to go through that process than it would the traditional rulemaking, notice and comment rulemaking. I think, however, the end result of those kinds of negotiations can be that State officials have their input, industry does, en-

vironmentalists do, and you reach an agreement very often that is much more acceptable to all parties and often does not end up in litigation, which is traditionally the way it has been done.

So I think that is certainly one area where the committee may want to look. If you are looking for ways to defuse the distrust, certainly the regulatory negotiation process, in some cases, can make a lot of sense and can be a very effective way to achieve that goal.

Senator Smith. Well, thank you very much, all of you, for being here today. I know you had to go out of your way to come. We ap-

preciate it.

This is, as you know, one of a series of hearings that we are having on the authorization process with the EPA to try to look at attempts to coordinate the various environmental laws that we have in a way that we can prioritize in the various communities where the impact is the worst, so your testimony has been very helpful and appreciated.

At this point, I would just announce that a lot of members had asked about having additional questions, so I'm going to leave the committee record open until the close of business on Friday to allow Senators to present questions for the record of any of the

three panels.

With that, the hearing is adjourned.

[Whereupon, at 12:27 p.m., the committee was adjourned, to reconvene at the call of the Chair.

[Additional statements submitted for the record follow:]

STATEMENT OF W. MICHAEL MCCABE, ACTING DEPUTY ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY

Good Morning, Chairman Smith, Senator Baucus and members of the committee. I am Michael McCabe, Acting Deputy Administrator for the Environmental Protection Agency. Thank you for the opportunity to speak with the committee about the important work we and our partners, the States are doing to protect public health and the environment.

Looking back over the last 30 years, we are proud of our strong track record of achievement. The public widely recognizes our work as having dramatically improved environmental conditions throughout the country. Working together, we enabled American towns to improve wastewater treatment—one of the biggest public works efforts in U.S. history. We have cleaned up hazardous waste sites and closed waster lead and water are safer. works efforts in U.S. history. We have cleaned up hazardous waste sites and closed unsafe local garbage dumps all over the nation. Our air, land and water are safer and visibly cleaner, even with significant economic expansion and population growth. And U.S. environmental expertise and technology are in demand worldwide. Under the nation's environmental laws, EPA and the States each have important duties. There always has been a division of labor, and a dynamic, evolving Federal-State relationship. At a minimum, EPA is charged with developing standards that provide baseling health, and environmental protection for all citizens. States and

provide baseline health and environmental protection for all citizens. States and Tribes, as well as local governments are the primary delivery agents, working di-

rectly with businesses, communities and concerned individuals.

Many Federal environmental statutes call for EPA to authorize or delegate to States and Tribes the primary responsibility for implementing programs and designate them as co-regulators, once EPA has confirmed that a State or Tribe meets certain qualifying criteria. Over the last quarter century, most States have assumed responsibility for implementing many Federal programs, with EPA retaining standard-setting responsibility and an oversight role to ensure effective implementation. In assuming responsibility for a delegated program, a State maintains legal authority, provides its share of program resources, carries out the work required to implement the program and is accountable for the Federal funds allocated to support it.

States now have assumed responsibility for approximately 70 percent of the EPA programs eligible for delegation. For the past three decades, States have developed strong environmental management capacity, gained experience and expertise. States have increased their financial investment in environmental programs, and many have adopted laws and programs beyond that required by Federal statutes, covering issues ranging from erosion control to coastal management. Some States have environmental standards that are more stringent than existing Federal requirements.

Our challenge now is to build on the progress we have made. But the problems we face today are much more complex than those of the past. Though significant, past problems were easier to deal with in some ways. We could target the "point sources" of pollution, and results from our work were easily identifiable. But that is no longer the case. For example, polluted runoff—our largest remaining water quality problem—comes from sources far less evident and greater in number. Many issues are international in scope, such as depletion of stratospheric ozone and global climate change.

Under the unprecedented continuity of leadership provided by EPA Administrator Carol Browner and the new generation of political leadership with strong State experiences appointed by President Clinton and Vice President Gore, new ways of thinking about causes of pollution, and new approaches to controlling them, are reshaping EPA and transforming the organizational culture that marked our first two decades. Non-traditional thinking is changing and strengthening our relationship with regulated businesses, State and local governments and the American public as a whole

Because EPA and the States share responsibility for protecting human health and the environment, a strong partnership between us is essential. States are strong environmental managers, and a new relationship with the States is emerging—one that allows us to adapt to changing priorities and to experiment with new ideas. We each have important roles to play, and by cooperating and collaborating we are achieving better results at less cost.

Today, the States and EPA are working hard to make this new partnership succeed. Our existing regulatory structures—reflecting the separate laws governing air quality, water quality, and waste management—present some challenges to our efforts to find new ways of doing business. But we are moving forward and finding ways to address environmental problems in more holistic, comprehensive ways. Together, we are making tough choices about competing priorities in the face of limited public resources, and we are developing more telling measures of environmental results.

THE NATIONAL ENVIRONMENTAL PERFORMANCE PARTNERSHIP SYSTEM

An important milestone in our collaboration was reached in May 1995, when EPA joined forces with State environmental agency leaders to establish the National Environmental Performance Partnership Systems (NEPPS).

Many of the concepts embodied in performance partnerships that had been discussed for years such as giving States a stronger role in priority setting, focusing scarce resources on the highest priorities, and tailoring the amount and type of EPA oversight to an individual State's performance were pulled together into a workable, understandable framework.

Performance partnerships between EPA and the States represent a new working relationship one in which EPA and the States determine together what work will be carried out on an annual or biannual basis, and how it will be accomplished.

The centerpiece of NEPPS is a Performance Partnership Agreement (PPA), which sets expectations for performance yet offers flexibility in meeting goals. This agreement is an innovative way to identify priorities, solve problems, and make the most effective use of our collective resources. It emphasizes performance rather than process and environmental results rather than administrative details. It gives a State greater freedom to focus resources on its highest environmental priorities and to select the best strategies for getting results. Prior to developing an agreement, a participating State assesses its environmental problems and conditions, while actively involving citizens in the process. Based on this information, the State then proposes environmental and public health objectives along with a plan of action. This forms the basis for developing the Performance Partnership Agreement with EPA. To date, 34 States have established agreements with the Agency.

34 States have established agreements with the Agency.

Another feature of NEPPS is flexibility in administering grants. States now can consolidate a variety of individual grants into one. A Performance Partnership Grant (PPG) reduces administrative burdens by cutting paperwork and simplifying financial management. It also allows the States more flexibility to use grant money to address their most pressing environmental problems. Forty-four States have chosen this option. To enhance flexibility for States, a State can participate with a PPG without a PPA.

The positive changes resulting from NEPPS can be seen in many States:

• Maryland has seen its administrative reporting requirements cut in 13 areas, and the goals and objectives identified through NEPPS serve as the environmental component in the State's strategic plan.

• Florida's emphasis on showing results led them to develop a new performance measurement and tracking system that received an "Innovations in Government" award from the Ford Foundation and Harvard's Kennedy School of Government.

- Mississippi's interest in targeting resources to solve priority problems resulted in a reorganization around specific functions, business sectors, and geographic areas.
- Minnesota shifted staff and resources from the main State office closer to where the real problems occur—out in the districts.
- Washington saw the paperwork associated with its annual work plan for grants fall by an order of magnitude—from about 40 to 4 pages.

One of the major components of NEPPS is the use of a common set of national environmental indicators to measure the performance of our environmental programs. This limited set of national data, called Core Performance Measures, is designed to help us better understand the effectiveness of our actions and gauge progress toward protection of the environment and public health.

Core Performance Measures, based on data collected and reported primarily by States, serve the NEPPS objective of managing for environmental results by:

- · providing States and the Nation as a whole with the information and tools to increase accountability and make policy, resource or other changes to support improvements in environmental conditions; and
- providing a benchmark upon which States and EPA can focus efforts to reduce high cost/low value reporting for public and private entities.

Core Performance Measures help paint a national picture of environmental progress.

Last year EPA and the States took a major step forward in the development of measures that rely more on environmental indicators and program outcomes rather than process and outputs by agreeing upon a set of Core Performance Measures for Fiscal Year 2000 and beyond.

This agreement was the culmination of a 3-year effort which included the personal involvement of EPA National Program Mangers and senior State officials. This 1999 agreement demonstrated the broad support among the leadership of EPA and The Environmental Council of the States (ECOS) for continuing and improving

our joint efforts to implement the various elements of NEPPS.

Several States and EPA regions are leading the way in developing even better

measures of environmental progress, using environmental data to drive planning and priority-setting, sharing their findings with the public, articulating more efficient oversight arrangements and using grant funds in more efficient ways.

The EPA/State partnership has come a long way, but we have shared challenges to confront in the near and long term. We need to jointly focus our concerted efforts on fully accomplishing NEPPS goals. Recently both EPA and ECOS reaffirmed our commitments to NEPPS. In March of this year, I signed a memorandum to senior commitments to NEPPS. In March of this year, I signed a memorandum to senior Agency leadership detailing this reaffirmation and calling upon them to ensure all EPA employees share our focus on NEPPS. I designated our Associate Administrator for Congressional and Intergovernmental Relations as the National Program Manager for NEPPS to secure strong and consistent leadership in this effort. Last month at its Spring meeting, ECOS adopted a resolution reaffirming its support for NEPPS and reinvigorating its NEPPS subcommittee to ensure continuing attention

toward making improvements.

We are developing tools to help clarify appropriate performance expectations, as well as ensure timely and clear communication in developing Performance Partnership Agreements. We are identifying what additional work is needed to move our Core Performance Measures toward more outcome based measures. We are determined to the State of the State of allow for mining what appropriate steps should be taken by EPA and the States to allow for greater use by States of the flexibility envisioned under the Performance Partnership Grant system to shift resources and funding among media programs. Together, we are determining how effective public participation in the NEPPS process can best be ensured. And, we are developing training to strengthen EPA institutional capacity and remove cultural barriers so our staff understand how the Performance Partnership System allows them to be more effective in finding solutions to keep on Partnership System allows them to be more effective in finding solutions to key environmental problems and better manage their programs.

ADDITIONAL COLLABORATIVE EFFORTS

In addition to our joint work through NEPPS, our partnership with the States is evolving in other areas, leading us to work in a more collaborative, coordinated manner. Together, we are applying innovate approaches to traditional environmental problems, and we have begun to see results. More importantly, we have set the stage for greater cooperation and progress in the years ahead. We are beginning to realize the benefits of our new working relationship, and the spirit of innovation now reflected in so much of our work.

EPA has several other ongoing efforts with our State partners to address today's top issues. There are on-going high level strategic interactions with the States on information, enforcement and compliance assistance, and our media programs.

Environmental Information is the foundation for improving performance in accomplishing our mission to protect public health and the environment. Better, more accurate information and the ability to integrate data across media, as well as exchange data with our State partners, allows for better decisions on priorities and approaches. This need for better use of information and for taking advantage of technological advances led to the creation of the Agency's new Office of Environmental Information. The fiscal year 2001 President's Budget proposes \$30 million to fund the Office of Environmental Information (OEI).

OEI is working with the jointly created State-EPA Information Management Workgroup. This workgroup has developed a set of operating principles that now govern our data and information management activities. Recently, the Information Management Workgroup developed an agreement and charter for a Data Standards Council. Recently adopted by ECOS membership, the Data Standards Council is tasked to develop data standards that will ensure that EPA and State environmental programs can share data meaningfully and efficiently.

In addition, the Agency's Office of Research and Development is working with the States and Tribes to transfer new methods of measuring environmental quality and

analyzing trends in the performance of their programs.

EPA's Office of Enforcement and Compliance Assurance and the States established an EPA/State Enforcement Forum to discuss enforcement and compliance issues of mutual concern. This group has been successful in areas such as identifying national priorities, the development of enforcement policies, and the design of performance measures. Our work with the Forum complements our work with mediaspecific State and local organizations. We look forward to continuing our collaborative relationship with the States and other Forum members.

EPA's Office of Air and Radiation has partnered with the States on development of a "National Air Quality Program: Joint Statement on Vision and Goals" which will be published in the near future. In February 2000, The Office of Air and Radiation convened its first national State and Local Air Roundtable in Florida. The purpose of this forum is to bring together leaders in State and local air program administration three-to-four times per year to assess how we are working together to achieve air quality goals and to discuss issues of mutual concern.

EPA—STATES AGREEMENT TO PURSUE REGULATORY INNOVATIONS

While strengthening our working relationships, NEPPS set the stage for another important development between the States and EPA—consensus about how to test new ideas that would still work hand-in-hand with Federal laws. Based on the States' growing interest in improving environmental management, we negotiated the EPA/State Regulatory Innovations agreement that expresses our joint interest in innovation and specifies how it should occur. It creates a new way for EPA and States to use the flexibility available in existing regulations—allowing new ideas to be tested while assuring consistent levels of environmental and public health protection nationwide. It commits EPA to promote innovations and gives States room for flexibility at all levels, which we are doing. And it commits EPA to consider and respond to these ideas in a timely (90 days) manner.

respond to these ideas in a timely (90 days) manner.

To date, four Innovations Projects with States have been approved, eight are under review and more are in the early consultation phase. The projects that have

been approved are:

- The Texas Natural Resources and Conservation Commission and EPA mutually agreed to use existing discretion to lower the number of trained air opacity inspectors in Texas to align more closely with the use of opacity as a compliance tool. Texas reduced the number of opacity certified inspectors from approximately 100 to 50, yet this will provide the TNRCC with a minimum of 75 more person/days a year to do facility inspections. The savings was created by using a smaller number of inspectors more often and savings hundreds of person/years lost for recertification every 6 months.
- We agreed to do concurrent State and Federal rulemaking for Air permits in Michigan.

· We have an agreement to do a multi-year experiment substituting Michigan's Department of Environmental Quality's MS4 program for EPA's proposed "Phase II" storm water permits. MDEQ is going to start its program 2 years before EPA's Phase II storm water regulations would have gone into effect and Michigan's will cover a broader range of non-point sources than EPA's proposed

EPA and Michigan have agreed to develop a Resource Conservation and Recovery Act (RCRA) lender liability team to conduct research on the possibility of providing lenders with liability protection for RCRA corrective action in cases of foreclosure. While both EPA and Michigan agree that liability protection would make clean-ups easier, this agreement is subject to determining a legal mecha-

nism to allow it.

In another important arena, EPA continues to work with States and Tribes as key partners in the cleanup of Superfund hazardous waste sites. During the last 2 years, in fiscal years 1998 and 1999, the Agency provided approximately \$225 million to States and Tribes to help manage response activities at Superfund sites. In May 1998, EPA released the "Plan to Enhance the Role of States and Tribes in the Superfund Program." Seventeen pilot projects with States and Tribes have been initiated to help provide additional resources and promote increased State and Tribal involvement in the cleanup of hazardous waste sites. In addition, EPA provides 42 involvement in the cleanup of hazardous waste sites. In addition, EPA provides 42 States approximately \$10 million a year to support the development of effective State voluntary cleanup programs. EPA has entered into 14 Memoranda of Agreement (MOA) with States regarding these cleanup programs. The MOAs provide a work-sharing process for the cleanup of hazardous waste sites. The Agency continues to work with States to negotiate and sign additional MOAs.

EPA also is working closely with State and local governments to assess, clean up and redevelop contaminated brownfield sites. The Agency has awarded more than 300 Brownfields Site Assessment Pilots to help large and small communities and Tribes develop brownfield programs, assess contaminated properties, and leverage public and private sector financial resources for cleanup and development. The pilots have contributed to the assessment of 1933 brownfield properties, redevelopment of 151 properties, and helped generate more than 5,800 jobs. Pilot communities have reported a leveraged economic impact of more than \$2.3 billion. EPA also has awarded 68 Brownfield Cleanup Revolving Loan Fund Pilots (BCRLF) to 88 communities. The BCRLF pilots complement the Assessment Pilots by providing

a source of cleanup funding for contaminated brownfield sites.

EPA has broadened its impact and effectiveness by reaching out to work in partnership with public and private sectors. Today, more than ever, EPA recognizes that it must involve everyone—other government agencies, businesses, communities, individuals, and especially our primary partners, the States—to meet environmental goals. The future will undoubtedly raise other challenging issues, but we are now better prepared to respond. Environmental solutions through new partnerships and new tools—that is our expectation for the future. We will meet that expectation along side our State partners with a spirit of innovation.

Thank you, Chairman Smith. This concludes my written testimony. I'll be happy

to answer any questions the committee may have.

RESPONSES BY MICHAEL MCCABE TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. In its testimony, EPA stated that it is moving forward and finding "new approaches to controlling causes of pollution" and that a "new relationship is evolving with the States—one that allows you to adapt to changing priorities and experiment with new ideas." Can EPA provide more specificity on these changes in the Agency? Please address at least the following: What are some of the "new approaches" that EPA has taken? How does EPA allow States to adapt to changing priorities? Are those changes in the law that would make it easier for EPA to priorities? Are there changes in the law that would make it easier for EPA to achieve those kinds of changes?

Response. EPA has placed a strong emphasis on new approaches and innovation to improve environmental protection. For example, new approaches are helping make clean air requirements more flexible and less expensive, while yielding better environmental results. Market-based trading has been successful in controlling acid rain: between 1995 and 1999, national sulfur dioxide emissions fell by more than 4 million tons annually; rainfall in the eastern United States is now about 25 percent less acidic; and some New England ecosystems show signs of recovery. Trading has also successfully reduced emissions of nitrogen oxide, the prime ingredient in smog formation: by 1999, States participating in the Ozone Transport Commission

had cut nitrogen oxide emissions 20 percent below levels allowed by law and 50 percent below 1990 levels.

Water quality permitting, monitoring, and reporting are now integrated into broader strategies that focus on individual watersheds, a move that brings greater efficiency, more attention to local priorities, and better understanding of local conditions. Today, all 50 States, 6 territories, and 80 tribal governments have completed comprehensive watershed assessments, creating the first coordinated overview of

water quality priorities in the nation's history.

New compliance assistance programs and incentives complement strong environmental enforcement. During the past 4 years, 675 companies have identified potential environmental violations at more than 2,700 facilities—voluntarily—based on EPA's offer to reduce or eliminate penalties for facilities that routinely audit their operations, disclose results, and quickly correct problems. Environmental managers in different business sectors, local governments, and Federal agencies can now find information on environmental requirements and pollution prevention by going on-

line to web-based compliance assistance centers.

The National Environmental Performance Partnership System (NEPPS) is one in-The National Environmental Performance Partnership System (NEPPS) is one innovation that allows States to adapt to changing priorities. NEPPS is built on founding principles which include joint priority setting; assessment of environmental conditions and programs; negotiation of Performance Partnership Agreements (PPAs); outlining roles and responsibilities between EPA and States; measurement of environmental performance; and evaluation. Based upon its own assessment of environmental conditions and program capabilities, a State is able to propose priorities and corresponding work activities which may differ from EPA's national program guidance. After consulting with an EPA National Program Manager, EPA Regional Office leaders can agree to provide the flexibility a State needs to address its own priorities, within the boundaries of statutory and regulatory requirements. In addition to varying from EPA priorities, States may use this flexibility to further address environmental and public health protection issues that cross traditional program boundaries, such as environmental justice or children's health.

Under authority provided by Congress to EPA in 1996, EPA now offers States the option of combining up to 16 categorical environmental program grants into a Per-

option of combining up to 16 categorical environmental program grants into a Performance Partnership Grant (PPG). In addition to gaining administrative cost savings, a State can use a PPG to direct Federal resources to a negotiated work plan that addresses the State's priority problems. PPGs can also fund innovative, crossmedia approaches to environmental and public health protection—such as pollution prevention, community-based environmental management, or compliance assistance to small business—that are difficult to fund under traditional categorical grants. Even States that choose to continue receiving their funds from EPA in categorical grants will soon have greater flexibility to direct resources to their own priorities. Under proposed revisions to the Code of Federal Regulations Part 35 rule that governs all EPA State grants, including PPGs, State priorities must be explicitly considered when EPA and States negotiate grant work plans. EPA expects to submit the final rule to the Office of Management and Budget for review in early August. We continue to work with States in improving environmental information in order

to support additional innovations. Having and using better environmental data helps ensure that "new approaches" are in fact better able to protect the environ-

ment and public health.

The joint interest of EPA and States in testing new approaches to flexibility available within existing statutes has led to an EPA/State Regulatory Innovations Agreement. This agreement allows new ideas on environmental management suggested by States to be implemented, while assuring consistent levels of environmental and public health protection nationwide. I listed four innovations projects in my written testimony, and we are considering several more proposals at this time. We have found some flexibility within the current statutes to experiment with innovative approaches. In some cases, it has been necessary to modify our regulations to conduct

such experiments, and we have done so through site-specific rules

EPA is now going through a fundamental change in thinking about what we need to make greater progress in implementing innovative approaches. We believe we have stretched the limits of the law about as far as we can. The authorities now in place have served us well in the past; they have allowed us to make extraordinary progress in cleaning and protecting the environment and public health. However, we recognize that our laws need to change if we are to meet the remaining challenges. The Clean Air Act has not changed in 10 years, the Clean Water Act in 13, and Superfund in 14. These laws need to be improved, and all of us have ideas on how that could be done. It is time for us to begin a public, nonpartisan evaluation of the whole legal framework under which EPA operates and how we can make it better.

Question 2. What specific actions has the Agency taken to reduce internal resistance toward implementation of the National Environmental Performance Partner-

ship System (NEPPS)? What results have you seen?

Response. The National Environmental Performance Partnership System (NEPPS) is a major evolution in how the Agency has interacted with State environmental agencies. It requires a fundamental change in approach by Agency employees from one of oversight and command-and-control to one of partnering with a capable government entity. Three steps have been taken recently to reinforce the importance of NEPPS: 1) the Agency has reaffirmed its commitment to NEPPS and to provide leadership and accountability designated the Associate Administrator for Congressional and Intergovernmental Relations to as the National Program Manager for NEPPS; 2) the Agency has tasked its senior career managers to convey to all employees the value of NEPPS to their work and the environment; and 3) the Agency is enhancing training to empower employees to carry out NEPPS and integrate the components of NEPPS into their daily work. While there are many challenges ahead in making the transition to a culture of partnership between EPA and States, EPA employees increasingly see the value that partnership with States brings to accomplishing our mission of protecting public health and the environ-

Question 3. EPA, in its testimony, recognized that States need more flexibility to address their environmental priorities. Performance Partnership Agreements (PPA) and Performance Partnership Grants (PPG) seem like a good first step in this direcand Performance Partnership Grants (PPG) seem like a good first step in this direction. Even those tools seem limited, however. The examples provided in the testimony focus largely on process and paperwork issues. More substantive steps are needed. For example, could a State use these programs to implement alternatives to certain Federal programs, like the TMDL program? What can the EPA do to make these tools more useful in achieving substantive changes in programs?

Response. One of the principal benefits of the National Environmental Performance Partnership System (NEPPS) is that it fosters joint development of priorities and work-sharing between EPA and States. As a result of negotiating Performance Partnership Agreements (PPAs) and Performance Partnership Grants (PPAs) the

Partnership Agreements (PPAs) and Performance Partnership Grants (PPGs) the States and EPA can work together on difficult issues. For example, PPAs between Region 10 (Seattle) and the States of Oregon and Washington divide up the work for developing total maximum daily loads (TMDLs) for specific pollutants under the for developing total maximum daily loads (TMDLs) for specific pollutants under the Clean Water Act. EPA is focusing on developing TMDLs for high priority interstate waters and for water bodies on Federal and Tribal lands, while the States are focusing on developing TMDLs for waters within their States and on State and private lands. Similarly, Region 4 (Atlanta) and the State of Georgia have used their PPA/PPG as a vehicle for dividing up work on TMDLs.

In Nebraska, the PPA includes the Nebraska Mandates Management Initiative (NMMI), an innovative approach to help small and rural governments cope better with nublic health and environmental laws and regulations. The Initiative uses an

with public health and environmental laws and regulations. The Initiative uses an intergovernmental and interdisciplinary team process to help local leaders better understand regulations, analyze local situations and issues to determine which problems pose the greatest risk, prioritize those risks, and find technically and financially feasible solutions to the problems. The Initiative has proven extremely successful, with outcomes including significant savings of capital expenditures; co-ordination of regulatory, technical, and financial assistance programs; and empowerment of local leaders and regulatory officials to encourage flexible, cus-

tomized, and common-sense solutions.

EPA is working continuously to improve implementation of NEPPS. We are developing comprehensive training materials based upon our experience to date as to what works and what does not. We are constantly analyzing feedback we get from within and outside the Agency. Through work inside EPA as well as in collaborative efforts with States, we are addressing barriers and developing tools to make NEPPS more useful in achieving substantive changes in environmental protection. Among efforts currently underway we are: more clearly defining the parameters of available flexibility; improving environmental information collection and use; and finding ways to reduce low value, high cost reporting.

Question 4. The GAO Report on EPA-State Collaborations makes the point that EPA's 1995 Agreement with the States called for a joint evaluation system for EPA and the States to work together to ensure continuous improvement in their partnership effort. That evaluation apparently has never been done. GAO also recommended that a joint evaluation be conducted. Why hasn't EPA initiated the evaluation? What will the Agency do in the future to ensure that the evaluation is done and that any recommended improvements are actually implemented?

Response. EPA and the States have conducted joint workshops to assess implementation, identify barriers, and work to remove those barriers. In addition, joint EPA/State work groups have tackled implementation issues such as core perform-

ance measures, information management, and reporting burden reduction.

Prior to the release of the GAO report in June 1999, EPA and the Environmental Prior to the release of the GAU report in June 1999, EPA and the Environmental Council of the States (ECOS) met to discuss the possibility of conducting a more formal joint evaluation of NEPPS. Because several outside evaluations had been recently conducted (GAO, EPA Office of Inspector General, and the National Academy of Public Administration [NAPA] research reports), EPA and the States decided to use the National EPA-EGOS NEPPS Workshop in the Fall of 1999 to review the recommendations made in these evaluations. Attendees at the workshop discussed the evaluation results as well as their even experiences within the NEPDS process. the evaluation results, as well as their own experiences within the NEPPS process, to develop recommendations for action by EPA and the States.

to develop recommendations for action by EPA and the States.

EPA and the States are now following up on these recommendations. Followup work includes giving increased leadership attention to NEPPS, developing training for staff so they understand how NEPPS improves their ability to do their work, improving the quality and usefulness of PPAs and PPGs, and examining how to accelerate efforts to "right size" State reporting. We also are anticipating the completion of the NAPA report due in November of this year. EPA and the States will rejout this progress made in addressing the various recommendations. view this report and the progress made in addressing the various recommendations before deciding what additional efforts will be undertaken.

Question 5. EPA acknowledged in its testimony that environmental problems today are much more complex than those of the past. Would you agree then that we need a stronger role for States and their innovations in dealing with these more

complex issues today more than we have in the past?

Response. Over the last 30 years the capacity of the States to play a pivotal role in environmental and public health protection has increased dramatically. The States have become important laboratories where innovative ideas for more effective management can be tested and proven. EPA and States have collaborated on many innovative ideas with EPA providing resources, technical assistance, and expertise. Many of these ideas hold promise for implementation on a ideas wider basis. EPA will continue working with States to help build their capacity for innovation so they can assume an even stronger role in generating and testing many more new ideas.

Question 6. The Environmental Law Institute has recommended that Congress authorize the flexibility and workload shifting embodied in the PPA and PPG con-

cepts. Does EPA support this recommendation

Response. We have found a great deal of flexibility within the current statutes to implement NEPPS. We are working hard to address the barriers that have been identified. We believe this is a more productive allocation of our limited resources than proposing statutory changes specific to NEPPS or PPGs at this time.

RESPONSES BY MICHAEL MCCABE TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. In your testimony, you state that "the problems we face today are much more complex than those of the past." and specifically reference nonpoint source water pollution as an example. Does the more complicated and site specific nature of many environmental challenges, such as nonpoint source pollution, argue moving away from existing "one-size-fits-all" regulation toward a more flexible and locally based approach? How do you envision such a flexible program working; in what areas do you feel the States should have greater flexibility?

Response. The Agency has many efforts underway to move away from the "one-size-fits-all" approach toward more flexible and locally based approaches to environmental protection. The National Environmental Performance Partnership System

mental protection. The National Environmental Performance Partnership System (NEPPS), which now serves as the framework for our partnership with States, is designed to provide States with greater flexibility in how they solve their most pressing environmental problems and provides a vehicle for States and EPA to negotiate innovative approaches. In the regulatory arena, collaborative efforts such as the EPA/State Regulatory Innovations Agreement and Project XL are seeking innovative ways to achieve environmental protection. The Community Based Environmental Protection program and EPA's Watershed Protection Approach to environmental Protection program and EFAS watershed Protection Approach to Christian mental management are examples of developing protection efforts based on the conditions and needs of local geographic areas. Through such collaborative efforts, EPA, States, local governments, businesses, and other stakeholders are working to provide greater flexibility in how environmental problems are solved while ensuring there is continuous improvement in environmental performance.

NEPPS. The National Environmental Performance Partnerships System (NEPPS) is the operating framework for EPA's working relationship with States to accomplish our joint mission of protecting public health and the environment. Through NEPPS, States can propose alternative approaches to priority problems and direct Federal funds to implementing these approaches. Under NEPPS, EPA and States set priorities jointly based on an assessment of environmental conditions and program needs as well as consideration of national, Regional, and State priorities. As a result of these negotiations, States have greater flexibility to focus environmental protection efforts on their most pressing environmental priorities. To address the jointly negotiated priorities, the Performance Partnership Grant (PPG) authority allows States to combine funds from up to 16 categorical grants in a single PPG. Another key element of NEPPS is oversight that is tailored to a level appropriate to the performance of each State. We continue to work both internally and with States to make the granting of flexibility more transparent.

Project XL. A good example of the short-term results—and long-term promise of

Project XL. A good example of the short-term results—and long-term promise of our search for innovative site specific solutions in partnership with States, business, and the public can be seen in Project XL. Launched in 1995, this innovative program tests ideas that could make the nation's environmental protection system

more efficient and effective.

Through Project XL, participants can reap the benefits of reduced administrative burdens or increased regulatory flexibility if they take steps to do more than just comply with regulations—achieving results that go beyond what the law requires. If a pilot project is successful, it is evaluated to see if those innovations can be more broadly applied to other facilities. This willingness to experiment outside the regulatory arena signifies our emphasis on getting results, not simply enforcing regulatory requirements. To date, 25 projects are being implemented under Project XL.

It a pilot project is successful, it is evaluated to see if those innovations can be more broadly applied to other facilities. This willingness to experiment outside the regulatory arena signifies our emphasis on getting results, not simply enforcing regulatory requirements. To date, 25 projects are being implemented under Project XL. Watershed Protection Approach. EPA's Watershed Protection Approach is effectively protecting and restoring aquatic ecosystems while protecting human health. Rather than just addressing an individual water body or discharger, this strategy has as its premise that many water quality and ecosystem problems are best solved at the watershed level. Major features of the Watershed Protection Approach are: targeting priority problems, promoting a high level of stakeholder involvement, integrated solutions that make use of the expertise and authority of our State partners and other agencies, and measuring success through monitoring and other data gathering.

Question 2. You argue that "existing regulatory structures. . . . present some challenges to our efforts to find new ways of doing business." Do you feel that our existing environmental laws such as the Clean Water Act, provide the necessary flexibility?

Response. As described in my testimony, EPA and State regulators have successfully tackled and addressed many of the nation's pressing environmental concerns. Building on these successes, EPA and States are now recognizing and focusing our attention on problems that are not as easily targeted by the existing statutory and regulatory structure.

We have found some flexibility within the current statutes to experiment with innovative solutions to environmental problems. In some cases, we have made site-

specific regulatory changes necessary to carry out these experiments.

EPA is now going through a fundamental change in thinking about what we need to make greater progress in implementing innovative approaches. We believe we have stretched the limits of the law about as far as they can go. The authorities now in place have served us well in the past; they have allowed us to make extraordinary progress in cleaning and protecting the environment. However, we recognize that our laws need to change if we are to meet the remaining environmental challenges. The Clean Air Act has not changed in 10 years, the Clean Water Act in 13, Superfund in 14. These laws need to be improved, and all of us have ideas on how that could be done. It is time for us to begin a public, nonpartisan evaluation of the whole legal framework under which EPA operates, and how we can make it better.

RESPONSES BY MICHAEL MCCABE TO ADDITIONAL QUESTIONS FROM SENATOR LAUTENBERG

Oversight

Question 1. In 1995, the GAO reported that States complain about excessive EPA oversight. States felt that a highly performing State should get less oversight than a State that is having difficulty implementing a program. Is there a method of measuring such a State performance agreed to by both EPA and the States? Are States providing and is EPA assembling the information necessary to identify highly performing States? If so, what are you finding—which States are performing well and which are not performing well?

Response. EPA Regional Offices work with each of their States to address State performance. EPA Regional of rices tailor the type and amount of oversight—as well as the kinds of technical and other assistance EPA will provide—to the needs and performance of each State. Agreements between EPA and the State about how EPA will conduct oversight and what technical assistance EPA will provide are often incorporated into a Performance Partnership Agreement (PPA) or other EPA-State agreement. Among the information considered in the negotiation of these agreements is an assessment of the State's performance. As envisioned by the National Environmental Performance Partnership System (NEPPS) that serves as the framework for EPA-State partnerships, EPA and the State will ideally evaluate the effective of the State of the

tiveness of their efforts jointly.

When EPA was collaborating with the States in the development of NEPPS, States representatives said they did not want EPA to rank or compare one State against another. As a result, efforts to develop criteria for the leadership aspects of NEPPS were dropped. However, there are some examples where criteria for evaluating States have been developed. of NEPPS were dropped. However, there are some examples where criteria for evaluating States have been developed, such as Region 8's enforcement oversight model. While specific approaches to oversight may vary by Region and program, EPA's oversight efforts are designed to foster continuous improvements in each State program. In evaluating a State program, EPA considers a complex set of factors such as: comparisons of current performance measures against past performance; whether the State is meeting its program commitments; the quality and adequacy of its program efforts; and factors outside the control of the State agency that might be affecting its performance. EPA discusses reasons for any problems and what could be done to improve with the States, and under NEPPS, a joint evaluation approach is considered the ideal. is considered the ideal.

We continue to explore ways that would be acceptable to both EPA and States to make differential oversight more transparent. The EPA-State Agreement on Core Performance Measures puts an important tool in place that should help in measuring individual State environmental and program performance and form a more solid and equitable basis for implementing a more formal approach to differential overcight in the future. sight in the future.

Environmental Reporting Reform

Question 2. As you know, I am drafting a bill to streamline environmental reporting. The bill will require EPA to give each business in the U.S. one point of contact for all Federal environmental reporting requirements. This "one-stop" electronic reporting system will use a common nomenclature throughout and use language understandable to a business person, as opposed to an environmental specialist. It will also provide pollution prevention information to the business. The following questions relate to that bill.

According to Mr. Bradford's testimony, the States and EPA are working together to accomplish many of the objectives I am pursuing in drafting my bill. It remains unclear to me, however, which specific objectives are currently envisioned by the EPA-State partnership; when we might expect to see them realized, and by what means. Your answers to the following questions will help clarify my understanding of the State-EPA partnership.

How long have EPA are State and State are according to the state of the state

How long have EPA and State agencies been working to integrate environmental

information management and to streamline environmental reporting?

Response. EPA began its preliminary integration efforts with States in 1990 with the development of the Facility Index System, a way of tracking a facility through different data sets. In the ensuing years, the efforts expanded to include direct program assistance to States through the One-Stop Reporting Program; Reinventing Environmental Information (REI) efforts designed to establish basic data standards and to implement electronic reporting; and convening in 1998, the State/EPA Information Management Workgroup to deal with ongoing policy issues surrounding information management. Each of these efforts contributed to the development of the Information Integration Initiative in 1999, the next logical step in developing a comprehensive data exchange network that will provide a wide-range of shared information among States, EPA, tribes, localities, the regulated community, and other data

Question 2a. Which of the following attributes will the integrated reporting system envisioned by the EPA-State partnership expect to have.

Will a facility be able to identify, through one point of contact, all EPA reporting requirements that apply to it? Will a facility be able to identify as well, through the same point of contact, all State, tribal, and local environmental reporting requirements that apply to it?

Response. At present, EPA has not created a single place where a given facility can identify all reporting requirements that apply to it. However, EPA is taking

steps toward consolidating the availability of information on Federal regulatory requirements and compliance assistance such as:

1. placing EPA regulations and guidance on line;

2. providing links to information via sector specific codes;

2. invitating limits to information via sector specific codes,
3. issuing simplified guidance on reporting; and
4. establishing compliance assistance centers in cooperation with States and industry associations.

EPA views these steps as critical to providing necessary assistance and guidance. The integration initiative effort to develop a data exchange network also will be able to provide internet links to State, Tribal, local, and other Federal agency required. ments. These links can in essence create a "roadmap" to information needed by the regulated community to improve compliance with environmental laws.

Question 2c. Will a facility be able to submit, through the same point of contact, all information that is normally submitted directly to EPA programs?

Response. The goal of EPA's Central Data Exchange (CDX) effort is to centrally process as many of EPA's data collections as possible. For information security or other reasons, such as protection of confidential business information, some data collections may remain independent of CDX.

Question 2d. Will a facility be able to submit as well, through the same point of contact, all information required under applicable State, tribal, and local environmental reporting requirements?

Response. Our current efforts focus on centralizing the exchange of data with our co-regulators, emphasizing data to ensure compliance with Federal requirements.

Question 2e. Will the reporting system direct the facility to information on applicable OSHA reporting requirements and environmental reporting requirements administered by Federal agencies besides EPA?

Response. While our current efforts focus on centralizing the exchange of data with co-regulators to ensure compliance with EPA's requirements, it should be possible to create other Federal links as necessary in the future.

Question 2f. Will the reporting system use data standards for units of measure, terms for chemicals, pollutants, waste, and biological material, and methods of identifying reporting facilities, developed in consultation with industry, environmental

groups and other stakeholders?

Response. Yes. EPA is working to establish, in consultation with our external partners, both data element and "format" standards for external data reported to EPA. The Environmental Data Standards Council consists of EPA, State and Tribal members. Its purpose is to jointly develop and implement standards which facilitate the efficient exchange and use of environmental information. To date, the Environmental Data Standards Council has approved standards for facility identification, date, Standard Industrial Classification/North American Industrial Classification System (SIC/NAICS), and Latitude/Longitude. The Council is working aggressively to also standardize chemical identification, biological taxonomy, and other data sets widely used by EPA programs, States, and Tribes. Work has been initiated on standards development for enforcement and compliance, permitting, Tribal identifiers, and geographic data elements. All of these standards will be provided to the public for review and comment before they are made final by the Council.

Question 2g. Will the reporting system use an "open data format" that allows facilities to download information from their own internal data management systems

directly to the integrated reporting system?

Response. EPA's Central Data Exchange (CDX) program has the lead for establishing the "transmission formats" which prescribe the arrangement of standard data elements in reporting transactions. CDX has recently received approval data elements in reporting transactions. CDX has recently received approval through the American National Standards Institute, an industry/government standards setting body, to deploy a standard data format for exchanging compliance data. This format is referred to as the ANSI X12 Environmental Compliance Reporting (179) Transaction Set. CDX is now in the process of deploying the ANSI X12 179 transaction set, and is also in the process of developing equivalent "Internet"-based formats, using "extensible markup language," to allow a broader range of regulated entities to provide data electronically.

There should be many benefits if facilities connect their internal management sys-

There should be many benefits if facilities connect their internal management systems to their environmental management and reporting systems. These benefits could include improved data quality, identification of pollution prevention and cost-saving opportunities, and reporting burden reduction. EPA will engage in outreach to commercial vendors developing enterprise resource planning systems, and other data management systems for the regulated community, and will encourage them

to include environmental management and reporting components that are compatible with the integrated reporting network.

Question 2h. To ease reporting by businesses with facilities in more than one jurisdiction, will EPA and State, tribal, and local agencies all use the same data format and data standards?

Response. The Environmental Data Standards Council will encourage States and Tribes to adopt the approved set of data standards and transmission formats. As currently envisioned, all members of the integrated reporting network would be reequired to use approved standards and formats as a condition of membership in the network. However, EPA cannot require States or Tribes to adopt content and format standards, nor can we require these parties to participate in the integrated information network. Based on our recent work with States and Tribes, it is clear that many, if not all, of these entities will partner with EPA in the network.

Question 2i. Will a facility be able to receive information on pollution prevention

technologies and practices through the reporting system?

Response. The integrated system envisioned by the EPA-State partnership is one which will allow facilities and government to exchange a broad range of information such as multimedia environmental data, geographic data, and facility data in a stewardship environment. As the network evolves, a wider array of information, including pollution prevention technology and practices information, may also ultimately be made accessible.

Question 2k. By what date may we expect the envisioned integrated reporting sys-

Response. The Agency will begin to see implementation of concrete integration projects in October, 2000, that directly support the State/EPA data exchange network. The projects are:

integration of information about regulatory activities (phase 1);

implementation of a Facility Registry System;

- expanded integration and access of geospatial information; and
- initial implementation of an integrated central data exchange capability.

These projects create new functionality in data base integration, access/application, and State/external data flows

EPA also is working closely with our State partners and plans to use the fiscal year 2001 funding request to:

- support collaborative State development and knowledge/technology sharing;
- work with other data partners beyond States; and
- coordinate the Agency's other program information efforts with States to modernize and integrate.

The States and EPA anticipate completion of a fully developed, nationally integrated Network, used by States, Tribes, localities, the regulated community, EPA and the public within the next 3 to 5 years.

Are the air, water, and waste programs of EPA and the State agencies fully participating in the development of the integrated reporting system?

EPA's information integration effort is, foremost, a partnership with the States. EPA also has included representatives from every major Agency program office. These representatives have been organized into a multi-disciplinary team of technical information experts responsible for recommending and developing the broad foundation pieces for:

- defining and implementing a national network for environmental data exchange in partnership with States and other data partners;
- assisting EPA's information partners to participate in the exchange network; positioning EPA to participate in the network and the data exchange it will
- facilitate; and
- integrating existing information collection processes with data standards and a centralized data exchange to streamline information sharing.

STATEMENT OF PETER F. GUERRERO, DIRECTOR, ENVIRONMENTAL PROTECTION IS-SUES, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE

Mr. Chairman and members of the committee: I am pleased to be here to discuss our recent assessment of the National Environmental Performance Partnership System (NEPPS). NEPPS was established by a May 1995 agreement between the Environmental Protection Agency (EPA) and the States as a new framework for improving their working relationship, and for improving the effectiveness of States' environmental programs. Under the program, a State and EPA may enter into a Performance Partnership Agreement that identifies the State's environmental goals and priorities, and how both EPA and State officials are to address them. The two sides may also agree on a Performance Partnership Grant, which is intended to allow the State greater flexibility in targeting limited resources to meet its most pressing

Both EPA and the States launched NEPPS to help address long-standing issues affecting their working relationship. Among these issues were concerns that EPA (1) is inconsistent in its oversight of States from one region to another, (2) sometimes micromanages the States' programs, (3) does not provide sufficient technical support for the States' programs increasingly complex requirements, and (4) often does not adequately consult the States before making key decisions affecting them.

In signing the agreement that established NEPPS, EPA and State leaders stated that they couldn't to "extraorthements are requirements."

In signing the agreement that established NEPPS, EPA and State leaders stated that they sought to "strengthen our protection of public health and the environment by directing scarce public resources toward improving environmental results, allowing States greater flexibility to achieve those results, and enhancing our accountability to the public and taxpayers." Among the key elements of NEPPS were (1) EPA's commitment to give States with strong environmental performance greater flexibility and autonomy in running their environmental programs and (2) the agreement between EPA and the States to develop effective "core" performance measures to better understand whether the States' programs are achieving their intended results tended results.

Given the expectation among participants that NEPPS could deal with many of the issues that have long impeded the EPA-State relationship, the Chairman, Subcommittee on VA, HUD, and Independent Agencies, House Committee on Appropriations, asked us to examine the progress made by EPA and the States since the 1995 Agreement. In response to this request, our June 1999 report (1) identified the status of grants and agreements made under NEPPS between EPA and participating States, (2) examined the progress that EPA and the States have made in developing results-oriented performance measures to be incorporated into NEPPS agreements results-oriented performance measures to be incorporated into NEPPS agreements and grants to the States, (3) examined how EPA oversight may or may not have been changing in States that were participating in NEPPS, and (4) discussed the extent to which the use of these performance partnership agreements and grants had achieved the benefits envisioned for the States and the public. 1

In summary, Mr. Chairman, we found the following:

State participation in NEPPS grew from 6 pilot States in its initial year in fiscal year 1996 to 45 States by the end of fiscal year 1998. Of that number, 31 States had both Performance Partnership Agreements and Performance Partnership Grants with EPA in 1998; 12 States had grants only; 2 States had Agreements only;

orants with EPA in 1998; 12 States had grants only; 2 States had Agreements only; and 5 States did not participate at all.

• EPA and the States agree on the importance of measuring the outcomes of environmental activities rather than just the activities themselves, in order to help them better understand whether their programs are achieving their intended results. Despite a number of technical challenges (e.g., the inherent difficulty in quantifying certain results, and the difficulty of linking program activities to environmental results) and disagreements between EPA and the States on such matters as the degree to which States should be permitted to vary from the national core measures, EPA and State leaders have managed to agree on a set of core measures for fiscal year 2000 that are widely regarded by EPA and State officials as significantly improved from those negotiated in previous years.

• The initial expectation that participation in NEPPS would be accompanied by reduced Federal oversight of States has thus far been realized to only a limited de-

gree. We identified a number of instances among the six States that we visited where oversight reduction did accompany participation in the system. However, in other cases cited by both State and EPA regional officials, it was difficult to attribute reduced oversight directly to NEPPS participation. Other instances were cited where oversight had either remained the same or had actually increased.

 EPA and State participants cited a number of benefits associated with NEPPS noting, for example, that participation provided a means of getting buy-in for innovative and/or unique projects and served as a tool to divide an often burdensome workload more efficiently between Federal and State regulators. Yet while participants from each State indicated that their participation in the voluntary program would probably continue, they also consistently expressed the view that the benefits of the program should be greater; that the program has yet to achieve its potential; and that improvements are needed. The 1995 Agreement anticipated the appro-

 $^{^{\}rm I}$ Environmental Protection: Collaborative EPA-State Effort Needed to Improve New Performance Partnership System (GAO/RCED-99-171)

priateness of such reflection in calling for "a joint evaluation system for EPA and the States to review the results of their efforts to ensure continuous improvement. We recommended in our report that such a joint evaluation process be initiated, and suggested a number of issues to be considered for attention during such a process.

Under NEPPS, States may voluntarily enter into "Performance Partnership Agreements" with their EPA regional offices. While there is considerable flexibility in how the agreements may be designed, they typically provide a means for EPA and the States to negotiate such matters as (1) which problems will receive priority attention within the State programs, (2) what EPA's and the States' respective roles will be, and (3) how the States' progress in achieving clearly defined program objectives will be assessed. An important component of the Partnership Agreements is the use of a common set of national environmental indicators (called "Core Performance Measures") to measure the effectiveness and success of States' environmental programs. In their efforts to develop these Performance Measures, EPA and State officials have sought to move beyond counting the number of actions (such as the number of inspections conducted or environmental enforcement actions taken), and

number of inspections conducted or environmental enforcement actions taken, and increasingly toward evaluating the impact of programs on the environment. While NEPPS provides the overarching framework for developing partnership agreements, Performance Partnership Grants, authorized by the Congress in April 1996, serves as a major tool to implement them. This program allows States to request that funds from 2 or more of the 15 eligible categorical grants be combined to the componental antities greater flavibility in targeting limited resources to to give governmental entities greater flexibility in targeting limited resources to their most pressing environmental needs. These grants are also intended to be used to better coordinate existing activities across environmental media and to develop multimedia programs. While the Partnership Agreements are designed to complement the Partnership Grants, States are free to negotiate both agreements and grants or to decline participation in NEPPS altogether.

Growth of State Participation in NEPPS
In fiscal year 1996, NEPPS was initially tested on a pilot basis with six participating States. EPA and the States viewed the first year as a time to experiment with the new system and various ways to implement it. The number of participating States subsequently increased to 45 States in fiscal year 1998, although the extent of participation varied widely. For example, half the States have negotiated both Partnership Agreements and Partnership Grants through their lead environmental agencies that cover most EPA programs; other States have substantially limited their participation and cover fewer programs.

States have also varied considerably in the detail and content of their Agreements. Senior officials in EPA's Office of State and Local Relations explained that the agency has not attempted to impose uniformity on the development of Partner-ship Agreements at this early stage of the NEPPS process, and has therefore re-frained from issuing guidance on how the agreements should be structured. Hence, the agreements vary widely in content and emphasis, reflecting each individual State's conditions and priorities and reflecting the results of negotiations with their respective EPA regional offices.

Progress in Developing Results-Oriented Measures

Both EPA and the individual States have had a number of efforts underway to develop effective performance measures to better understand whether their programs are achieving their intended results. Their collective efforts to develop such measures for NEPPS has centered around the Performance Measures that were negotiated between EPA and the Environmental Council of the States during the past several years (The Council is a national nonpartisan, nonprofit association of State and territorial environmental commissioners.). The effort faced a number of technical challenges inherent in developing defensible results-oriented measures. The results of activities designed to improve water quality, for example, can take years to appear, and the capability of many States to monitor a significant share of their waters is limited. Moreover, even if environmental conditions could be reliably and consistently measured, it may be particularly difficult to demonstrate the extent to which a specific government program affected that condition. Officials from Florida (which has made a significant commitment to measuring compliance rates and environmental indicators), for example, explained that such factors outside their control as economic activity and weather conditions, make it particularly difficult to link program activities with changes in environmental conditions.

In addition to these technical challenges in developing results-oriented measures, the effort was also challenged by disagreements between EPA and the States on issues such as (1) the degree to which States should be permitted to vary from the national Performance Measures and (2) the composition of these measures, particularly regarding the degree to which pre-existing output measures should be retained as newer outcome measures are added. Overall, however, the States and EPA made progress in meeting these challenges. For example, officials in four of the six States whose programs we examined had developed and implemented their own measures to address their own priorities. At the same time, program officials in each of the six States also agreed to report information required for the national Performance Measures agreed upon between the Environmental Council of the States and EPA. In addition, while they maintained that further refinement will still be needed, EPA and State officials agreed on a set of fiscal year 2000 measures that, by most accounts, is a substantial improvement over those measures negotiated from previous years in that they are fewer in number (i.e., better targeted to address key goals) and generally more outcome-oriented.

Reductions in Oversight Attributable to NEPPS Have Thus Far Been Modest

Instances of greater State flexibility and reduced EPA oversight tended to focus on reducing the frequency of reporting and, in some cases, the frequency of onsite reviews. Maine environmental officials, for example, noted that more frequent, and less formal, dialog between the program staff and regional staff had replaced written reports, saving time and improving the level of cooperation between EPA and State staff. While Maine program officials attributed the reductions in part to the assignment by EPA's Boston regional office of a liaison for each State's delegated programs, they credited NEPPS with formalizing or legitimizing the changes. Likewise, Florida program officials identified sizable reporting reductions in its waste program as a result of a joint effort with EPA included in the Partnership Agreement. Other instances were cited by officials in Georgia and Minnesota.

ment. Other instances were cited by officials in Georgia and Minnesota.

Aside from such individual instances of streamlining reporting requirements and similar tracking efforts, the large majority of the State officials we contacted generally maintained that participation in NEPPS had not yet brought about significant reductions in reporting and other oversight activities by EPA staff, nor had it resulted in significant opportunities for them to focus on other priorities or to shift resources to weaker program areas. EPA officials generally acknowledged this point, but they provided specific reasons why the agency's oversight of State programs has not significantly decreased as a result of NEPPS—and in some cases has actually increased. In this connection, we noted that environmental statutes or regulations sometimes prescribe the level of oversight required of EPA which, according to some headquarters and regional officials, leaves the agency with little room to scale it back. These officials also pointed to (1) audits that identified problems in some States' enforcement programs (such as the underreporting by States of significant violations and precipitous decreases in the number of State enforcement actions taken), which they believed called for greater oversight, and (2) the difficulty in scaling back oversight without measurable assurances that the States' programs experimenting with alternative compliance strategies are achieving their desired results.

menting with alternative compliance strategies are achieving their desired results. At the same time, EPA officials cited a number of barriers preventing greater State flexibility that could be more readily addressed. For example, senior EPA officials in three of the four regional offices that we visited acknowledged that support for NEPPS within EPA varies. One senior regional official explained that many regional managers and staff are often more comfortable with pre-existing ways of doing business and are unsure as to how they can accomplish their work in the context of the partnership approach under NEPPS. He voiced the opinion that there may be a need for training EPA regional staff in NEPPS implementation. Another senior regional official said that some agency staff will only take NEPPS seriously when EPA's reward system is more closely tied to their performance in implementing the program. Headquarters officials also acknowledged another problem cited by many of the State officials we contacted—that headquarters guidance, initiatives, and special requests sometimes arrived at the regions too late to be used effectively in regional-State Partnership Agreement negotiations, and that they were working to address the problem.

Benefits of NEPPS Participation Cited, But Full Potential Has Yet to be Realized

Senior officials and program managers from each of the six States in our review agreed that NEPPS has provided their programs with worthwhile benefits, and that its potential for achieving a more effective partnership between EPA and the States was still worth pursuing. Among the examples cited were instances in which Partnership Agreements were used to more efficiently divide a heavy workload between regional and State staff, and in which States were able to take at least limited advantage of the flexibility in their Partnership Grant agreements to shift resources among their media programs. Overall, however, the most frequently cited benefit

among both State and EPA regional participants was that the two-way negotiation process inherent in NEPPS has fostered more frequent and effective communication between regional and State participants and improved their overall working relationship.

At the same time, State officials almost unanimously expressed the view that the benefits from their investment of time and resources into NEPPS should be greater; that it has yet to achieve its potential; and that improvements are needed. Of particular note, almost all of the State officials we interviewed cited progress in achieving reduced oversight and greater autonomy as critical to the future success of NEPPS. They also cited the need to continue improving performance measures; address the barriers impeding greater acceptance of NEPPS among staff within both EPA and State agencies; determine how to make greater use of the flexibility under Partnership Grants to shift resources and funding to address higher priorities; and improve how EPA's headquarters offices provide their input into State-regional NEPPS negotiations.

These concerns pose challenges for the future of NEPPS—challenges that were anticipated by the 1995 Agreement that launched the program which called for a joint evaluation system for EPA and the States to review the results of their efforts to ensure continuous improvement. On the basis of the information that can be gleaned from the experiences to date of participating States and regional offices, we concluded that it was now appropriate to undertake such a joint evaluation process. We recommended that EPA work with senior-level State officials to initiate a joint evaluation process that (1) seeks agreement on the key issues impeding progress in developing a more effective National Environmental Performance Partnership System and (2) develops mutually agreeable remedies for these issues. Among the issues we suggested that such a process could focus on were the following:

- Developing a set of flexible guidelines, to be used as a tool by State and EPA regional NEPPS negotiators, that could help to clarify the appropriate performance expectations and other conditions that States must meet to achieve reduced oversight in carrying out their environmental programs, and the type of reduced oversight (e.g., reduced frequency of reporting, greater autonomy in setting program priorities) that could be achieved.
- Identifying what additional work is needed to improve the national Core Performance Measures recently negotiated by EPA and State representatives for fiscal year 2000.
- Alleviating the resistance among some staff (both within EPA offices and among participating State agencies) toward implementing NEPPS through training efforts and other strategies.
- Determining what appropriate steps should be taken by EPA and the States to allow for greater use by States of the flexibility envisioned under the Performance Partnership Grant system to shift resources and funding among their media programs.
- Determining how effective public participation in the NEPPS process can best be ensured.
- Developing ways to improve communication among EPA's headquarters and regional offices and participating States to ensure that States are given clear and timely information on whether key elements of their NEPPS-related agreements have the full buy-in of key EPA offices.

In response to this recommendation, EPA pointed out that in March 1999, EPA and the Environmental Council of the States agreed in principle to conduct such a joint evaluation and that it would review many of the issues cited in our recommendation. Since that time, however, progress has been limited. According to an official with the agency's Office of State and Local Relations, EPA and the Council have yet to agree on such basic issues as who should undertake the evaluation and what its scope should be. Furthermore, it is unclear when final resolution will be reached. Our findings suggest that future support for this program will depend heavily on the timely resolution of many of the barriers that have thus far impeded its effectiveness. Therefore, we believe timely efforts by EPA and the Council to identify what specific issues are to be addressed, and to identify a timetable for addressing them, would be important steps in expanding both the participation in, and effectiveness of, this important program.

This concludes my prepared statement, Mr. Chairman. I would be pleased to address any questions that you or other members of the committee may have.

RESPONSES BY PETER GUERRERO TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. GAO stated in its report that Federal oversight of States participating in the National Environmental Performance Partnership System (NEPPS) was not reduced as expected. Among the factors GAO cited are: (a) the inherent difficulty in "letting go" on the part of some regulators and (b) EPA's multi-level organizational structure which complicates things. One of GAO's recommendations is to reduce the resistance toward implementation of NEPPS through training and other strategies. What are some of those strategies that GAO believes can produce a more cooperative agency?

Response. One key step would be for the agency to achieve a shared understanding, both within EPA and between EPA and the States, on the core measures that articulate the goals and objectives all key parties are trying to achieve. In this connection, the agency needs to reconcile the differences that still exist between its GPRA measures, and the core performance measures it has negotiated with the Environmental Council of the States.

Once this agreement is achieved, NEPPS goals and objectives need to be incorporated into performance expectations among EPA employees throughout the agency (and, ideally, among their State counterparts). Until this occurs, the responsibilities for which EPA staff are currently being held accountable will tend to supercede NEPPS-related activities in priority.

NEPPS must be approached with strong communication skills and an open mind as to how environmental problems can best be addressed. Such attributes are important for all NEPPS participants, but particularly for those at the EPA regional level, where managers and staff sometimes have to balance conflicting headquarters and State priorities. This makes their role particularly important in helping to forge consensus under challenging circumstances. Our interviews with both EPA and State environmental managers suggest that training to develop these skills would be a good investment in helping NEPPS to succeed.

In the past, Headquarters offices have been criticized for not providing States and regions with timely input needed to facilitate their NEPPS negotiations. In particular, States have complained that headquarters sometimes imposes new requirements on State programs during the year—after the States and their corresponding EPA regional offices have already agreed on the work to be done for the following year. In an effort to be responsive to this issue, headquarters offices have attempted to issue 2-year guidance to regions and States to allow them greater continuity in carrying out their agreements. We believe this is a step in the right direction.

Question 2. In your opinion, what leadership qualities are needed to best overcome those barriers to fully implement the NEPPS program?

The most important step that senior EPA and State managers can take to pro-

The most important step that senior EPA and State managers can take to promote NEPPS' full implementation is to send an unambiguous message to the staff in their agencies that they fully support the program. Visibility of support and interest from the top levels of EPA and the States are critical if mid-level managers and other staff are to treat NEPPS as a priority.

other staff are to treat NEPPS as a priority.

Many EPA staff still tend to view environmental programs with a separate, media-specific focus. States, on the other hand, increasingly find that they must make tradeoffs among their individual media responsibilities to ensure that their most important environmental priorities are adequately addressed. EPA leadership needs to advocate among its staff a broader, multi-media focus that recognizes the need for these tradeoffs, within the constraints posed by the framework of existing laws and regulations.

 $\it Question~3.$ Are there any statutory changes that would make Performance Partnership Agreements (PPAs) or Performance Partnership Grants (PPGs) more attractive to States?

Response. As a program promoting a new way of doing business, NEPPS bears similarity to many of EPA's and States' "reinvention" programs. In fact, many States are trying to use their Performance Partnership Agreements under NEPPS to accelerate and institutionalize their reinvention efforts. In this regard, we agree with the Chairman's observation at the hearing that EPA's stove-piped structure has complicated the efforts of environmental regulators and the regulated community to adopt more flexible and innovative approaches to environmental protection. At the request of Congressmen Boehlert, Dooley, and Greenwood, we have recently initiated an evaluation of the extent to which laws, regulations, and agency policies inhibit innovation, and would be pleased to share our findings with the committee when they are available.

Question 4. What should the relationship be between Core Performance Measures (CPMs) and EPA's obligations under the Government Performance and Results Act

Response. CPMs are generally a subset of the agency's GPRA measures, and EPA maintains that there is a close relationship between the two. However, there is a substantial difference in that the GPRA measures are far more numerous and, as a group, tend to be more "output" oriented than the more results-oriented CPMs.

EPA needs to make more progress in aligning its GPRA measures with the CPMs it has negotiated with the States by (1) reducing the overall number of GPRA measures to focus on the most significant measures and (2) continue to shift the relative balance between output and outcome measures to place increasingly greater emphasis on outcome measures.

RESPONSES BY PETER GUERRERO TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. One of your findings is that the "initial expectation that participation in National Environmental Performance Partnership System would be accompanied by reduced Federal oversight of States has thus far been realized to only a limited Yet in your report you note that EPA and the States agree that "a formal system for implementing differential oversight . . . would be controversial and difficult to implement." Do you believe that EPA and the States can agree on which programs should be considered "strong" environmental programs?

Response. For years, EPA has essentially made decisions as to which State envi-

ronmental programs were strong and which weaker. These decisions, however, tended to be informal and were used to support annual grant agreement negotiations by identifying areas in which EPA would provide additional support to States.

An additional issue is the complication that arises among States' environmental programs in publicly identifying which among them are strong performers and which are weak performers. For this reason, the effort to formalize such a "differential oversight" process through NEPPS was discontinued.

Nevertheless, EPA's Denver region is attempting to develop such a formal system of ranking their States to identify stronger and weaker States for purposes of focusing attention where it is most warranted. This system, called the "Unified Oversight" System," is designed to evaluate State enforcement and compliance program performance. The objective of this system is to strengthen State programs and reward strong programs with reduced oversight. The system, which will employ both quantitative scoring and narrative feedback, will be used to conduct annual joint planning with States and to manage the limited oversight resources of EPA. Time will tell whether the Denver region's experiment will succeed.

Question 2. Given the absence of formal criteria for determining what constitutes a good program, how can one distinguish between good programs that deserve reduced oversight and inadequate programs that require additional attention?

Response. There are a number of factors that have historically served as indicators of the strength of State programs. Examples include:

- Various measures of enforcement activity, such as the number of inspections conducted, violations disclosed, fines levied/collected, etc.;

 - Adequacy of staffing of State programs;
 Results of periodic EPA audits of State programs;

The challenge in recent years has been to move away from activity measures and toward outcome measures, such as the extent to which the efforts of programs are resulting in improved compliance or improvements in environmental quality. The Core Performance Measures negotiated between EPA and the Environmental Council of States are a key step in that direction in that they are increasingly designed to emphasize measures of the impact of environmental activities on the environment, as opposed to measuring the number of activities conducted.

As noted above, the Denver region's experience with its Unified Oversight System should be instructive to future efforts to systematically assess States' programs, and to practice differential oversight on the basis of performance and capability. While the measures to be used in the System are initially weighted toward outputs, it is anticipated that outcome measures will be relied upon increasingly over time.

[Report by the General Accounting Office]

Environmental Protection: Collaborative EPA-State Effort Needed to IMPROVE NEW PERFORMANCE PARTNERSHIP SYSTEM

> U.S. GENERAL ACCOUNTING OFFICE, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION Washington, D.C. 20548, June 21, 1999.

The Honorable James T. Walsh, Chairman, Subcommittee on VA, HUD, and Independent Agencies Committee on Appropriations House of Representatives.

DEAR MR. CHAIRMAN: As requested, we are reporting on the Environmental Protection Agency's (EPA) and the States' progress in implementing the National Environmental Performance Partnership System.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days from the date of this letter At that time we will early earlies to the appropriate to the appropriat ter. At that time, we will send copies to the appropriate congressional committees; the Honorable Carol Browner, Administrator, EPA, and the Honorable Jacob Lew, Director, Office of Management and Budget. We will also make copies available to others upon request.

Please call me at (202) 512-6111 if you or your staff have any questions. Major contributors to this report are listed in appendix II.

Sincerely yours,

PETER F. GUERRERO, Director. Environmental Protection Issues Executive Summary Purpose.

EXECUTIVE SUMMARY

Purpose

The Environmental Protection Agency (EPA) has had long-standing difficulties in establishing effective partnerships with the States, which generally have the lead responsibility in implementing many environmental programs. Among the key issues affecting EPA-State relationships have been concerns that EPA (1) is inconsistent. ent in its oversight across regions, (2) sometimes micromanages State programs, (3) does not provide sufficient technical support for State programs' increasingly complex requirements, and (4) often does not adequately consult the States before making key decisions affecting them. To address these problems and improve the effectiveness of environmental program implementation, EPA's Administrator and leaders of State environmental programs established the National Environmental Performance Partnership System (NEPPS) in May 1995. In signing the agreement that established NEPPS, EPA and State leaders said that the system is designed to strengthen protection of public health and the environment by directing scarce public resources toward improving environmental results, allowing States greater flexi-bility to achieve those results, and enhancing accountability to the public and tax-payers. A key element of NEPPS was EPA's commitment to give States with strong environmental performance greater flexibility and autonomy in running their environmental programs.

Given the expectation among participants that NEPPS could deal with many of the issues that have long impeded EPA-State relationships, the Chairman, Subcommittee on VA, HUD, and Independent Agencies, House Committee on Appropriations, asked GAO to examine the progress made by EPA and the States since the 1995 agreement. Specifically, as agreed with the Chairman's office, this report (1) identifies the status of grants and agreements made under NEPPS between EPA and participating States, (2) examines the progress that EPA and the States have made in developing results-oriented performance measures to be incorporated into NEPPS agreements and grants to the States, (3) examines how EPA oversight may or may not be changing in States that are participating in NEPPS, and (4) discusses the extent to which the use of these Performance Partnership Agreements and Grants has achieved the benefits envisioned for the States and the public.

Background

Under NEPPS, States may voluntarily enter into "Performance Partnership Agreements" with their EPA regional offices. While there is considerable flexibility in how the agreements may be designed, they typically provide a means for EPA and the States to negotiate such matters as (1) which problems will receive priority attention within the State programs, (2) what EPA's and the States' respective roles will be, and (3) how the States' progress in achieving clearly defined program objectives will be assessed. An important component of the Partnership Agreements is the use of a common set of national environmental indicators (called "Core Performance Measures") to measure the effectiveness and success of States' environmental programs. In their efforts to develop these performance measures, EPA and State officials have sought to move beyond counting the number of actions (such as the number of inspections conducted or environmental enforcement actions taken) and

number of inspections conducted or environmental enforcement actions taken) and increasingly toward evaluating the impact of programs on the environment. While NEPPS provides the overarching framework for developing Partnership Agreements, the Performance Partnership Grants Program, authorized by the Congress in April 1996, is used by many States as a major tool to implement them. This program allows States to request that funds from 2 or more of the 15 eligible categorical grants be combined to give governmental entities greater flexibility in targeting limited resources to their most pressing environmental needs. These grants are also intended to be used to better coordinate existing activities across environmental media and to develop multimedia programs. While the Partnership Agreements are designed to complement the Partnership Grants, States are free to negotiate agreements and/or grants or to decline participation in NEPPS altogether.

State participation in the National Environmental Performance Partnership System grew from 6 pilot States in its initial year in fiscal year 1996 to 45 States by the end of fiscal year 1998. Of that number, 31 States had both Performance Partnership Agreements and Performance Partnership Grants with EPA in 1998; 12 States had grants only; 2 States had agreements only; and 5 States did not participate at all. Nationwide, for that year, \$217 million of \$745 million in State environmental program grants was consolidated into Performance Partnership Grants-an increase of 28 percent from the previous year.

EPA and the States agree on the importance of measuring the outcomes of environmental activities rather than just the activities themselves. However, the development of these measures has been impeded by a number of technical challenges, including (1) an absence of baseline data against which environmental improvements could be measured, (2) the inherent difficulty in quantifying certain results, (3) the difficulty of linking program activities to environmental results, and (4) the considerable resources needed for high-quality performance measurement. In addition, EPA and the States have had to resolve fundamental disagreements over a number of issues, including (1) the degree to which States should be permitted to vary from the national core measures and (2) the composition of the measures-particularly regarding the degree to which preexisting output measures are to be retained as newer outcome measures are added. Despite these barriers, EPA and State leaders have managed to agree on a set of core measures for fiscal year 2000 that are widely regarded by EPA and State officials as significantly improved from

that are whelly regarded by EFA and State unitials as significantly improved those negotiated in previous years.

The initial expectation that participation in NEPPS would be accompanied by reduced Federal oversight of States has thus far been realized to a limited degree. A number of instances were identified among the six participating States GAO visited number of instances were identified among the six participating States GAO visited where oversight reduction did accompany participation in the system. However, in other cases cited by both State and EPA regional officials, (1) decreased oversight could either not be linked directly to NEPPS participation or (2) oversight had either remained the same or increased. Among the factors cited by these officials as complicating reduced EPA oversight were (1) statutory and/or regulatory requirements that in some cases prescribe the kind of oversight required of States by EPA; (2) reluctance by EPA regulators to reduce oversight without the measures in place (2) reluctance by EPA regulators to reduce oversight without the measures in place to ensure that environmental quality would not be compromised; (3) the inherent difficulty in "letting go" on the part of some regulators that have implemented the existing EPA-State oversight arrangement for several decades; and (4) EPA's multilevel organizational structure, which complicates efforts to identify whether all key agency decisionmakers among the agency's headquarters and regional offices are in

agreement on key oversight-related questions.

EPA and State participants nonetheless cited a number of benefits associated with NEPPS, noting in particular that participation (1) provided a means of getting buy-in for innovative and/or unique projects, (2) allowed States the option to shift resources and funds under the Performance Partnership Grants Program, (3) served as a tool to divide an often-burdensome workload more efficiently between Federal and State regulators, and (4) improved communication and increased understanding among EPA and State program participants about program priorities and other key

¹The six States were Connecticut, Florida, Georgia, Maine, Minnesota, and Oregon.

matters. Yet while participants from each State indicated that their participation in the voluntary program would probably continue, they also consistently expressed the view that the benefits of the program should be greater; that the program has yet to achieve its potential; and that improvements are needed. The 1995 agreement anticipated the appropriateness of such reflection in calling for "a joint evaluation system for EPA and the States to review the results of their efforts to ensure continuous improvement." GAO recommends in this report that such a joint evaluation process be initiated and suggests a number of issues to be considered for attention during such a process.

PRINCIPAL FINDINGS

Growth of State Participation in NEPPS

NEPPS was initially tested on a pilot basis in fiscal year 1996 with six participating States. This first year was viewed by EPA and the States as a time to experiment with the new system and various ways to implement it. The number of participating States has increased since that time to 45 States in fiscal year 1998, although the extent of their participation has varied widely. For example, half the States have negotiated both Partnership Agreements and Partnership Grants through their lead environmental agencies that cover most EPA programs; other States have thus far limited their participation to a Partnership Grant, such as one administered by their agriculture agency that, for example, addresses only pesticide programs. States have also varied considerably in the detail and content of their agreements. Senior officials in EPA's Office of State and Local Relations explained that the agency has not attempted to impose uniformity on the development of Partnership Agreements at this early stage of the NEPPS process and has, therefore, refrained from issuing guidance on how the agreements should be structured. Hence, the agreements vary widely in content and emphasis, reflecting individual States' conditions and priorities and reflecting the results of negotiations with their respective EPA regional offices.

respective EPA regional offices.

While Performance Partnership Grants allow eligible States to request that funds from two or more categorical grants (such as those authorized under the Clean Water Act or those used to implement the Clean Air Act) be combined to allow for greater flexibility in targeting limited resources to States' most pressing environmental needs, the percentage of eligible grant funds consolidated under these Grants is less than one-third. For fiscal year 1998, \$217 million (29 percent) of eligible grants was consolidated among the participating States, while \$528 million (71 percent) remained as categorical grants. This level of consolidation represents an increase of 28 percent over the \$169 million that was consolidated the previous year.

Progress in Developing Results-Oriented Measures

Both EPA and individual States have a number of efforts under way to develop effective performance measures to better understand whether their programs are achieving their intended results. Their collective effort to develop such measures for NEPPS has centered on the "Core Performance Measures" that have been negotiated between EPA and the Environmental Council of the States during the past several years. The effort has faced a number of technical challenges inherent in developing defensible results-oriented measures. The results of activities designed to improve water quality, for example, can take years to appear, and the capability of many States to monitor a significant share of their waters is limited. Moreover, even if environmental conditions could be reliably and consistently measured, it may be particularly difficult to demonstrate the extent to which a government program affected that condition. Officials from Florida (a State that has made a significant commitment to measuring compliance rates and environmental indicators), for example, explained that factors outside their control, such as economic activity and weather conditions, make it particularly difficult to link program activities with changes in environmental conditions.

changes in environmental conditions.

In addition to these technical challenges in developing results-oriented measures, the effort has also been challenged by disagreements between EPA and the States on a number of issues, including (1) the degree to which States should be permitted to vary from the national core measures and (2) the composition of the measures, particularly regarding the degree to which preexisting output measures are to be retained as newer outcome measures are added. Overall, however, the States and EPA have made progress in meeting these challenges. For example, officials in four of the six States whose programs GAO examined have developed and implemented

 $^{^2\,\}mathrm{The}$ Environmental Council of the States is a national nonpartisan, nonprofit association of State and territorial environmental commissioners.

their own measures to address their own priorities. At the same time, program officials in each of the six States have also agreed to report information required for the national core measures agreed upon between the Environmental Council of the States and EPA. In addition, while they maintain that further refinement will still be needed, EPA and State officials have agreed on a set of fiscal year 2000 measures for use in negotiating EPA-State partnership agreements that, by most accounts, are a substantial improvement over those negotiated from previous years in that they are fewer in number (i.e., better targeted to address key goals) and generally more outcome-oriented.

Reductions in Oversight Attributable to NEPPS Have Thus Far Been Modest

Instances of greater State flexibility and reduced EPA oversight tended to focus Instances of greater State flexibility and reduced EPA oversignt tended to rocus on reducing the frequency of reporting and, in some cases, the frequency of onsite reviews. Maine environmental officials, for example, noted that more frequent, and less formal, dialog between the program staff and regional staff had replaced written reports, saving time and improving the level of cooperation between EPA and State staff. While Maine program officials attributed the reductions in part to the assignment by EPA's Boston Regional Office of a liaison for each State's delegated programs, they credited NEPPS with formalizing or legitimizing the changes. Florida program officials identified sizable reporting reductions in its waste program as ida program officials identified sizable reporting reductions in its waste program as a result of a joint State-EPA effort included in the Partnership Agreement. Other

instances were cited by officials in Georgia and Minnesota.

instances were cited by officials in Georgia and Minnesota.

Yet aside from such individual instances of streamlining reporting requirements and similar tracking efforts, the large majority of the State officials GAO contacted generally maintained that participation in NEPPS has not yet brought about significant reductions in reporting and other oversight activities by EPA staff, nor has it resulted in significant opportunities for them to focus on other priorities or to shift resources to weaker program areas. EPA officials generally acknowledged this point, but provided specific reasons why oversight of State programs has not significantly decreased as a result of NEPPS-and in some cases has actually increased. Some headquarters and regional officials, for example, noted that environmental statutes or regulations sometimes prescribe the level of oversight required of EPA, leaving little room for EPA to scale it back. The officials also pointed to (1) audits that identified problems in some State enforcement programs (such as the underreporting by States of significant violations and precipitous decreases in the number of State enforcement actions taken) that they believed called for greater oversight and (2) the difficulty in scaling back oversight without measurable assurances indicating that State programs experimenting with alternative compliance strategies are achieving State programs experimenting with alternative compliance strategies are achieving their desired results.

At the same time, EPA officials cited a number of barriers preventing greater State flexibility that could be more readily addressed. For example, senior EPA officials in three of the four regional offices that GAO visited acknowledged that support for NEPPS within EPA varies. One senior regional official explained that many regional managers and staff are often more comfortable with preexisting ways of the property of the pro regional managers and staff are often more comfortable with preexisting ways of doing business and are unsure as to how they can accomplish their work in the context of the partnership approach under NEPPS. The official also said that there may be a need for training EPA regional staff in NEPPS implementation. Another senior regional official said that some agency staff will only take NEPPS seriously when their reward system is more closely tied to their performance in implementing the program. Headquarters officials also acknowledged another problem cited by many of the State officials GAO contacted-that headquarters' guidance, initiatives, and special requests sometimes arrive at the regions too late to be used effectively in regional-State Partnership Agreement negotiations and that they have taken steps to address the problem. to address the problem.

BENEFITS OF NEPPS PARTICIPATION CITED, BUT FULL POTENTIAL HAS YET TO BE REALIZED

Despite their disappointment at the rate of progress in achieving greater autonomy and greater emphasis on State priorities, senior officials and program managers from each of the six States in GAO's review agreed that NEPPS has provided their programs with worthwhile benefits, and that its potential for achieving a more effective partnership between EPA and the States is still worth pursuing. Among the examples cited were instances in which Partnership Agreements were used to more efficiently divide a heavy workload between regional and State staff, and in which States were able to take at least limited advantage of the flexibility in their Performance Partnership Grant agreements to shift resources among their media programs. Overall, however, the most frequently cited benefit among both State and EPA regional participants was that the two-way negotiation process inherent in the

program has fostered more frequent and effective communication between regional and State participants and improved their overall working relationship.

At the same time, State officials almost unanimously expressed the view that the benefits from their investment of time and resources into NEPPS should be greater; that the program has yet to achieve its potential; and that improvements are needed. Of particular note, almost all of the State officials GAO interviewed cited progress in achieving reduced oversight and greater autonomy as critical to the fuprogress in achieving reduced oversight and greater autonomy as critical to the future success of the program. Also cited was the need to continue improving performance measures; addressing the barriers impeding greater acceptance of NEPPS among staff within both EPA and State agencies; determining how to make greater use of the flexibility under Performance Partnership Grants to shift resources and funding to address higher priorities; and improving the manner in which head-quarters offices provide their input into regional-State NEPPS negotiations.

These concerns pose challenges for the future of NEPPS-challenges that were anticipated by the 1995 agreement that launched the program, which called for a joint evaluation system for EPA and the States to review the results of their efforts to ensure continuous improvement. On the basis of the considerable information that can be learned from the experiences to date of participating States and regional of

ensure continuous improvement. On the basis of the considerable information that can be learned from the experiences to date of participating States and regional offices, GAO believes that it is now appropriate to undertake such a joint evaluation process, with the goals of (1) identifying best practices among participating States for dealing with the most challenging problems facing the program and (2) eventually obtaining agreement on actions that will improve and expand the program. EPA officials and representatives of the Environmental Council of the States have, in fact, recently agreed upon the basic outline of such a joint evaluation process. Further progress (including decisions on the specific issues to address and a timetable for addressing them) would be important steps in expanding both the participation in, and effectiveness of, this important program.

RECOMMENDATIONS

GAO recommends that the Administrator, EPA, work with senior-level State officials to initiate a joint evaluation process that (1) seeks agreement on the key issues impeding progress in developing a more effective National Environmental Performance Partnership System and (2) develops mutually agreeable remedies for these is-

 Sues. Among the issues such a process could focus on are these:
 Developing a set of flexible guidelines, to be used as a tool by State and EPA regional NEPPS negotiators, that could help to clarify the appropriate performance expectations and other conditions that States must meet to achieve reduced oversight in carrying out their environmental programs and the type of reduced oversight (e.g., reduced frequency of reporting, greater autonomy in setting program pri-orities) that could be achieved.

Identifying what additional work is needed to improve the Core Performance Measures recently negotiated by EPA and State representatives for fiscal year 2000.

• Alleviating the resistance among some staff (both within EPA offices and

- among participating State agencies) toward implementing NEPPS, through training efforts and other strategies.
- Determining what appropriate steps should be taken by EPA and the States to allow for greater use by States of the flexibility envisioned under the Performance Partnership Grant system to shift resources and funding among their media programs.
- Determining how effective public participation in the NEPPS process can best be ensured.
- Developing ways to improve communication among EPA's headquarters and regional offices and participating States to ensure that States are given clear and timely information on whether key elements of their NEPPS-related agreements have the full buy-in of key EPA offices.

AGENCY COMMENTS

GAO provided a draft of this report for review and comment to EPA and the Environmental Council of the States. EPA said that "the Report describes, in a fair and balanced manner, the progress EPA and the States have made through performance partnerships." EPA also agreed with the report's recommendation that agency and State efforts to improve NEPPS should include training and other efforts to achieve

the cultural change necessary for greater success.

EPA also commented on GAO's recommendation that EPA and State environmental leaders should agree on guidelines that would help to clarify, for EPA and State negotiators, the appropriate performance expectations that States must meet to achieve reduced oversight in carrying out their environmental programs and the

type of reduced oversight that could be achieved. EPA noted that while it agreed with this recommendation in principle, EPA and the States believe that each State's Performance Partnership Agreement should specify the degree of oversight necessary to accommodate the unique environmental problems and varied program capabilities of that State. GAO agrees that oversight arrangements should be negotiated between each State and its corresponding regional office in a manner that accounts for that State's unique circumstances, and that these arrangements should be specified in the Performance Partnership Agreement. GAO continues to believe, however, that nonbinding national guidance-to be agreed upon in advance by EPA and State environmental leaders-would be useful in introducing objective parameters to be considered by regional and State negotiators as they seek agreement over

In addition to these comments, EPA provided updated information and comments on several other issues (discussed at the end of chs. 3, 4, and 5). EPA's comments, together with GAO's detailed responses, are included in appendix I.

Representatives of the Council provided a number of suggested clarifications. They cautioned that since their comments had not been reviewed by the Council's membership, they should be viewed as informal suggestions to enhance the accuracy and completeness of the report. GAO made revisions as appropriate to incorporate these comments.

INTRODUCTION

The Environmental Protection Agency (EPA) has had long-standing difficulties in establishing effective partnerships with the States. Among the key issues affecting EPA-State relationships have been concerns that EPA (1) is inconsistent in its oversight across regions, (2) sometimes micromanages State programs, (3) does not provide sufficient technical support for State programs' increasingly complex requirements, and (4) often does not adequately consult the States before making key decisions affecting them

In an effort to address these problems and improve the effectiveness of environ-mental program implementation, EPA and State environmental agencies established the National Environmental Performance Partnership System (NEPPS). Under this system, strong State programs were to be given more leeway to set environmental priorities, design new strategies for addressing these priorities, and manage their own programs-allowing EPA to concentrate more effort, oversight, and technical assistance on weaker programs. A major component of the system is the development of Performance Partnership Agreements. These agreements are to provide a means for EPA and the States to negotiate such matters as (1) which problems will receive roles will be, and (3) how the States' progress in achieving clearly defined program objectives will be assessed. States may also establish Performance Partnership Grants, which allow them to consolidate grants as a way of providing more flexibility in managing their environmental grant funds, and to cut paperwork and simplify financial management. For example, a State that would otherwise have separate water, air, and pesticide grants can now combine the funds from some or all of these

water, air, and pesticide grants can now combine the funds from some or all of these grants into one or more performance partnership grants.

Given the expectation among participants that NEPPS could deal with many of the issues that have long impeded the EPA-State relationship, the Chairman, Subcommittee on VA, HUD, and Independent Agencies, House Committee on Appropriations, asked us to examine the progress made by EPA and the States since the 1995 agreement. Specifically, as agreed with the Chairman's office, this report (1) identifies the status of grants and agreements made under NEPPS between EPA and participating States, (2) examines the progress that EPA and the States have made in developing results-oriented performance measures to be incorporated into NEPPS agreements and grants to the States (3) examines how EPA oversight may or may agreements and grants to the States, (3) examines how EPA oversight may or may not be changing in States that are participating in NEPPS, and (4) discusses the extent to which the use of these performance partnership agreements and grants

has achieved the benefits envisioned for the States and the public.

NEPPS Was Designed to Improve the Effectiveness of the EPA-State Working Relationship

Most of the nation's environmental statutes envision a strong role for the States in implementing and managing environmental programs. Toward this end, in 1993, a joint State/EPA task force recommended that EPA and the States adopt a more systematic approach to manage environmental programs in a way that allows each level of government to contribute according to its respective strengths. In May 1993, the EPA Administrator established a State/EPA Steering Committee to oversee the implementation of the task force's recommendations. Subcommittees were established to pursue work on oversight reform, with the goal of increasing State participation in EPA decisionmaking, developing national environmental goals and measures, allowing flexible funding across programs, and improving communications be-

tween EPA and States.

As a result of these efforts, on May 17, 1995, the EPA Administrator and the leaders of State environmental programs formally agreed to implement a new environmental partnership entitled the National Environmental Performance Partnership System. This agreement, entitled the Joint Commitment to Reform Oversight and Create a National Environmental Performance Partnership System, stated that the Create a National Environmental Performance Partnership System, stated that the long-range goal of NEPPS was "to provide strong public health and environmental protection by developing a system where EPA and the States work together for continuous gains in environmental quality and productivity." In establishing NEPPS, EPA and the leaders of State environmental programs indicated the system is designed to strengthen protection of public health and the environment by directing scarce resources toward improving environmental results, allowing States greater flexibility to achieve those results, and enhancing accountability to the public and taxpayers. The seven principle components of NEPPS are:

• increased use of environmental goals and indicators in order to measure the effectiveness and success of environmental programs;

• a new approach for conducting assessments of environmental programs, which will include a greater reliance on annual environmental and programmatic self-as-

will include a greater reliance on annual environmental and programmatic self-aswill include a greater reliance on annual environmental and programmatic self-assessments conducted by each State and sharing with the public information about environmental conditions, goals, priorities, and achievements;

• the development of environmental performance agreements that outline environmental priorities and goals agreed to jointly by EPA and the States;

• a reduction in oversight for those States with strong environmental programs, which will enable EPA to focus resources on States that need more assistance;

• the designation of strong State environmental programs as "leadership programs" that are afforded minimal oversight;

• increased opportunity for constructive public involvement in the management

 increased opportunity for constructive public involvement in the management of environmental programs through a program that encourages regulated entities the development of a joint system evaluation for EPA and the States to review

the results of their efforts to ensure continuous improvement.

As we reported in May 1998, NEPPS is intended to strengthen the effectiveness of the nation's environmental programs by redefining the Federal and State roles or the nation's environmental programs by redefining the Federal and State roles to ensure that public resources are used efficiently to address the most important environmental problems. According to EPA, NEPPS is based on a shared recognition that continued environmental progress can be achieved most effectively by working together as partners. Accordingly, the effort is designed to promote joint planning and joint priority-setting, which takes into account each State's environmental conditions and objectives. A key element of this program is EPA's commitmental to the program is EPA's commitmental to the program of the program ment to give States with strong environmental performance greater flexibility and autonomy in running their environmental programs. To help document this capability, a primary objective of the program is the measuring and reporting of EPA's and States' progress toward achieving their environmental and programmatic goals.

Negotiation of Performance Partnership Agreements and Performance Partnership

Under NEPPS, States and their corresponding EPA regional offices are expected to reach an understanding of the State's environmental conditions and to agree on appropriate environmental goals and priorities and on program performance indicators to measure progress. The results of these negotiations are documented in Performance Partnership Agreements and/or Performance Partnership Grants. Partnership Agreements are comprehensive agreements that are expected to be used as the principal mechanism for implementing NEPPS. According to EPA, the agreements are derived from joint discussions by EPA and the State on their interests, concerns, choices, and commitments for sound environmental performance.

While NEPPS provides the overarching framework for developing partnership agreements, the Performance Partnership Grants Program serves as a major tool to implement them. Performance Partnership Grants are intended to allow States greater flexibility in deciding how Federal grant funds can best be spent to achieve their environmental goals. Under these grants, which were authorized by the Con-

³Environmental Protection: EPA's and States' Efforts to Focus State Enforcement Programs on Results (GAO/RCED-98-113, May 27, 1998).

gress in April 1996, eligible States and tribes may request that funds from two or more categorical grants (such as those authorized under the Clean Water Act or those used to implement the Clean Air Act) be combined into one or more grants to give governmental agencies greater flexibility in targeting limited resources to their most pressing environmental needs. These grants are also intended to be used to better coordinate existing activities across environmental media and to develop multimedia programs.

Importantly, State participation in NEPPS is voluntary. In particular, while Partnership Agreements are designed to complement Partnership Grants, States are free to negotiate both agreements and grants or to decline participation in NEPPS altogether.

Development of Performance Measures Is a Key Component of NEPPS

A key component of the 1995 NEPPS agreement was the commitment by EPA and the Environmental Council of the States to identify a common set of national environmental indicators to measure the effectiveness and success of States' environmental programs. ⁴ In an effort to fulfill this commitment, on August 20, 1997, EPA and the Council agreed on a set of "Core Performance Measures" for EPA and States to use in measuring progress toward the achievement of environmental and program goals. This first set was used to measure progress in fiscal year 1998 and, with some minor revisions, was used again in fiscal year 1999.

In their efforts to develop these performance measures, EPA and State officials have sought to move beyond counting the number of actions and increasingly toward evaluating the impact of programs on the environment. Traditionally, performance measures have focused on tracking "outputs," such as the number of inspections conducted and enforcement actions taken. Such actions are easiest to count, and they provide a useful measure of the level of agency activity. On the other hand, measuring the actual results a program is intended to achieve, such as the degree to which progress is made in achieving air or water quality standards, is more difficult but provides information on whether the goals of the regulatory program are being achieved. ⁵

In order to strike a better balance between output measures and measures of program results, EPA and the Council developed a tiered approach, shown in table 1.1, to better account for program results. As the table indicates, an output measure considers numbers of actions taken, demonstrating the level of a particular activity or how resources are used. An outcome, on the other hand, can measure the results associated with a particular policy, such as the percent of facilities in environmental compliance. Finally, environmental indicators demonstrate whether overall, long-term agency objectives are being achieved, such as the trend in the number of bodies of water meeting clean water standards.

Table 1.1: Categories of Environmental Performance Measurement

Measure	Characteristic	Examples	Purpose	
Output	Numbers of actions	Number of penalty dollars col- lected; number of violations discovered.	Demonstrates level of activity; demonstrates how resources are used	
Outcome	Environmental or programmatic results associated with a particular program or policy.	Tons of pollution reduced or percent of facilities in envi- ronmental compliance.	Demonstrates results of spe- cific initiatives or policies	
Environmental indica- tor.	Indicators associated with overall environmental or program objectives.	Trend in number of bodies of water meeting clean water standards.	Demonstrates whether overall, long-term agency objectives are being achieved	

Note: In its efforts to develop overall performance measures for the Government Performance and Results Act of 1993, EPA uses slightly different terms: "outputs," "intermediate outcomes," and "long-term outcomes." In its guide to implementing the act, the Office of Management and Budget distinguishes between "output goals" and "outcome goals" and calls on Federal agencies to measure progress toward both. Other experts in the field of government performance measurement labeled the three tiers "outputs," "policy or behavioral outcomes," and "program outcomes," See for example, Sparrow, Malcolm, "Regulatory Agencies, Searching for Performance Measures That Count," and Greiner, John M., "Positioning Performance Measurement for the Twenty-first Century, "Organization Performance and Measurement in the Public Sector, Quorum Books, (1996).

Source: Environmental Protection: EPA's and States' Efforts to Focus State Enforcement Programs on Results (GAO/RCED-98-113, May 27,1998).

⁴The Environmental Council of the States is a national nonpartisan, nonprofit association of State and territorial environmental commissioners.

⁵Thus, for example, one outcome-oriented core measure in the air program tracks overall emission reductions for key pollutants over time.

NEPPS' emphasis on performance measurement also provides a critical link to the Congress' intent in passing the Government Performance and Results Act of 1993. The Results Act requires agencies to clearly define their missions, establish long-term strategic goals (and annual goals linked to them), measure their performance against the goals they have set, and report this information to the Congress. Importantly, rather than focusing on the performance of prescribed tasks and processes, the statute emphasizes the need for agencies to focus on and achieve measurable program results.

Objectives, Scope, and Methodology

Our objectives in this review were to (1) identify the status of grants and agreements made pursuant to NEPPS between EPA and participating States, (2) examine the progress that EPA and the States have made in developing results-oriented performance measures to be incorporated into NEPPS agreements and grants to the States, (3) examine how EPA oversight may or may not be changing in States that are participating in NEPPS, and (4) discuss the extent to which the use of performance partnership agreements and grants has achieved the benefits envisioned for the States and the public.

For the first objective, we reviewed EPA documents describing the overall status of performance partnership grants and agreements made between EPA and States. We also interviewed officials from EPA's Office of State and Local Relations to obtain the latest data and related information on the status of Partnership Agree-

ments and Partnership Grants signed by the States and EPA.

For the remaining objectives, we first contacted EPA (headquarters and regional) officials to identify appropriate State environmental programs for detailed study. In selecting States, we were primarily concerned with the degree of State participation in this voluntary program, the length of time they have been participating, and the desirability of examining States with different experiences and geographical locations.

On the basis of these criteria, we visited six States that have experience with NEPPS for detailed study-Connecticut, Florida, Georgia, Maine, Minnesota, and Oregon. In each case, we interviewed officials in the States' lead environmental agency. For each State, we first discussed the program with officials that have overall responsibility for NEPPS. To get insights into the status of NEPPS at the program level, we interviewed program managers from each of three environmental programs: the Resource Conservation and Recovery Act, the Clean Water Act, and the Clean Air Act. We also interviewed program officials in the EPA regional office with jurisdiction for each State we visited. After these visits, we conducted telephone interviews with environmental officials from two States that have limited their participation in NEPPS-Michigan and Pennsylvania-to determine their views of NEPPS and the reasons why they chose not to participate more fully.

At EPA headquarters, we contacted officials from the various offices with NEPPS responsibilities, including the Offices of Air and Radiation; Water; Solid Waste and Emergency Response; Enforcement and Compliance Assurance; Reinvention; and State and Local Relations, to discuss our objectives as well as the results of our spe-

cific work at the States and EPA regional offices.

We also gathered information on our objectives through interviews with officials from other organizations with an interest in NEPPS, including the Association of State and Interstate Water Pollution Control Administrators, Association of State and Territorial Solid Waste Management Officials, Environmental Council of the States, National Academy of Public Administration, National Governors Association, and State and Territorial Air Pollution Program Administrators. Regarding the second objective, we interviewed officials from the Green Mountain Institute for Environmental Democracy, which participated in studies of issues related to the development and/or use of core performance measures.

and State and Territorial Air Pollution Program Administrators. Regarding the second objective, we interviewed officials from the Green Mountain Institute for Environmental Democracy, which participated in studies of issues related to the development and/or use of core performance measures.

We conducted our work from June 1998 through April 1999 in accordance with generally accepted government auditing standards. We provided copies of this report to EPA and the Environmental Council of the States for their review and comment. EPA's comments and our responses are included in appendix I. The Council indicated that since its response had been prepared without the benefit of review by Council membership, its comments should be viewed not as reflecting the Council's positions, but rather as informal suggestions to enhance the accuracy and completeness of the report. We made revisions as appropriate to incorporate these comments. We also provided relevant sections of the draft to representatives of the eight States included in our review to verify statements attributed to them, and to verify other information they provided, and have made revisions as appropriate to incorporate

their comments.

GROWTH OF STATE PARTICIPATION IN NEPPS

State participation in the National Environmental Performance Partnership System has grown significantly in the 4 years since the system was created, increasing from 6 pilot States in fiscal year 1996 to 45 States by the end of fiscal year 1998. 6 However, the extent of participation among these 45 States varied considerably: 31 States had both performance partnership agreements and grants; 12 States had grants only; 2 States had agreements only; and 5 States did not participate at all. Moreover, while some States included a full range of environmental programs under their agreements, others included only one or two programs (such as pesticide or drinking water programs).

Initial Implementation Was Devoted to Experimentation

NEPPS was initially tested on a pilot basis in fiscal year 1996 with 6 participating States. This first year was viewed as a time to experiment with the new system and various ways to implement it. According to a 1996 study of five of the six pilot efforts conducted by the Environmental Law Institute with funding from EPA, 7 although the pilot States shared ideas during the process of developing their agreements, the States deliberately avoided discussing some of the specifics of their approaches so as to ensure diversity.

The Environmental Law Institute's study focused on whether, and how, the pilot performance partnership agreements achieved and measured environmental results, how flexibility was exercised under the program, and how accountability was ensured. Based on the experiences of the pilot States, the Institute's study concluded that NEPPS showed great promise for improving the relationship between EPA and the States and for improving the administration of the environmental statutes. However, the study cited a number of issues that would need to be addressed as the program evolved. It stated, for example, that while States and EPA had made progress toward the goal of increasing the use of environmental indicators (measures of overall progress in achieving environmental objectives), much remained to be done to develop appropriate measures. The study also concluded improvements were needed to (1) clarify the relationship between Performance Partnership Agreements and Grants, (2) more effectively communicate EPA's national priorities to EPA regions and States in time to impact State and EPA regional office negotiations on Performance Partnership Agreements, and (3) increase public participation in the program.

State Participation Expanded Rapidly Since Initial Implementation

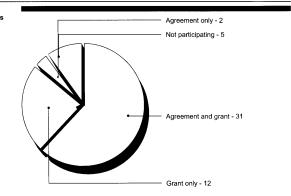
State participation in Performance Partnership Agreements and Grants expanded rapidly after the first year. In fiscal year 1997, States and regional offices were expected by EPA headquarters to build on the prior year's experiences and work on areas that needed additional clarification or where barriers needed to be removed. Participation grew that year to 44 States and to 45 States in fiscal year 1998.

 $^{^6\}mathrm{For}$ this report, NEPPS participation is defined as participation in Performance Partnership

Agreements, Performance Partnership Grants, or both.

⁷An Independent Review of the State-Federal Environmental Partnership Agreements for 1996, Environmental Law Institute, (1996). The Performance Partnership Agreement between EPA and the sixth State was signed after the Institute completed its review and analysis of the other five agreements and thus was not covered by this study. The Institute's study did not include a review of Performance Partnership Grants since the authority for these grants was not provided by the Congress until the middle of fiscal year 1996.

Figure 2.1: State Participation in Performance Partnership Agreements and Grants, Fiscal Year 1998

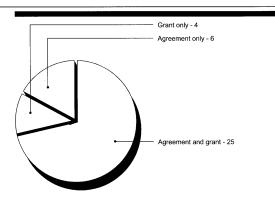


Source: Prepared by GAO from EPA's data.

Of the 45 States participating in fiscal year 1998, 31 had both Performance Partnership Agreements and Grants, 12 States had grants only, 2 States had agreements only, and 5 States did not participate at all. (See fig. 2.1.) Since States can have multiple Performance Partnership Agreements and Grants, depending on which State agencies handle the different environmental programs, the 45 States accounted for a total of 38 agreements and 52 grants.

According to EPA, States vary in the extent of their participation, with half the States participating broadly by negotiating both Performance Partnership Agreements and Performance Partnership Grants that cover most EPA programs through their State environmental agencies, while other States limit their participation by negotiating, for example, a partnership grant through their agricultural agency that covers pesticide programs. As shown in figure 2.2, of those States that participated in NEPPS through their lead environmental agencies in fiscal year 1998, 25 had both Performance Partnership Agreements and Grants, 4 had grants only, and 6 had agreements only.

Figure 2.2: State Environmental Agencies Participating in Performance Partnership Agreements and Grants, Fiscal Year 1998



Source: Prepared by GAO from EPA's data.

States also vary considerably in terms of the detail and content of their partner-ship agreements. Senior officials in EPA's Office of State and Local Relations explained that the agency has not attempted to impose uniformity on the development of partnership agreements at this early stage of the NEPPS process and has, therefore, refrained from issuing guidance on how partnership agreements should be structured. Hence, the agreements vary widely in content and emphasis, reflecting individual State's conditions and priorities, and their negotiations with their respective EPA regional offices.

Most States Have Performance Partnership Grants , but Few Take Full Advantage of the Flexibility Offered

As discussed in chapter 1, allow eligible Performance Partnership Grants States to request that funds from two or more categorical grants (such as those authorized under the Clean Water Act or those used to implement the Clean Air Act) be combined into one or more grants to give greater flexibility in targeting limited resources to their most pressing environmental needs. Thus far, however, the States have consolidated less than one-third of the eligible categorical grant funds under partnership grants. Of the eligible grants, 29 percent, or \$217 million, was consolidated in fiscal year 1998, while 71 percent, or \$528 million, remained as categorical grants. This represents an increase of 28 percent over the \$169 million that was consolidated the previous year.

EPA AND STATES HAVE MADE PROGRESS IN DEVELOPING RESULTS-ORIENTED PERFORMANCE MEASURES

Both EPA and individual States have a number of efforts underway to develop effective performance measures to better understand whether their programs are achieving their intended results. Their collective effort to develop such measures for NEPPS has centered on the "Core Performance Measures" that have been negotiated between EPA and the Environmental Council of the States during the past several years. These measures are intended to be used in tracking States' progress toward achieving the most important goals of the nation's environmental programs.

In developing the performance measures, EPA and the States have retained a number of the traditional output measures they have used in the past but have attempted to focus increasingly on measuring desired environmental outcomes. However, overcoming a number of technical challenges, and reaching agreement on the most important environmental outcomes and on the methodologies to measure progress toward those outcomes, has been difficult. Nevertheless, considerable progress has been made in developing and improving the performance measures-as evidenced by agreement on a set of measures for fiscal year 2000 that are widely regarded as improved measures from previous years.

Developing and Agreeing on Core Performance Measures Has Been Difficult

EPA and State officials agree on the importance of measuring the outcomes of environmental activities rather than just the activities themselves. However, developing such measures has faced a number of challenges. Outputs, by their nature, are inherently easier to measure, report, and understand than outcomes and environmental results. Compared to output measures, developing defensible results-oriented measures has proven to be substantially more difficult. In addition to these technical challenges, EPA and the States have differed on what the measures should look like (particularly regarding the relative emphasis of output versus outcome measures) and on the degree of flexibility with which they should be implemented

Technical Challenges

EPA and State officials identified several key technical challenges that they have had to address in their efforts to focus performance measurement on desired results. These include (1) an absence of baseline data against which environmental improvements could be measured, (2) the inherent difficulty in quantifying certain results, (3) the difficulty of linking program activities to environmental results, and (4) the considerable resources needed for high-quality performance measurement.

Need for Baseline Data to Measure Progress

As noted in our May 1998 report on EPA's enforcement program, ⁸ the absence of adequate baseline data for comparison is a common problem among many organizations engaged in performance measurement, including Federal and State agencies. Measuring environmental improvements requires a starting point against which to measure changes. Without such a baseline, any environmental measurement system can only provide a snapshot in time; it cannot tell whether conditions are getting better or worse.

Federal and State agencies have therefore frequently had to build entirely new data systems and ways of collecting data because the old systems are of limited use in analyzing programs' performance. Our 1998 report noted that compliance data

⁸Environmental Protection: EPA's and States' Efforts to Focus State Enforcement Programs on Results (GAO/RCED-98-113, May 27, 1998).

are especially scarce for small businesses that historically received few inspections. Consequently, State programs that are just now attempting to measure results have limited data with which to compare them. Florida officials, for example, told us that their recent environmental reports showing industry-wide compliance rates generally have a baseline of 1997 or 1998, because past information is unavailable or unreliable. An EPA official responsible for NEPPS implementation also noted that the scarcity of baseline information by which to measure program improvements attributable to NEPPS is a particular challenge and a major concern to the agency.

Inherent Difficulty in Quantifying Data

Generating relevant and accurate data is a challenge under the best of circumstances. Not only do appropriate measures need to be defined, methodologies need to be established to develop the necessary data. In enforcement programs, for example, it is difficult to determine the impact on the overall environment from individual inspections conducted or enforcement actions taken. In addition, as officials told us during our review of enforcement programs, quantifying industry-wide compliance rates and other outcomes has been complicated by the difficulty of deciding both how to define a compliance rate and how to calculate it. As another example, the results of activities designed to improve water quality can take years to appear, and the capability of many States to monitor a significant share of their waters is

These challenges have led some State officials to note that it may be exceedingly difficult to achieve comparability from State to State, both in what is being measured and the methodology used in gathering data. In particular, a State with more complete data may appear to have greater environmental problems than a State with poor data. Minnesota officials, for example, told us that their data base for "impaired waters" (waters that do not meet State water quality standards) includes waters that have undergone far more rigorous analysis than that performed by other States. Consequently, according to these officials, Minnesota's impaired waters may appear to be far more severe than those of another State that does not subject its waters to such rigorous analysis.

Similar findings were reached in a 1998 study evaluating an effort where six New England State environmental management agencies and EPA's Boston office collaborated on a menu of environmental indicators intended to measure (1) the status and trends of the quality of the New England environment and (2) program accomplishments toward reaching State and regional environmental goals. ⁹ The findings of the study were based on an evaluation of data availability and quality for 12 example indicators, which included 6 specific performance measures. A key finding of this effort was that the level of consistency required for regional indicators is difficult to achieve given (1) a lack of clarity in terms of what the indicators intend to measure and for what purpose and (2) a lack of consistency across States in both the type of data collected and methodology used.

Challenges in Linking Program Activities to Environmental Outcomes

Assuming environmental conditions could be reliably and consistently measured, it may still be difficult to demonstrate the extent to which a government program affected that condition. As we noted in a 1997 report on the complexities associated with performance measures, "Separating the impact of [a] program from the impact of other factors external to the program was cited by government agency officials as the most difficult challenge in analyzing and reporting government performance." 10

Even in the case of the Florida Department of Environmental Protection's significant commitment to measuring compliance rates and environmental indicators, regulators made a conscious decision not to link their enforcement programs with trends in environmental indicators or outcomes like compliance rates. The regulators explained that the causes of these trends are subject to other influences outside their control, such as the state of the economy, the weather, and other departmental actions besides enforcement. The Department's consultant agreed, noting, for example, that "If and when the scallop population in Tampa Bay is restored to healthy levels, Florida's Department of Environmental Protection . . . would be hard

⁹Green Mountain Institute for Environmental Democracy, "Indicator Data Catalog, An Evaluation of Data Issues Related to the Development of Core Performance Measures and Regional Environmental Indicators," (Nov. 1998).

¹⁰Managing for Results: Analytic Challenges in Measuring Performance (GAO/HEHS/GGD–97–138, May 30, 1997).

pressed to prove beyond doubt that their interventions actually produced this result, no matter how compelling their scientific analyses and explanations." ¹¹
Determining causality has proven to be particularly difficult among pollution pre-

Determining causality has proven to be particularly difficult among pollution prevention programs. According to EPA headquarters officials, EPA and the States have not yet been able to determine how to establish a cause and effect relationship to measure the impacts on the environment from many activities that prevent pollution from occurring.

Resource Limitations

Another barrier, which essentially flows from the others, relates to the significant resources and expertise required for identifying and testing potential results-oriented performance measures. Once measures are in place, gathering and analyzing the data can also be resource-intensive and can take years to show environmental improvements. In addition, several program officials of the States we visited told us that some Federal and State data bases will require significant improvement in order to track the new information to support results measures. A member of the Environmental Council of the States' Information Management Workgroup agreed, noting that this is an issue EPA and the States still need to address.

Two States that have developed systems to measure the results of selected enforcement efforts found that considerable resources are needed to do quality performance measurement. The Florida Department of Environmental Protection hired a consultant to assist them in developing their new performance measurement system and dedicated several of its own staff to this effort. A Massachusetts environmental official found that monitoring the results of even a single program can require considerable resources. The former Deputy Commissioner said that in a pilot test of its new Environmental Results Program, the agency had to invest a great deal of time and energy to work with the facilities and measure the ultimate results, even though the test involved only 18 participating companies. Officials from these and other States noted that it is difficult to commit resources to the development and implementation of new results-oriented performance measures while still meeting other program requirements.

Results-Oriented Measures Easier to Develop for Some Programs Than Others

As challenging as the exercise may be for all programs, we found that developing results-oriented performance measures has been easier in the case of some programs than others. Air programs, for example, have long had a monitoring network in place to measure ambient air quality throughout the country. Accordingly, as officials of EPA's Office of Air and Radiation told us, the air program has had considerable background with results-oriented performance measures, and that this experience has limited both the burden of developing specific performance measures and the burden on the States of implementing these measures. Officials of the States we visited generally confirmed this assessment. A senior official in Georgia's environmental protection division, for example, told us that developing results-oriented measures is easiest for the air program, more difficult for the water program, and most difficult for the waste program. The Georgia official attributed the differences to the extensive historical experience of the air program with results-oriented measures, the length of time it takes to see measurable results in the water program, and the difficulty in identifying suitable measures for the waste program. Similar comments were made by a Florida air program official that noted that States and EPA have been monitoring air quality for some time, have good data, and can show results.

Challenges in Obtaining Agreement Between EPA and the States on the Measures In addition to these technical challenges, EPA and States have had to resolve fundamental disagreement over (1) the degree to which States should be permitted to vary from the national core measures and (2) the composition of the measures, particularly regarding the degree to which pre-existing output measures are to be retained as newer outcome measures are added.

Extent to Which States Can Vary From the Core Measures

EPA's goal to use the performance measures to provide a national picture of environmental progress necessitates a degree of consistency among the States in what is being measured. To achieve consistency, the May 1995 NEPPS Agreement provides that EPA and the States will ". . .develop a limited number of program and multi-media performance measures that each State will report so that critical national program data is collected." However, recognizing that a set of national meas-

 $^{^{11}\}mbox{Malcolm}$ Sparrow, "Regulatory Agencies, Searching for Performance Measures That Count," (June 9, 1997).

ures may not necessarily address individual States' priorities (or represent what inures may not necessarily address individual States priorities (or represent what individual States consider to be the best measures for their State-specific situations), the agreement further provides that States may develop other goals and performance indicators that will present a more meaningful picture of their State's environmental quality. This apparent need was further recognized in the August 1997 joint statement by EPA and the Environmental Council of the States, which accompanied the release of the measures for fiscal year 1998. The statement indicated that where a particular performance measure does not fit a State's situation, that measure may be modified, substituted, or eliminated if mutually agreed to by both the State and EPA. Deviations could be warranted, for example, where (1) there may not be adequate data to report on the measure, (2) alternative measures may work better, or (3) there may be higher priorities in a State.

According to Council officials, in the first year of the performance measures, EPA

regions were inconsistent in implementing the performance measures across the country; some EPA staff in regional offices allowed States flexibility in implementcountry: some EPA staff in regional offices allowed States flexibility in implementing performance measures (as intended by the 1997 joint statement) while staff in other regions tried to portray the national performance measures as mandatory and inflexible. In June 1998, the president of the Council wrote to the Deputy Administrator of EPA, asking that the agency reaffirm its support for the flexibility provisions of the joint statement. Noting that one of the most challenging aspects of implementing the performance measures is balancing the need for uniform national measures with the need to accommodate the circumstances of individual States, the Deputy Administrator's September 1998 response reaffirmed that under certain circumstances. EPA regions can adjust a measure that is inappropriate for a particular cumstances, EPA regions can adjust a measure that is inappropriate for a particular State. Updated EPA-Council joint guidance on the use of performance measures, is sued in April 1999 as an addendum to the 1997 Joint Statement along with the release of the fiscal year 2000 measures, reiterates EPA's commitment to allow flexible implementation of the measures in specific situations and with approval of both the State and EPA. 12

States Have Implemented Both Core Performance Measures and Their Own Meas-

As permitted by the 1995 NEPPS agreement, four of the six States that we visited have developed some performance measures on their own, separately from the national core measures. These States use their own measures to track priority issues in their respective States and to report environmental progress to their State legis-latures and the public. Florida environmental officials developed their separate measures in conjunction with the NEPPS program, and they continue to use them because they believe they are better measures of results than the Core Performance Measures. Georgia and Minnesota officials developed measures that focus on specific State priorities, and Oregon officials developed measures that were specifically tailored to the State's strategic plan. While environmental program officials in Connecticut and Maine have not developed performance measures apart from the core measures, they told us that they believed State-specific rather than national measures. ures would be more useful to them and more appropriate to measure the results of environmental programs in their States.

Regardless of whether a State developed its own performance measures, each of the States we visited also agreed to report on the national core measures. Normally, the States did not adopt the core performance measures verbatim; they made minor changes where appropriate to meet State-specific situations. In each case, however, changes where appropriate to meet State-specific situations. In each case, however, the States' changes to the national Core Performance Measures were reviewed and approved by the appropriate EPA regional office to ensure that they were compatible with the national measures. EPA officials told us that they were aware of only one State (New Jersey) that had deviated significantly from the national Core Performance the deviation was reviewed and approved. formance Measures, and in that instance, the deviation was reviewed and approved by the appropriate EPA headquarters program office.

Concerns About Applying Core Performance Measures to Nonparticipating States

NEPPS is a voluntary program and not all States have chosen to participate. Because core performance measures are a component of NEPPS, environmental officials in many States initially presumed that they did not apply to nonparticipating States. EPA's intent to use performance measure data to present a national environ-

¹² Specifically, the addendum states that a State and EPA may jointly agree to deviate from particular performance measures where (1) the measure does not apply to a State's or region's physical setting or environmental condition; (2) the State does not have authority for the program to which the measure applies; (3) data for the measure are not available or alternative data are more relevant in painting a picture of environmental progress; (4) the State and EPA agree that the measure or the work associated with it are not a high priority in the State.

mental picture, however, led the agency to request this type of data from all states—not just NEPPS participants. Accordingly, in an October 1998 internal memorandum on EPA implementation of core performance measures, the Acting Deputy Administrator stated that: "The Regions are responsible for obtaining data on the Core Performance Measures from all States (whether or not they have a Performance Partnership Agreement with EPA) because these measures are intended to paint a picture of environmental and program progress across the nation."

formance Partnership Agreement with EPA) because these measures are intended to paint a picture of environmental and program progress across the nation."

At the Environmental Council of the States' October 1998 annual conference, States expressed concern that EPA's policy of seeking to make performance measures applicable to all States is inappropriate and in conflict with the voluntary concept of the NEPPS program. Subsequently, joint EPA-Council guidance was issued with the fiscal year 2000 performance measures which stated that "[Core Performance Measures] as such only apply to States participating in NEPPS," but added that "States not participating in NEPPS will continue to provide key information needed by EPA through State/EPA Agreements, grant work plans, or other operating agreements."

Relative Emphasis on Outputs Vs. Outcomes

Among Federal and State officials, there is a broad agreement in principle on the importance of measuring outcomes rather than just outputs. A major concern among State officials, however, has been a continued emphasis on output measures by EPA. Ironically, many State officials maintain that much of EPA's continued emphasis on outputs stems from the agency's implementation of the Results Act.

The Results Act requires agencies to clearly define their missions, establish long-term strategic goals, measure their performance against the goals they have set, and report this information to the Congress. The statute emphasizes the need for agencies to focus on and achieve measurable program results, rather than focusing on the performance of prescribed tasks and processes. Thus, EPA's goals under NEPPS and the Results Act would appear to share the same focus on environmental results. However, as we noted in a 1998 report on the first set of performance measures EPA prepared pursuant to the Results Act, the overwhelming share of measures were heavily weighted toward numerical targets and other outputs. ¹³

Broad concern was expressed among the States that we interviewed about the im-

Broad concern was expressed among the States that we interviewed about the impact that EPA's implementation of the Results Act has had on core performance measures. To varying degrees, senior level and program management officials in five States we visited, and EPA program officials in two regions, expressed concern about the apparent conflict between the results-oriented performance measures being developed under NEPPS and the generally output-oriented performance measures EPA has thus far used to report on the Results Act. The officials were concerned that EPA's implementation of the Results Act is (1) maintaining an emphasis on output rather than outcome measures and (2) adding new measures on top of existing measures, leading to an overall increase in the amount of data States must gather and report

EPA's enforcement program was illustrative of States' concerns about the difficulty in moving toward outcome-oriented performance measures. Performance measures from an enforcement standpoint have tended to focus heavily on outputs, such as the number of inspections conducted, the number of significant violations detected, and how violations are handled. Senior and program management level officials in half the States and EPA regional offices we visited specifically cited the relatively heavy focus of EPA's enforcement program on such outputs as a barrier to achieving greater progress in developing outcome-oriented performance measures. This view echoed those expressed by State officials in our May 1998 report on EPA enforcement efforts, which relayed concerns among most of the State officials interviewed that EPA's Office of Enforcement and Compliance Assurance overemphasizes output measures. We recommended at that time that EPA ensure that the enforcement-related provisions of EPA's Performance Plan, prepared pursuant to the Results Act, focus on outcomes in a manner consistent with that of the Core Performance Measures developed under NEPPS.

In a November 1998 response to our enforcement report, EPA emphasized a num-

In a November 1998 response to our enforcement report, EPA emphasized a number of initiatives underway, most notably its National Performance Measures Strategy, to build in more outcome measures in its own enforcement program and to assist States in doing so for their programs. ¹⁴ The Office also acknowledged the need

¹³ Observations on EPA's Annual Performance Plan for Fiscal Year 1999 (GAO/RCED-98-166R, Apr. 28, 1998).

¹⁴Among the outcome measures the Office has already implemented under this strategy are measures of improvements resulting from EPA enforcement actions. Outcome measures cur-

to reorient its performance plan increasingly toward outcomes and signaled its intent to integrate some outcome measures into the fiscal year 2000 core performance measures. The Office's fiscal year 2000 measures list seven measures, four of which are identified as providing outcome measures. The implementation approach for three of the four measures is to work with volunteer States to test the measures. In this connection, the Office has recently announced the availability of funds for States for projects that will improve the design and use of performance measures for enforcement and compliance/assistance activities. In evaluating project proposals, the Office plans to give priority to projects designed to develop outcome measures.

Progress has also been made in other EPA programs in reorienting the agency's Results Act measures toward outcomes. Specifically, we found that EPA's fiscal year 2000 annual Performance Plan, which contains the measures to be used to track progress toward achieving its programs' goals, demonstrated some progress since the performance plan of the previous year. ¹⁵ Further progress in coming years would help to reduce the disparity between the generally output-oriented focus of EPA measures prepared pursuant to the Results Act and the efforts by EPA regions and States to focus their negotiations under NEPPS increasingly on achieving results

Status of Core Performance Measures

Notwithstanding concerns among State and some regional officials about the potential impact of EPA's implementation of the Results Act on their efforts to orient their NEPPS-related activities toward outcomes, EPA and the Environmental Council of the States have managed to agree on a third set of Core Performance Measures for use in fiscal year 2000 and beyond which, by most accounts, are a significant improvement over the 1998 and 1999 measures. As both EPA and Council officials have noted, one of the most apparent differences between the new measures and those of past years is that the fiscal year 2000 measures are significantly fewer in number. Specifically, as shown in table 3.1, data provided by EPA show that the number of Core Performance Measures has been reduced from an initial set of 104 measures for fiscal year 1998 to 37 measures for fiscal year 2000. 16

Table 3.1: Number of Core Performance Measures, Fiscal Years 1998 Through 2000

Program	Fiscal Year 1998	Fiscal Year 1999	Fiscal Year 2000
Air and radiation	23	16	10
Water		31	13
Hazardous waste		17	7
		25	0
Enforcement and compliance	8	8	7

rently being implemented include (1) the average number of days for significant violators to return to compliance or enter enforceable plans or agreements and (2) the percentage of significant violators with new or recurrent significant violations within 2 years of receiving previous enforcement action. Outcome measures targeted for implementation in October 1999 include assessments of the levels of compliance among selected regulated populations.

15 Observations on the Environmental Protection Agency's Annual Performance Plan For Fiscal Year 2000 (draft). Specifically, we noted that among the improvements in the fiscal year 2000 plan are goals and measures of generally better quality, and we note some additional efforts to implement outcome measures. Overall, however, we found that the plan still focuses heavily on output measures.

¹⁶ Súch a sizable reduction reflects the efforts by EPA and the Council to focus Core Performance Measures on what they agreed are the most important measures. The magnitude of the reduction, however, should be interpreted with caution for several reasons. First, the figures reflect the temporary deletion of all 25 measures for the Pollution Prevention and Toxic Substances Program. Work is currently underway to develop new measures for pollution prevention and toxic substances, which are expected to be ready for use in fiscal year 2001. Second, the dropping of a measure as a Core Performance Measure does not necessarily mean that data will not be gathered in response to that measure. Rather, the inclusion or exclusion of the measure as a core measure is an expression of its relative importance to the national environmental picture. Third, some core measures have multiple parts, such as "trends in air quality for each of the six criteria air pollutants" (actually six measures) or "trends in emissions of toxic air pollutants" (actually six measures) or "trends in emissions of toxic air pollutants" (189 hazardous air pollutants the Clean Air Act identifies). The discrete data that are necessary to report under such measures may be aggregated or disaggregated depending on the amount of detail used to measure performance. Disaggregating the data increases the number of perceived performance measures.

Table 3.1: Number of Core Performance Measures, Fiscal Years 1998 Through 2000—Continued

Program	Fiscal Year	Fiscal Year	Fiscal Year
	1998	1999	2000
Totals	104	97	37

Source: EPA's Office of State and Local Relations

In addition to reducing the number of measures to provide greater focus on what are perceived as the most important measures, progress was also made in shifting the proportion of fiscal year 2000 measures increasingly toward outcomes and environmental indicators. Specifically, according to EPA, while about 40 percent of the measures focused on outcomes or environmental indicators in fiscal year 1998, about 60 percent of the measures focus on outcomes and environmental indicators in fiscal year 2000. Moreover, while EPA and Council officials are not expected to formally vote on a comprehensive set of new measures each year, the fiscal year 2000 measures are to be periodically updated as deemed appropriate by EPA and the Council. In this connection, EPA program officials, told us that they have a number of projects currently under way (in addition to those in the enforcement program discussed earlier) that are specifically designed to develop additional results-oriented performance measures.

Finally, EPA and the States have also made progress addressing the States' concern that EPA had required additional reporting by the States to help the agency meet its data requirements under the Results Act. Under the April 1999 Addendum to the Joint Statement, co-signed by EPA and the Environmental Council of the States, Core Performance Measures and other current reporting requirements will be relied upon to satisfy EPA's Results Act-related data needs.

CONCLUSIONS

There is broad agreement among Federal and State officials on the importance of measuring the outcomes of environmental activities. While considerable progress has been made in developing and implementing results-oriented Core Performance Measures, a number of challenges involving technical and policy issues have complicated the process. Progress has nonetheless been made in developing fiscal year 2000 measures which, by most accounts, are a significant improvement over measures used in previous years. Continued progress in developing the measures-and the data systems needed to support the measures-will be critical to States' and EPA's efforts to demonstrate the efficacy of their programs under NEPPS. In the past, it has been difficult for States to achieve the flexibility they desire without the performance measures in place to demonstrate that their environmental goals are being achieved, and it will likely continue to be so in the future.

AGENCY COMMENTS

Citing our observations that (1) EPA has focused on outputs to meet its obligations under the Results Act while supporting a transition to outcome-based management under NEPPS and (2) these conflicting priorities have led to confusion that hinders performance partnerships, EPA said that, to the contrary, both the Results Act and NEPPS encourage the development of outcome measures and outcome-based management. We acknowledge the shared objective of NEPPS and the act in focusing on results. The key word, however, is implementation: as we have documented in other recent work, the measures EPA has used in its implementation of the Results Act have thus far been heavily output-oriented and, therefore, convey priorities that are often in conflict with the more outcome-oriented measures being employed under NEPPS.

We acknowledge EPA's ongoing efforts to orient its Results Act-related measures increasingly toward outcomes and believe that further progress toward this end will help to alleviate this problem. In addition, we modified our discussion of this issue to reflect the progress made by EPA and the States in addressing the States' complaint that EPA had required additional reporting by the States to help the agency meet its data requirements under the Results Act. The chapter notes that pursuant to the April 1999 Addendum to the Joint Statement, co-signed by EPA and the Environmental Council of the States, Core Performance Measures and other current reporting requirements will be relied upon to satisfy EPA's Results Act-related data needs.

REDUCTIONS IN EPA'S OVERSIGHT ATTRIBUTABLE TO NEPPS HAVE THUS FAR BEEN MODEST

As originally envisioned, the principle of differential oversight was a key element of NEPPS. Under this principle, States with stronger environmental programs would be accorded reduced oversight and greater autonomy over delegated programs, thereby allowing these States greater flexibility to manage their programs, and providing EPA the opportunity to shift greater attention of its own resources toward weaker programs. An important component of the concept of differential oversight was that programs eligible for reduced oversight would meet certain criteria and that the EPA and States would work together to choose a group of meas-

ures to use in assessing State performance.

In the years immediately following the 1995 agreement, EPA and many States agreed that a formal system implementing differential oversight, whereby the merits of a State program would be evaluated based on certain standards or criteria to determine whether it qualifies for reduced oversight, would be both controversial and difficult to implement. Nonetheless, the original concept of reduced EPA oversight in exchange for acceptable State environmental performance remains an im-

portant goal for both EPA and participating States.

Among the six States we visited, we found instances in which some oversight reduction was successfully negotiated between States and their corresponding EPA regions. Such instances, however, have thus far been limited in both scope and frequency. A number of interrelated factors were cited as limiting the reduction of EPA oversight, including (1) statutory and/or regulatory requirements that specify State reporting requirements and other methods of ensuring State accountability to EPA; (2) EPA's refuctance to reduce oversight without measurable assurances that environmental goals are still being achieved; (3) the inherent difficulty in "letting go" on the part of some regulators that have implemented the existing EPA-State oversight arrangement for several decades; and (4) the challenge faced by EPA of communicating to States through a complex, multilevel organization involving both headquarters and regional offices.

Initial Expectations Concerning EPA Oversight of Participating States' Programs

The May 1995 joint agreement between EPA and the Environmental Council of the States stated that "a differential approach to oversight should provide an incentive for State programs to perform well, rewarding strong State programs and freeing up Federal resources to address problems where State programs need assist-It added that "after agreement is reached, EPA will focus on program-wide, limited after-the-fact reviews rather than case-by-case intervention and will work with States to identify other ways to reduce oversight.

Accompanying differential oversight was the concept of "performance leadership," whereby qualifying programs having a record of strong performance would be nationally recognized with "leadership" status. In such instances, the leadership programs would be afforded minimum allowable oversight based on the belief that they deserve to be treated with deference whenever possible and do not need Federal

oversight on a routine basis.

In subsequent years, however, both EPA and the States found it difficult to implement both a formal differential oversight process and to formally designate certain State programs as performance leadership programs. One key problem was the inability of EPA and the States to agree on criteria to use in making such determina-tions. EPA officials responsible for NEPPS noted that because the capacity of a State program can change depending upon circumstances, the proper level of oversight should be determined on a State-by-State basis by EPA regional managers-not on the basis of specific criteria that would be universally applied to all States. In addition, as noted by the Environmental Council of the State's Executive Director, many State environmental leaders expressed concern that formal designations of such programs as performance leaders could be interpreted by EPA, State legislatures, and the public as a "report card" of good and bad performers. Such designations would probably be challenged, particularly given the difficulty of developing and applying specific criteria to use in making these determinations.

Nonetheless, the concept of differential oversight, albeit in a less structured and visible form, remained an important component of State and EPA regional NEPPS negotiations. Officials in the six States told us that their early expectations for NEPPS were that the program would help them to reduce their oversight workload in some well-run program areas and to allow them a stronger focus on State priorities and problem areas. Officials in three States noted in particular that they believed the NEPPS framework would better allow them to identify and address opportunities for multimedia projects, rather than continuing to expend time and resources only on the traditional, single media air, water, and waste programs.

States and Regional Offices Report Limited Oversight Reduction Thus Far Directly Attributable to NEPPS

State officials cited a number of instances in which they negotiated some reduction in regional oversight of their programs. These efforts tended to focus on reducing the frequency of reporting, and in some cases the frequency of conducting onsite reviews, in situations where both sides agreed such activities were duplicative or otherwise of limited value. However, most State program officials indicated that the extent of reporting required has either remained the same or actually increased in spite of NEPPS, and that few instances were identified where States obtained more significant independence in operating their programs (e.g., focusing their resources on State priorities). Most regional staff we interviewed generally agreed that, to date, oversight reduction attributable to NEPPS has been limited.

Instances of Reduced Oversight Cited by States and Regions

Officials in Maine, Florida, Georgia, and Minnesota cited specific instances in which reporting requirements were scaled back, at least in part as a result of their participation in NEPPS. Maine environmental officials, for example, noted that more frequent dialog and less formal reporting between the program staff and regional staff had replaced written reports, saving time and improving the level of cooperation between EPA and State staff. While Maine program officials attributed the reductions in large part to the assignment by EPA's Boston Regional Office of a liaison for each State's delegated programs, they credited NEPPS with formalizing or legitimizing the changes. Florida program officials identified sizable reporting reductions in its Resources Conservation and Recovery Act program as a result of a joint State/EPA effort included in the Performance Partnership Agreement. The Chief of Florida's Bureau of Water Facilities also noted that under the agreement, the State was able to streamline oversight of its pretreatment program through reduced reporting and by negotiating with the EPA Atlanta office a shifting of resources from the conduct of routine annual inspections and audits to other priority areas in the program. ¹⁷

In some cases, regional and State officials indicated that oversight had been scaled back, but that such efforts could not be tied directly to a State's participation in NEPPS. Connecticut officials reported that quarterly reporting had been eliminated in recent years for some of their air, water and waste programs, but attributed the change solely to EPA regional efforts that preceded NEPPS. Similarly, program officials in EPA's Boston, Chicago, and Seattle offices each cited instances in which quarterly reviews and file reviews were eliminated, but indicated that such efforts often preceded independently of the signing of a NEPPS agreement.

Few Instances of Significant Oversight Reduction Under NEPPS

Notwithstanding the streamlining of reporting requirements and similar tracking efforts, the large majority of the State officials we interviewed generally maintained that participation in NEPPS has not yet brought about significant reductions in reporting and other oversight activities by regional program and audit level staff, nor has it resulted in significant opportunities to focus on other priorities or shift resources to weaker program areas. Oregon officials, for example, explained that their initiatives to focus on the State's highest priorities are having difficulty competing with their obligations to track and report on the national core performance measures and to comply with other EPA reporting requirements. Program managers in Connecticut, Florida, Georgia, Maine, and Minnesota conveyed similar experiences, indicating that the addition of new core measures to preexisting reporting requirements had increased their reporting workload, or that they are likely to do so in the future. Program managers in three of these States indicated they will need to develop the data and systems to report on the new measures.

Oregon officials also pointed to a significant increase in EPA oversight by the regional enforcement officials of its air, water, and waste programs. EPA Seattle officials told us that the enforcement reviews in Oregon were the outcome of nation-wide enforcement reviews by both the Office of Enforcement and Compliance Assurance and of EPA's Office of the Inspector General, which raised concerns about whether and how States were bringing enforcement actions against violators. Georgia officials also said that oversight of their hazardous waste program has increased,

¹⁷Under EPA's Pretreatment Program, wastewater treatment plants are charged with monitoring and regulating contaminant discharges by industrial users into their sewer systems.

noting that regional enforcement officials were making regular monthly visits to re-

view program records.

EPA regional program and enforcement officials generally acknowledged that oversight of State programs has not significantly decreased as a result of NEPPS and that in some cases, has increased. Officials in the Atlanta and Chicago Regional Offices noted in particular that it may have been unrealistic to assume, as many States had at the outset of NEPPS, that States' participation in the program would necessarily lead quickly to reduced EPA oversight. Moreover, regional officials point to specific reasons why it has been difficult to scale back EPA oversight-and why oversight has actually increased in certain instances.

Factors Affecting Potential to Reduce Oversight Under NEPPS

We asked both State and regional officials to identify what they believed to be the most important considerations affecting the extent to which NEPPS has prothe most important considerations affecting the extent to which NEPPS has provided States with reduced oversight, greater program autonomy, and the flexibility to emphasize their highest priorities. There was considerable consistency on the factors identified by both State and EPA officials, although there was some variation on the degree to which various factors were emphasized. The key factors include (1) statutory and/or regulatory requirements that in some cases prescribe the kind of oversight required of States by EPA; (2) reluctance by EPA regulators to reduce oversight without measurable assurances that environmental protection will not be compromised; (3) the inherent difficulty in letting go on the part of some regulators that have implemented the existing EPA-State oversight arrangement for several decades; and (4) EPA's multilevel organizational structure, which complicates efforts decades; and (4) EPA's multilevel organizational structure, which complicates efforts to identify whether all key decisionmakers among the agency's headquarters and regional offices are in agreement on key oversight-related questions.

Statutory or Regulatory Requirements May Limit Options to Reduce Oversight

In some cases, statutory and/or regulatory requirements may prescribe certain types of EPA oversight, limiting the extent to which further streamlining can be negotiated. EPA headquarters officials in the Office of Air and Radiation noted that some of the core performance measures for the air program are driven by statutes and thus are non-negotiable. The officials noted, for example, that dates by which areas in "non-attainment" with air quality standards must come into compliance are driven by the Clean Air Act and that EPA accordingly has no flexibility to alter them. Similarly, a regional official cited the Clean Water Act's requirement under section 305(b) that a Water Quality Inventory Report be issued every 2 years. One State requested an alternative schedule in which the State would submit its information for the report every 5 years for each watershed area. EPA denied the request as contradicting the 2-year frequency required by the act.

In addition, EPA Atlanta and Boston regional staff pointed out that they have a

In addition, EPA Atlanta and Boston regional staff pointed out that they have a responsibility to ensure that new regulations, which sometimes pose particular challenges for both Federal and State regulators, are properly implemented. EPA head-quarters officials cited as an example their new regulations concerning fine particulate matter, which required significant EPA action during the middle of the fiscal year. Regional staff said that such actions may inevitably require greater EPA oversight and more detailed reporting. Officials in EPA's Atlanta Regional Office cited another example where, in the middle of the year, headquarters implemented a new initiative that required the region to ask the States to do additional inspections of metal finishing plants that went beyond the commitment made by States in their Performance Partnership Agreements.

State program managers acknowledged that statutory and regulatory require-

State program managers acknowledged that statutory and regulatory requirements do in fact sometimes limit the potential to reduce EPA oversight. In addition, while welcoming the administrative relief and flexibility allowed under the Performance Partnership Grant Program, several noted that the implementation of these grants is still governed by certain statutory and regulatory requirements. For example, the grants are still subject to certain grant administrative requirements and cost accounting standards applicable to Federal grants generally. Specifically, while the Partnership Grants do not require the detailed accounting required of categorical grants, States must still report to EPA on how funds have been spent under the broader categories. Furthermore, like other Federal grants, the EPA grant agreements are supposed to include adequate oversight procedures to provide EPA assurance that Federal funds are used efficiently and effectively.

Perhaps more significantly, both State and regional officials added that the State programs are still held accountable for accomplishing program commitments outlined in their work plans and that base program requirements under the various statutes must still be met. Such competition for limited resources to meet the requirements of individual statutes has, in fact, been a long-standing issue that has

complicated efforts to shift attention and resources to what are perceived as the highest environmental priorities. We noted in our 1988 general management review of EPA, for example, that the objective of setting risk-based priorities across environmental media has been accounted by the control of the control o ronmental media has been complicated by the fact that each statute prescribes certain activities to deal with its own medium-specific problems. ¹⁸ In 1991, we touched on the issue again noting, for example, that numerous legislative mandates have led to the creation of individual EPA program offices that tended to focus solely on reducing polluting within the period of the creation of t ducing pollution within the particular environmental medium for which they have responsibility, rather than on reducing overall emissions. ¹⁹ More recently, in testifying on efforts by EPA to improve its working relationship with the States and to provide them with additional flexibility, 20 we concluded that as long as environmental laws are media-specific and prescriptive and EPA personnel are held accountable for meeting the requirements of the laws, it will be difficult for the agency to fundamentally change its relationships with the States to reduce day-to-day control over program activities.

EPA Reluctance to Reduce Oversight Without Measurable Assurances That Environmental Protection Will Not Be Compromised

Program managers and staff in all four of the EPA regional offices we visited questioned the extent to which the agency can reduce oversight without measurable assurances that program requirements, and environmental objectives, will be askilances that program requirements, and environmental objectives, win be achieved. The issue has become particularly pronounced in the enforcement program, where some States have taken issue with what they perceive to be heavy-handed oversight by EPA. Among State officials' complaints are that EPA enforcement officials inappropriately hold States accountable for the number of enforcement. ment actions (outputs) taken rather than achieving better environmental compliance (outcomes). Some States have also cited the prospect of EPA taking direct enforcement action in States where the lead State environmental agency has primary enforcement authority, or of "overfiling" with an EPA action in instances where a State enforcement action was determined by EPA to be insufficient. State officials have also maintained that such a posture is inconsistent with the philosophy under NEPPS that EPA should focus its oversight on results and should provide States with greater flexibility as to how to achieve those results.

EPA Seattle regional officials, however, have cited the Office of Enforcement and

Compliance Assurance's recent reviews and those of the Office of Inspector General, which have concluded that (1) many States have underreported violations by diswhich have concluded that (1) many states have underreported violations by dischargers of pollutant limitations and other environmental requirements and (2) the numbers of enforcement actions taken by State enforcement officials has declined. These reports, the officials contend, raised questions about the ability of States to achieve compliance by the regulated community without vigilant Federal oversight. Moreover, according to the officials, States presently do not have the data to support their contentions that environmental compliance is still being achieved in cases where their enforcement activity has been curtailed.

where their enforcement activity has been curtailed.

State officials told us, both during this review as well as during our 1998 review of State enforcement programs, 21 that the absence of measurable results complicates efforts to use more flexible approaches-not just because it is harder to get EPA approval but also because it is harder to get approaches after the confidence of the results. EPA approval, but also because it is harder to obtain the confidence of the media and the general public. Florida officials, for example, told us that the number of penalties assessed, and dollar value of penalties collected, under its federally delegated programs decreased from 1994 to 1996, and that questions were raised as to whether these decreases resulted, at least in part, from a greater emphasis on the use of assistance to achieve compliance. In fact, newspapers in the State subsequently published articles questioning whether the State was letting violators continue to pollute without fear of punishment. Florida officials told us that their major investment in measuring the results of their enforcement and compliance assistance efforts was undertaken, in part, to determine whether these concerns were wellfounded.

The Office of Enforcement and Compliance Assurance points out that it is addressing the problem through its National Performance Measures Strategy and by collaborating on the development of enhanced outcome-oriented performance meas-

Per Proposition Protection: Meeting Fubility Expectations With Emitted Resources (SEED-91-97, June 18, 1991).

20 Environmental Protection: Status of EPA's Initiatives to Create a New Partnership With States (GAO/T-RCED-96-87).

21 Environmental Protection: EPA's and States' Efforts to Focus State Enforcement Programs

on Results (GAO/RCED-98-113, May 27, 1998).

¹⁸Environmental Protection Agency: Protecting Human Health and the Environment Through Improved Management (GAO/RCED-88-101, Aug. 16, 1988).

¹⁹Environmental Protection: Meeting Public Expectations With Limited Resources (GAO/ROED-81-001).

ures with a number of States. In addition to helping States develop outcome measures, enforcement officials also pointed to recently issued guidance that encourages EPA regional offices to be more flexible in considering States' preferences when negotiating regulatory priorities. ²² Specifically, the guidance calls on regions to "develop their priorities in partnership with their States . . ." and notes, "States are not required to adopt EPA's national priorities . . . This guidance provides flexibility for both regions and States to identify and implement their own priorities." The guidance further states that EPA is "addressing States' concerns about joint planning and priority-setting, work sharing, and oversight responsibilities by identifying this as a management focus area to be addressed by each region in the fiscal year 2000/2001 [memorandum of agreement] process."

Resistance to Change at Lower Levels Within Both EPA and Among State Agencies Our 1997 report on EPA's efforts to "reinvent" environmental regulation observed the widely held view, both within and outside EPA, that achieving a full commitment to reinvention by EPA staff will be difficult and will take time. ²³ The report further identified widespread agreement among EPA officials, State officials, and others that the agency has a long way to go before reinvention becomes an integral part of its staff's everyday activities, and cites a senior EPA reinvention official as noting that "many staff are comfortable with traditional ways of doing business and consider their program-specific job responsibilities as their first priority and re-

invention projects as secondary.

Many of the State officials we interviewed contended that comfort level among some EPA staff with the preexisting oversight arrangement-which has generally been in place for many years-helps to explain the reluctance by many of them to provide States with greater flexibility and reduced oversight. Program officials in five of the six States provided examples where they believed that regional program staff (tasked with the day-to-day implementation of specific programs) asked for information that was not included in the Partnership Agreement or that they had previously agreed with the region to drop. Minnesota officials said that EPA regional waste officials were asking for predictive or target numbers (such as the number of inspections the State intends to pursue during the coming year)-information, they said, that was not required nor included in their Partnership Agreement. Similarly, Georgia program officials said that EPA enforcement officials requested additional information after their Partnership Agreement had been negotiated and was ready to be signed. Georgia's Assistant Director and the Atlanta Deputy Regional Administrator, recognizing that the difficulty was due in part to different targets and schedules for enforcement and the media programs, set up an enforcement planning work group consisting of State and regional representatives from enforcement and the media programs to study and resolve the problem so that they could avoid last minute changes in the future. Other State officials told us that EPA has recently requested information related to the Results Act which, they believed, was outside the scope of their agreements. Several State officials commented that an openness toward seeking ways to reduce such information requests appears to be greater among senior EPA regional managers than among lower-level staff.

It is possible that what State officials may view as an "resistance to change" could be regarded by EPA staff as a well-founded concern that program requirements be implemented properly and in accordance with laws and regulations. However, officials in three of the four EPA regions we visited nonetheless acknowledged that support for NEPPS within EPA varies. One senior regional official said that managers and staff are often more comfortable with the preexisting way of doing business and are unsure as to how they can accomplish their work in the context of the partnership approach under NEPPS. He voiced the opinion that there may be a need for training in NEPPS implementation among regional staff. Another senior regional of-ficial said that some staff will only take NEPPS seriously when their salaries are

By the same token, our interviews with senior State officials suggest that cultural change is also needed at the State level if NEPPS is to achieve its full potential. Specifically, several State officials said that State program managers may not also be suggested in the state of the state program managers may not also be suggested. ways be well-versed in recognizing opportunities that would allow them to exercise their responsibilities with greater flexibility. Some of them indicated that there is resistance to NEPPS at the State program manager and staff level because of the perceived threat to their programs. In one State, in order to get the program direc-

²² EPA Office of Enforcement and Compliance Assurance, Final fiscal year 2000/2001 OECA Memorandum of Agreement (MOA) Guidance (Apr. 1999).

²³ Environmental Protection: Challenges Facing EPA's Efforts to Reinvent Environmental Regulation (GAO/RCED-97-155, July 2, 1997).

tors' support for participating in NEPPS, senior management made a commitment not to make any large-scale shift of funds among or between programs. Some regional staff and managers also commented that States have not taken advantage of opportunities to seek more flexibility under NEPPS, noting in particular that none of the States in their regions attempted to move significant amounts of funds among programs or across media lines.

Challenges in Communicating Requirements Through a Multi-Level EPA Organizational Structure

EPA's organizational structure poses additional challenges in negotiating agreements that have the full buy-in of all key EPA decisionmakers. Headquarters interaction with the States is generally conducted indirectly through the regional offices. National Program Managers set national strategic direction, and core program requirements and priorities, for each of their environmental programs. The managers establish overall national goals for their respective programs based on a variety of factors, including the underlying statutory mandates, congressional directives, administration/administrator priorities, and their own view of programs and policies that their programs should focus upon. The managers also must develop an accountability system to ensure program delivery by EPA's regions. The regional offices consult with managers in determining national priorities and communicate these priorities to the States. As such, the regional offices serve as the key EPA focal point in negotiating with States on program priorities and oversight arrangements to be reflected in NEPPS agreements. Importantly, the States generally have little direct communication with the managers. Thus, for example, if States wish to deviate from a national core performance measure or priority, it is the regions that consult with the managers.

Buy-in by Key Decision Makers and Mixed Messages Confuse States

As a consequence of this structure, according to the majority of State program managers we interviewed, it is not always clear that a Partnership Agreement between the State and the region has the full buy-in of EPA's key headquarters managers. A senior official with Florida's Department of Environmental Protection cited the example of the State's "Joint Compliance and Enforcement Plan," negotiated under the State's 1998–1999 Performance Partnership Agreement. Under the plan, State and regional officials enter into a process that seeks agreement, on the basis of industry compliance data, on what the State's most important compliance problems are and which methods (e.g., enforcement action, technical assistance) are most appropriate to address them. The official said that while the State has already invested significant time and effort into the plan, and has had expressions of strong support from EPA's Atlanta Regional Office, it does not know the extent to which EPA's headquarters Office of Enforcement and Compliance Assurance supports the effort or whether that office will ultimately give its approval.

Similar observations were made by other States' officials, who indicated that pro-

Similar observations were made by other States' officials, who indicated that provisions were sometimes added at the request of EPA headquarters to Partnership Agreements after they were negotiated. The timing of headquarters guidance and special requests for input into Partnership Agreements was cited by some State and regional officials as a key factor: final headquarters guidance, or specific requests in some cases, often come too late to be included in regional and State negotiations,

causing the need for some agreements to be renegotiated. 24

State officials also indicated that some headquarters requirements are negotiated separately from the overall Partnership Agreement negotiations. Officials with the Minnesota Pollution Control Agency told us that after successfully negotiating its agreement with regional program officials, the Office of Enforcement and Compliance Assurance requested separate measures and a separate section apart from the media programs in the Partnership Agreement. In the opinion of the State officials, this process illustrated the difficulty in getting all headquarters interests incorporated into the agreement in a timely fashion. Officials in several other States cited similar circumstances where enforcement provisions had to be negotiated outside the scope of the Performance Partnership Agreement, making it difficult to develop the kind of integrated environmental program NEPPS is intended to encourage.

²⁴In response to a 1997 survey by the Environmental Council of the States, participating States commented that headquarters guidance should be finalized by February of each year so that States and regions can meet in March to set joint priorities and begin the Performance Partnership Agreement process for the following fiscal year.

EPA Officials Acknowledge Need for Clearer and More Consistent Communication

Officials in the four regional offices we visited told us that sometimes there are inconsistencies between headquarters and regional offices, which complicates the message the agency sends to the States. Boston regional officials cited one instance in which Maine and Connecticut had proposed to consolidate funds for their wet-lands programs (1 of the 15 eligible programs) under a performance partnership grant and were initially told by the regional office that the arrangement would be acceptable. However, EPA's headquarters Water Office subsequently objected to alacceptable. However, EPA's headquarters Water Office subsequently objected to allowing all funds to be shifted from a categorical grant to a Performance Partnership Grant on the basis that a portion of the funds were supposed to be used in a competitive bid process for nonprofit organizations (and other eligible parties) to propose special projects. According to State and EPA Boston regional program managers, EPA's Boston Regional Office resolved the resulting confusion by brokering an agreement to allow for some funding from each of the New England States' wetlands

agreement to allow for some funding from each of the New England States wetlands grant programs to be set aside for special regional wetlands pilots.

Many EPA regional officials said that headquarters officials sometimes view NEPPS negotiations as a regional-State matter, and that headquarters offices do not view themselves as "signatories" to the process. The officials noted that it is only when there is a significant deviation on the part of the State from a national priority that headquarters may become involved with decisions related to NEPPS agree-

Most of the headquarters managers that we interviewed acknowledged that EPA headquarters input into the NEPPS negotiation and agreements process is primarily left for the regions, to convey to the States, with headquarters primarily engaged in setting the national priorities and issuing national program guidance. These headquarters managers acknowledged that headquarters input into the NEPPS process can be improved, noting in particular that headquarters guidance, initiatives, and special requests sometimes arrive at the regions too late to be useful. In April 1999, headquarters managers issued 2-year program guidance to help address April 1999, headquarters managers issued 2-year program guidance to help address some of the problems related to untimely requests. EPA intends that this guidance will allow the regions and States to include national program priorities earlier in the negotiating process for Performance Partnership Agreements. At the same time, however, the managers said certain circumstances that could affect a signed agreement, such as those dealing with new regulations, are sometimes out of their con-

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EPA provided updated information about the concern that headquarters program guidance often arrived too late to be of use in Performance Partnership Agreement negotiations between States and their EPA regional offices. Specifically, the agency noted that in April 1999, its headquarters National Program Managers issued 2year program guidance to the regional offices simultaneously and on schedule, so that the information would be available prior to Performance Partnership Agreement negotiations. EPA said that the new procedure has been well received by the regional offices, and that the introduction of 2-year guidance will allow regional offices and States to extend their planning horizon without fear that the priorities of the National Program Managary will change dramatically an an annual basic. We the National Program Managers will change dramatically on an annual basis. We have amended this chapter to reflect this progress. At the same time, the chapter still conveys agency officials' views that the guidance will not necessarily prevent other circumstances, which are out of EPA's control, from necessitating the reopening of an agreement.

EPA also cautioned that the report should more clearly distinguish between the terms burden reduction and differential oversight. Burden reduction, according to EPA, applies to activities, particularly information exchanges, that both EPA and a State agree are unnecessary, duplicative, or inefficient. In such cases, EPA believes that all State programs should benefit from burden reduction. The term differential oversight, according to EPA, means that oversight may vary depending on how effectively a State program meets performance expectations. The EPA comment draws a clear distinction between issues associated with reporting burdens and other issues that are more appropriately viewed as related to EPA's oversight of State environmental programs. We acknowledge that there are circumstances, separate and apart from EPA oversight, in which EPA and a State collaboratively pursue strategies to reduce reporting requirements that they both agree are unnecessary, duplicative, or inefficient. However, the distinction between this activity and oversight is not always so clear. Specifically, in cases where States and EPA have disagreed on the need for data not required by statute and viewed by States as extraneous, and EPA has continued to require reporting of such data, States have often characterized the issue as, in their view, a questionable exercise of EPA oversight.

BENEFITS OF NEPPS PARTICIPATION CITED, BUT FULL POTENTIAL HAS YET TO BE REALIZED

State participants' expectations for reduced EPA oversight and greater program flexibility-major anticipated benefits at the outset of NEPPS in 1995-have thus far met with some disappointment. Yet while these participants expressed disappointment at the rate of progress in achieving greater autonomy and greater emphasis on State priorities, senior officials and program managers from each of the six States that we reviewed agreed that NEPPS has provided their programs with worthwhile benefits. Among the benefits most frequently cited were that NEPPS (1) provided a means of getting buy-in for innovative and/or unique projects, (2) allowed States the option to shift resources and funds under the Performance Partnership Grants Program, (3) served as a tool to divide a burdensome workload more efficiently between Federal and State regulators, and (4) improved communication and increased understanding among EPA and State program participants about each other's program priorities and other key matters. Officials in each of the four regions visited substantially agreed with many of the benefits of NEPPS participation cited by State officials.

Yet while participants from each State indicated that their participation in the voluntary program would probably continue, they also shared a consistent opinion that the benefits of the program should be greater, that the program has yet to achieve its potential, and that improvements are needed. To some extent, such an outcome should not be surprising, given that the program (1) has been in place for just a few years and (2) began as an experiment in which participants were encouraged to try different tools and techniques. Yet these early years of the program have also provided a wealth of experiences as to what has worked well, what has not worked, and how the program can be improved. The 1995 agreement anticipated the appropriateness of such reflection in calling for a joint evaluation system for EPA and the States to review the results of their efforts to ensure continuous improvement. On the basis of our work, we believe that it is now appropriate to begin such

a joint evaluation process.

Program Improvements Attributed to NEPPS

State officials in each of the six States we visited identified a number of benefits State officials in each of the six States we visited identified a number of deficients to their air, water, and waste programs, but frequently spoke of some benefits, such as the ability to move funds toward the State's highest priorities, as potential future benefits rather than as benefits already realized. EPA regional staff acknowledged many of the benefits identified by State participants, but were often cautious in stating that additional flexibility could be exercised only so long as States continue that the statistical participants associated with their base proto meet the statutory and regulatory requirements associated with their base programs. Benefits identified related to the flexibility to work on innovative and special projects; to use resources and gain administrative efficiencies through the consolidated environmental grant; to more efficiently divide the workload among EPA and State regulators; and as a means of improving public outreach and involvement in environmental policies and programs.

The additional benefit most frequently cited by State officials is perhaps the most intangible one-that it helped to encourage a more systematic and effective communication between EPA and State officials on key issues and priorities, leading to increased mutual understanding and improved relations. Although many of these officials acknowledged that this progress has not yet resulted in the more equal partnership with EPA to the extent hoped for, the collaboration and negotiation fostered

by the process was viewed as a definite step in the right direction.

NEPPS Provides a Means of Getting Buy-in for Innovative And/or Unique Projects The majority of EPA regional and State officials we contacted cited the ability to work on, and get buy-in for, innovative and/or unique projects (such as those dealing with cross-cutting issues or multimedia projects) as a tangible benefit under NEPPS. Among the examples cited was a Quality Assessment Management Plan included in Florida's fiscal year 1999 Performance Partnership Agreement, signed between the State's Department of Environmental Protection and EPA's Atlanta Regional Office. Once fully developed and implemented, the plan is expected to provide the State with the ability to identify and improve the quality of data provided by private laboratories. The Florida project director spearheading the effort on behalf of the State said that elevating the project as a priority in the Partnership Agree-ment legitimized the concept and gained the support of key EPA and State

decisionmakers. The prototype or model of the plan has been completed and submitted to State and regional officials with the expectation that the project staff will next move on to issues related to implementation. According to the project director, the Partnership Agreement-as a document signed by the senior officials at both the State and Federal level-was crucial in conveying top management buy-in. The project director observed that the Agreement, in effect, provided the "impetus to innovate" whereby State and regional leadership formally endorsed a new way of doing business. Environmental officials in Minnesota recently reorganized the State's pollution control agency to eliminate its media-specific structure. The new organization has three geographic divisions to handle most environmental issues and two divisions to handle environmental planning and outcomes. The reorganization was undertaken because they believed that an integrated approach to environmental management was needed and because many problems transcend media boundaries. Agency officials noted that the Performance Partnership Agreement between the State and EPA's Chicago Regional Office was key to establishing a new working relationship with EPA and to Minnesota's efforts to find a better way to plan and carry out their work. They added that the Partnership Agreement provides the State the flexibility to go beyond reporting on media-based program outputs toward linking, tracking, and measuring agency activities with actual environmental results. Among other examples cited, a program manager in EPA's Atlanta Regional Office pointed to North Carolina's effort to use its Performance Partnership Agreement to pursue a multimedia inspection project for metal finishing plants. The inspections are conducted jointly from an air, water, and waste perspective so that each media program does not have to do its own separate inspection. The Partnership Agreement provided program managers in the State environmental agency with a recognized vehicle to propose

Flexibility to Shift Resources and Funds Under NEPPS Grant

As noted earlier in this report, Performance Partnership Grants allow States the opportunity to combine individual categorical grant funds into a consolidated grant. Once included in the consolidated grant, the funds Agreements essentially lose their category-specific identity and can be used with considerably greater flexibility. Environmental agencies within four of the six States included in our review

Environmental agencies within four of the six States included in our review (Maine, Connecticut, Georgia, and Minnesota) have Partnership Grants with their corresponding EPA regional offices. Importantly, officials in these States told us that they have not been able to take greater advantage of the ability to shift funds, primarily because the programs covered by the Partnership Grant each have their own base program requirements that must be funded. ²⁵ However, several of the officials told us that the flexibility allowed under a Partnership Grant to move funds where they are most needed remains an important potential benefit of the program. For example, a Georgia official said that they hoped to shift funds sometime in the future to address nonpoint sources of water pollution and air quality in metropolitan Atlanta. This official added that if an emergency were to arise, the Partnership Grant would allow the State to move funds and staff quickly from various programs to address the problem. A grant official with EPA's Boston office noted that prior to the Partnership Grant program, States in the region often complained about their inability to shift funds from programs that had excess funds to other programs that were short of funds. He noted that such complaints have declined with the inception of the program.

Program officials in all four of the case study States having Partnership Grants also cited administrative efficiencies from the ability to consolidate their categorical grants. The officials noted that the grants have allowed States to condense individual work plans into a single consolidated work plan, and States have gained additional flexibility in the way they account for staff time. State environmental agency officials noted that they were able to reduce the number of grant applications, budget documents, and work plans required. Some added that they gained administrative relief from not having to track staff time and charges on a detailed, grant-bygrant basis. A Maine official, for example, noted that under the traditional categorical grant process, staff positions funded by multiple categorical grants required con-

²⁵At a workshop sponsored in July 1997 by the Environmental Council of the States, two States reported plans to shift between 5 and 15 percent of the funds under their Performance Partnership Grants to address priorities such as pollution prevention. Also, one State in a 1997 Council survey of the Performance Partnership Agreement process reported setting aside 5 percent of its funds from water grants to address wetlands lakes and a new Performance Partnership Grant coordinator position.

trols to be in place to ensure that employees charge their time to specific grants and budget categories. The Partnership Grants provide the flexibility to accomplish necessary work without worrying about which tasks are funded by which categorical

grants.

EPA regions' responses to this increased flexibility have been mixed. Regional program managers in the four regions visited expressed concern about the flexibility of the NEPPS agreement and grants process and said that there is a need to retain or develop new State reporting requirements if EPA is to retain proper program oversight. These program managers commented that eliminating reporting requirements results in EPA losing its ability to hold States accountable and argued for States to provide predictive annual targets as to what they plan to accomplish and to develop short-term or interim measures for reporting States' progress toward measuring environmental results. Several managers said that it is important for the States to prove that work is actually being done and cited the consolidation of grant funds under a Partnership Grant as an example where EPA loses a level of control. Other regional program managers, however, were more optimistic and comfortable with the fact that States provide year-end reports on what they have done.

A Tool to Divide a Burdensome Workload Efficiently Between Federal and State Regulators

In 1997, we reported on EPA's and States' efforts to improve their management of Superfund site cleanups, ²⁶ and cited innovative efforts in Minnesota and Washington where State and regional officials experienced substantial efficiencies through work-sharing agreements. In Washington, State and EPA officials reported that under a formal written agreement signed by officials in EPA's Seattle office and the State's Department of Ecology, responsibility was formally divided for cleaning up the State's National Priority List sites between the two agencies. Both EPA and State officials reported that the formal, clearly articulated division of responsibility between the two parties helped to reduce both the acrimony and the duplication of effort that characterized their past relationship. The State official reported a strong consensus among the staff that the changes contributed to a significant reduction in the number of staff resources needed to oversee cleanups at NPL sites. Minnesota officials and Superfund officials with EPA's Chicago office reported similar success with such a work-sharing agreement.

with such a work-sharing agreement.

State and EPA regional officials cited similar benefits of Partnership Agreements, as formal documents that clearly articulate the obligations of both parties to the agreement. State officials noted that in some instances in the past, communication seemed to be one of EPA conveying its expectations of the State, rather than the two-way communication embodied in many Partnership Agreements. Even where the concept of dividing responsibilities and identifying work-sharing opportunities has been used, State officials indicated that a formal Partnership Agreement brings a commitment and focus to the need to share scarce resources and to formalize stat-

ed commitments.

Program managers in several of the regions and States we visited cited a number of examples that illustrated the benefits associated with the formal division of labor memorialized in a Partnership Agreement. Connecticut's NEPPS coordinator, for example, said that the Connecticut Department of Environmental Protection negotiated with EPA's Boston Regional Office to pick up some of the State's training work load, because EPA could provide joint training for all the New England States at a lower cost than would be the case if each State provided training individually. The Connecticut Partnership Agreement specifically States that EPA agrees to assist with training in several areas, such as measuring and documenting the success of the State's compliance assistance and enforcement activities. The State's fiscal year 1999 agreement also documents coordination with the Boston office, indicating that the region agrees to work with the State on helping to reduce the State's reporting burden. According to the agreement, the region was to assume some of the State's inspection workload or streamline inspection requirements in order to free up State staff resources for compliance assistance activities.

Georgia's Partnership Agreement includes provisions for EPA's Atlanta office to assist the State in training, enforcement, and inspection activities generally on an "as requested" basis. For example, the region provided some expertise to the State and committed to dedicating EPA resources to the training of compliance officers within the State. Oregon's Partnership Agreement was similarly used to address unmet needs in the State's water program. Officials with EPA's Seattle Regional Office and the State's Department of Environmental Quality agreed that the State's

 $^{^{26}\,}Superfund:$ Stronger EPA-State Relationship Can Improve Cleanups and Reduce Costs (GAO/RCED-97-77, Apr. 24, 1997).

program to identify and remediate heavily polluted waters was understaffed and underfunded. Under the agreement, the regional office agreed to provide the State with two staff to assist in the program.

Opportunity to Improve Public Outreach and Involvement

A key intended benefit and one of the seven principal components of NEPPS in its May 1995 joint agreement is the opportunity to share information with the public on State environmental conditions, objectives, and performance. Officials with the Environmental Council of the States commented that public participation is a strong point of the NEPPS program-something that rarely occurred under the formal traditional system where public comment was generally sought on specific facilities or sites only. At the time of the 1995 agreement, some States had begun to share such information through their annual State of the environment reports. The NEPPS process, however, offered greater opportunities for constructive public involvement.

EPA and State officials told us that increased public participation and involvement remains a principle benefit of the EPA-State NEPPS process, but its full potential is largely unmet. State officials have found that public interest and input into the NEPPS process has varied but that, overall, it has thus far tended to be limited. Minnesota officials, for example, said that they sent out a press release and copies of their Partnership Agreement to about 400 entities comprised of industry, environmental, community, and tribal groups and received only a handful of comments. Georgia sought comments on its Partnership Agreement at a public meeting and received limited comments, and Connecticut held an evening meeting with an advisory board consisting of representatives for the different media and similarly obtained little feedback. In general, regional and State officials said that it will take time to increase the public's understanding and interest in focusing on the States' and EPA's long-term environmental goals and performance, rather than only on specific activities or conditions of more immediate concern.

Improved Communication Among Participants About Program Priorities and Other Key Matters

Nearly all EPA regional and State officials that we interviewed said that a key benefit of NEPPS has been improved communications among program participants and the fostering of a better Federal-State working relationship. Members of the EPA Chicago Regional Office's NEPPS coordinating committee (which represents all media and enforcement programs), said that NEPPS has provided the region with a better understanding of States' strategic plans, which has assisted the States when negotiating a change with the region. In addition, NEPPS has encouraged regional and State staff of all media programs to discuss their programs jointly, a practice that has helped program officials at both the State and regional level gain a better understanding of each other's needs. According to State and regional officials, this higher level of understanding has been a major factor that has helped them to improve the way they set priorities across programs.

Headquarters enforcement officials also point to regional efforts to try to use

Headquarters enforcement officials also point to regional efforts to try to use NEPPS as a vehicle to more actively engage the States in joint enforcement planning and priority-setting. EPA's Boston Regional Office, for example, systematically arrayed a number of multimedia enforcement and compliance assistance programs for discussion and possible incorporation in States' fiscal year 2000 Performance Partnership Agreements. In each case, the priority the agency attaches to the program is indicated as well as the type of collaboration EPA anticipates having with the States. ²⁷ Similarly, the officials cited as another example a Chicago Regional Office's analysis of its Performance Partnership Agreement with Minnesota which describes, on a media-specific basis, the State's and EPA's commitments to participate in mutually agreed-upon enforcement and compliance assurance activities to realize jointly determined environmental objectives.

Senior officials and program managers in all six States we visited also agreed that the NEPPS process has improved EPA-State communication and overall relations. Many also noted that NEPPS highlights and enhances communication among their own State media programs, as well as among EPA regional media programs. Noting that improved communications can solve 95 percent of their State-regional problems, Minnesota officials have instituted routine monthly conference calls with EPA's Chicago Regional Office to address waste issues and are considering implementing the same process for their other media programs. EPA Chicago Regional

²⁷ EPA's Boston Regional Office, "Assistance and Pollution Prevention Programs & Priorities For Fiscal Year 2000 State/EPA Performance Partnership Agreement (PPA) & Compliance Strategy Discussions"

Office officials told us that they are also relying increasingly on oral communications with their States in an effort to encourage a more collegial and efficient approach to resolving problems.

Future Prospects for Success Depend on Further Progress

Officials in each of the case study States that we interviewed agree that the concept behind NEPPS, and its potential for achieving a more effective partnership between EPA and the States, is worth pursuing. Yet while acknowledging some benefit from their participation, they also consistently expressed the view that the benefits should be greater; that the program has yet to achieve its potential; and that improvements are needed. Of particular note, providing States with the incentives envisioned initially under NEPPS, including the differential oversight as discussed in chapter 4, was seen by almost all of the State officials we interviewed as critical

to the future success of the program.

This view is reinforced by the resource commitment that some States feel has been required to take part in the program. Oregon officials, for example, said that they invested a significant amount of their resources in conducting a State environmental self assessment and other activities to participate in the NEPPS-Performance Partnership Agreement process. To date, however, these officials noted that they have not gained the advantages of reduced oversight leading to increased self management of their delegated programs and greater autonomy to focus on State priorities. Similarly, in explaining a major reason for their decision not to participate in the program, the Deputy Director of Michigan's Department of Environmental Coefficients. mental Quality noted that the heavy investment cited by participating States and the modest benefits achieved by those States has led to the Department's decision to wait and see how NEPPS evolves. The Deputy Secretary of Pennsylvania's Department of Environmental Protection had similar reasons for that Department's nonparticipation, noting that the department had several State initiatives underway that were important and, therefore, they would be reluctant to shift resources to NEPPS. The Deputy Secretary said that Pennsylvania is reserving judgment as to its future participation in NEPPS, noting that if greater progress and benefits under NEPPS.

NEPPS accrue over time, it may become advantageous for the State to participate. For their part, EPA officials acknowledge the States' desire for greater program flexibility and autonomy, but believe they are not in a position to grant it unconditionally. Specifically, the officials maintain that additional program flexibility will have to be accompanied by demonstrated, measurable assurances that statutory and

regulatory requirements and program objectives will still be met.

As we noted in chapter 4, both EPA and State officials have pointed to the difficulty of developing specific, nationwide criteria to be used in determining the appropriate level of regional oversight of State programs under NEPPS. However, given the importance to the program's future of making progress on this issue, it may be helpful for EPA and State officials to collaborate in developing some type of non-binding guidance that could be used in guiding the negotiations of individual regions and States on this sensitive issue.

In addition to this overriding concern about oversight, NEPPS participants believe that the benefits that have accrued from their participation in NEPPS have not reached their full potential. For example, many participants have noted improvements in communication under NEPPS, but said that further improvements are ments in communication under NEPPS, but said that further improvements are needed to ensure that all key EPA offices provide timely input into Partnership Agreement and Partnership Grant negotiations to help State agencies understand whether their agreements have full buy-in of all EPA offices. Similarly, while Partnership Grants allow for greater flexibility in shifting funds among media programs, States have thus far taken advantage of this opportunity to only a limited degree. To some extent, the base program requirements under individual programs combined with financial constraints have limited States' flexibility in shifting funds as freely as they would like. However, other factors may explain the problem as well, including specific grant regulations, resistance by EPA headquarters and/or regional staff, or similar resistance among State agencies themselves. staff, or similar resistance among State agencies themselves.

Joint EPA-State Evaluation Process Needed to Improve NEPPS

These concerns pose challenges for the future of the program. However, we believe such challenges are to be expected in the context of a new program that strives to chart a new direction in the EPA-State relationship. Importantly, the need to address such challenges was anticipated by the 1995 Agreement that launched the program, which called for a joint evaluation system for EPA and the States to review the results of their efforts to ensure continuous improvement.

To some extent, such a joint evaluation process was undertaken to produce the core performance measures. The intergovernmental committees that developed these

measures, composed of representatives of EPA and State agencies, produced an initial set of measures for fiscal year 1998 that was modified and improved in subsequent years. As noted in chapter 3, the measures approved for fiscal year 2000 are widely viewed as substantially improved by both EPA and State officials.

EPA's and States' recent efforts to improve their working relationship in cleaning up priority Superfund sites may offer another useful precedent for such an effort. Reflecting a growing consensus among many in the administration, State government, and the Congress that States should take on more responsibilities for leading priority site cleanups, EPA and representatives from different States formed a number of intergovernmental workgroups to recommend ways to overcome the key barriers toward this goal. ²⁸ For example, a "State Readiness Workgroup," composed of representatives of EPA headquarters and regional offices and State agencies, was charged with clarifying the requirements and circumstances under which States could be granted additional responsibilities to clean up these priority sites. Similarly, an intergovernmental "Assistance Workgroup" was also established to identify the technical financial, administrative, and legal assistance needs of the States in their efforts to take a lead role in successfully cleaning up Superfund sites. According to the Director of the State, Tribal, and Site Identification Center (within the Office of Solid Waste and Emergency Response), the workgroups were particularly useful in fostering collaboration among representatives of EPA's headquarters and regional offices involved in the cleanups in a manner that helped to identify where the key problems were and what practices worked well to address them. The Director said that the results of the workgroups have since been incorporated into nilot to the proper said that the results of the workgroups have since been incorporated into nilot. the key problems were and what practices worked well to address them. The Director said that the results of the workgroups have since been incorporated into pilot projects in seven States (and their corresponding regional offices) designed to increase States' responsibilities in leading cleanups of these sites.

CONCLUSIONS

On the basis of information that can be learned from experiences to date of a number of States and their corresponding EPA regional offices, we believe the systematic joint evaluation process called for by the 1995 Joint Commitment to Reform Oversight and Create a National Environmental Performance Partnership System should be initiated. The goals of this effort should be to (1) identify best practices among participating States for dealing with the most challenging problems facing the program and (2) eventually obtain agreement on actions that will improve and

expand the program.

Such a process has already been used to develop and improve the Core Performance Measures used in the NEPPS program, and has served as a successful model elsewhere in EPA where new ideas have been developed and tested, and agreement among diverse parties on their implementation has been reached. We believe a similar effort, which targets key issues affecting NEPPS progress and which involves representation from EPA headquarters offices, EPA regional offices, and participating State agencies, could similarly help to expand both the participation in, and effectiveness of, this important program. The precise format to be used for this process (e.g., whether individual working groups should be established or whether a single committee composed of senior State and EPA officials should be used) should be determined by EPA and State environmental leaders.

RECOMMENDATIONS

We recommend that the Administrator of EPA work with senior-level State officials to initiate a joint evaluation process that (1) seeks agreement on the key issues impeding progress in developing a more effective National Environmental Performance Partnership System and (2) develops mutually agreeable remedies for these is-

 developing the issues such a process could focus on are:
 developing a set of flexible guidelines, to be used as a tool by State and EPA regional NEPPS negotiators, that could help to clarify the appropriate performance expectations and other conditions that States must meet to achieve reduced oversight in carrying out their environmental programs and the type of reduced oversight (e.g., reduced frequency of reporting, greater autonomy in setting program priorities) that could be achieved;

· identifying what additional work is needed to address the challenges in implementing the Core Performance Measures recently negotiated by EPA and the Environmental Council of the States for fiscal year 2000, including how these measures can best be reconciled with the measures adopted by EPA under the Results Act;

²⁸ State and EPA efforts to augment States' roles in leading Superfund cleanups are discussed in our 1997 report, Superfund: Stronger EPA-State Relationship Can Improve Cleanups and Reduce Costs (GAO/RCED-97-77, Apr. 1997).

 alleviating the resistance among some staff (both within EPA offices and among participating State agencies) toward implementing the National Environmental Performance Partnership System, through training and other strategies;
 determining what appropriate steps should be taken by EPA and the States to allow for greater use by States of the flexibility envisioned under the Performance Partnership Grant system to shift resources and funding among their media programs: grams;

· determining how effective public participation in the NEPPS process can best be ensured:

• and developing ways to improve communication among EPA's headquarters and regional offices and participating States to ensure that States are given a clear and timely indication on whether key elements of their agreements pursuant to the system have the full buy-in of major EPA offices.

AGENCY COMMENTS

EPA agreed with the report's recommendation that EPA and State efforts to improve NEPPS should include training and other efforts to achieve the "cultural change" necessary for greater success. The agency also pointed out that it recently agreed with representatives of the Environmental Council of the States on a basic outline of a joint evaluation process. We acknowledge this milestone and note that further progress on the details of such a process, including the specific issues to be addressed and a timetable for addressing them, will be important steps toward improving NEPPS

EPA also commented on our recommendation that EPA and State environmental leaders should develop guidelines that would help to clarify, for EPA and State negotiators, the appropriate performance expectations that States must meet to achieve reduced oversight in carrying out their environmental programs and the type of reduced oversight (e.g., reduced frequency of reporting, greater autonomy in setting program priorities) that could be achieved. EPA noted that while it agreed with this recommendation in principle, the agency and the States believe that each State's Performance Partnership Agreement should specify the degree of oversight necessary to accommodate the unique environmental problems and varied program capabilities of that State. We agree that oversight arrangements should be negotiated between each State and its corresponding regional office in a manner that accounts for that State's unique circumstances, and that these arrangements should be specified in the Performance Partnership Agreement. We continue to believe, however, that nonbinding national guidance-to be agreed upon in advance by EPA and State environmental leaders-would be useful in introducing objective parameters to be considered by regional and State negotiators as they seek agreement over this sensitive issue.

APPENDIX I

COMMENTS FROM THE ENVIRONMENTAL PROTECTION AGENCY AND OUR EVALUATION

The following are GAO's comments on the Environmental Protection Agency's (EPA) letter dated May 20, 1999.

1. We have clarified, in the executive summary and chapter 5, that EPA officials and representatives of the Environmental Council of the States have recently agreed to certain characteristics of a joint evaluation process, and that further progress (interest deciries and existing the states of the states are stated as a state of the states are stated as a stated a cluding decisions on the specific issues to address and a timetable for addressing them) would be important steps in improving NEPPS.

2. We have amended the report to reflect the agency's expectation that its April 1999 2-year guidance should allow the regions and States to consider national program priorities earlier in their partnership agreement negotiations, and thus limit the need to renegotiate priorities that had been previously established. At the same time, the report still conveys agency officials' views that the guidance will not necessarily prevent other circumstances, which are out of EPA's control, from necessitating the reopening of an agreement.

3. Citing the observation in chapter 3 that (1) EPA has focused on outputs to meet its obligations under the Results Act while supporting a transition to outcome-based management under NEPPS and (2) these conflicting priorities have led to confusion that hinders performance partnerships, EPA stated that, to the contrary, both the Results Act and NEPPS encourage the development of outcome measures and outcome-based management. We acknowledge the shared objective of NEPPS and the act in focusing on results. The key word, however, is implementation: as we have documented in other recent work, the measures EPA has used in its implementation

of the Results Act have thus far been heavily output-oriented and therefore convey or the Results Act have thus far been heavily output-oriented and therefore convey priorities that are often in conflict with the more outcome-oriented measures being employed under NEPPS. We acknowledge the agency's ongoing efforts to orient its Results Act-related measures increasingly toward outcomes, and believe that further progress toward this end will help to alleviate this problem. In addition, we modified our discussion of this issue in Chapter 3 to note that the April 1999 Addendum to the Joint Statement, co-signed by EPA and the Environmental Council of the States, States that core performance measures and other current reporting requirements will be relied upon to satisfy EPA's Results Act-related data needs.

4. We agree that oversight arrangements should be negotiated between each State and its corresponding regional office in a manner that accounts for that State's unique circumstances, and that these arrangements should be specified in the State's Performance Partnership Agreement. We continue to believe, however, that nonbinding national guidance-to be agreed upon by EPA and State environmental leaders-would be useful in introducing objective parameters to be considered by regional and State negotiators as they seek agreement over this sensitive issue.

5. EPA's comment draws a clear distinction between issues associated with reporting burdens and other issues related to EPA's oversight of State environmental programs. We acknowledge circumstances in which EPA and a State collaboratively pursue strategies to reduce reporting requirements that both agree are unnecessary, duplicative, or inefficient; and that such circumstances could be viewed as outside the two parties' oversight arrangement. However, the distinction between this activity and oversight is not always so clear. Specifically, where States and EPA have disagreed on the need for data not required by statute and viewed by States as extraneous, and EPA has continued to require reporting of such data, States have often characterized the issue as, in their view, a questionable exercise of EPA over-

STATEMENT OF R. LEWIS SHAW, DEPUTY COMMISSIONER, SOUTH CAROLINA DEPART-MENT OF HEALTH AND ENVIRONMENTAL CONTROL AND PRESIDENT, ENVIRON-MENTAL COUNCIL OF THE STATES (ECOS)

Mr. Chairman and members of the committee, thank you for the opportunity to appear before you today. My name is R. Lewis Shaw, and I am the Deputy Commissioner of the South Carolina Department of Health and Environmental Control. I have 29 years of service to my State with the last 16 of those in my current position as the State environmental director. Today, however, I am here representing the views of the Environmental Council of the States (ECOS) of which I am the President.

ECOS is the national, non-profit, non-partisan association of the State and territorial environmental agencies. The States and territories are our members and the people we represent are the leaders of the various State environmental agencies. Our mission is to:

1. Champion the cause of States, and

2.Provide for the exchange of ideas, views and experiences among the States, and 3.Foster cooperation and coordination in environmental management, and

4. Articulate State positions to Congress, Federal agencies and the public on environmental issues.

Other details about our association are provided in the attachments to this testimony, which I ask be entered into the record.

I am here to tell you of some of the accomplishments that States have made in environmental protection—accomplishments that are not widely known. I will make four main points:

1)States now implement most of the delegable environmental programs, gather most environmental data, and conduct most enforcement and compliance actions;

States are paying for the largest share of environmental protection;

3)States implement many of their own environmental programs, and have become the chief architects of and advocates for innovations; and

4)States are committed to an environmental partnership with the Federal Government, but have suggestions for how to improve that relationship.

I'd like to now expand on those four points: First, States now implement most of the delegable environmental programs. This is good news, because that is what Congress intended when it enacted laws such as the Clean Air and Clean Water Acts. States now have primary responsibility for carrying out those laws. As of 1999, about 70 percent of the major programs that could be delegated to States had been delegated. This means States are running most of the clean water programs, clean air programs, drinking water programs, and waste clean up programs that Congress created. As you can see from Chart 1 (on display and attached), much of this growth was in the 1990's, and in particular between 1993 and 1998 a 5-year period in which State delegations grew by almost 75 percent.

As part of this responsibility, States are also collecting most of the environmental quality data. Brent Bradford, my colleague from the State of Utah will be speaking

more about this today.

We also conduct most of the environmental enforcement activities. In recent years, States have averaged between 75 and 80 percent of all enforcement actions taken by EPA and the States combined. We conduct at least 97 percent of all enforcement inspections. But we also conducted many other enforcement actions and compliance assistance that EPA may not count for one reason or another. Last year, Congress directed ECOS to conduct research on the issue of counting enforcement and compliance activities and report back to Congress. We are working on this

project now and expect to report to you early next year.

My second point is that States are paying for most of this environmental protection. As you can see in chart 2 (on display and attached), State spending for environmental protection has grown dramatically since 1986. In 1986 States spent about \$5.2 billion on environmental protection and natural resources. Congress, through EPA, provided just over \$3 billion of that, almost 58 percent. But by fiscal 1996, a very different story had emerged. States spent about \$12.5 billion, with the EPA providing about \$2.5 billion, or about 20 percent. During the 10-year period from 1986 to 1996, State spending on the environment increased about 140 percent, while total EPA funding to the States decreased about 17 percent. Most of the decline is attributable to reductions in water infrastructure support programs. In 1996 the States spent nearly twice as much (\$12.5 billion) on environment/natural resources as the entire EPA budget (\$6.5 billion).

My third point is that States conduct many other non-delegated programs on their own, and that we are great at innovation. For example, in South Carolina, we have our own laws, rules and practices on the protection of shellfish beds that are not part of the delegated Federal system, but are very important to our State. Obviously, these kinds of laws vary State to State, but they show the commitment of the States to the environment. According to the National Conference of State Legislatures, the States passed into law over 700 environmental bills in 1997 alone. At least half of these dealt with non-delegated environmental programs such as pollution prevention and solid waste management (chart 3 on display and attached). As the chart shows, for example, most of the hazardous waste sites in the country are actually being regulated and cleaned up under State authority. Another study by The Council of State Governments found that 80 percent of the States had at least one Clean Air Standard that exceeded the Federal minimum standards. In South Carolina, for instance, our toxics list includes 258 constituents, compared to 188 on the Federal list.

States implement most environmental protection programs, so we are often the first to recognize innovative solutions for environmental problems. Each year for the past 3 years, ECOS has compiled State program and implementation innovations. These cover the complete range of environmental protection, including delegated and non-delegated programs. ECOS has now compiled hundreds of these innovations. Some of these State ideas have been nationally recognized by Innovations Awards programs such as those of The Council of State Governments and Harvard University.

States are committed to the State-Federal partnership in environmental protection. But we believe that the time for command-and-control, top-down programs has ended. Perhaps it should be replaced by a set of mutually agreed upon national goals and standards, which would be achieved by the States in the manner we deem most appropriate, and supplemented by local goals and standards that meet the specific needs of the States. After all, you are not likely to see the same environmental problems in South Carolina as you would in Utah because the States have such different ecologies. Our final chart shows some of the differences that we think will lead to a more harmonious relationship and better environmental protection (see display chart and attached).

Some people still believe that it's 1970 and that the States can't be trusted to protect the environment. We believe the facts presented here today give the real story States are leaders in environmental protection and committed to protecting the health and environment of the citizens we serve.

Mr. Chairman, thank you again for the opportunity to appear before you today. I am happy to take any questions.

The role of State governments in environmental protection has increased dramatically over the last $10\ \text{years}.$

(by R. Steven Brown)

A remarkable, and largely unnoticed, change in environmental protection has occurred over the past five to 10 years. The States have become the primary environmental protection agencies across the nation. Much has been written about EPA's role, or about State-EPA partnerships. This article seeks to tell the States' story.

role, or about State-EPA partnerships. This article seeks to tell the States' story.

Over the past year with help from other State-based organizations (many of which have articles in this issue), ECOS compiled a set of data that shows a remarkable maturation of the policymaking and regulatory capabilities of the State environmental agencies. This article presents those data in five categories: delegation, fiscal, enforcement, information gathering and policymaking.

Delegation

Congress intended for the States to administer most Federal environmental programs. ¹ Generally, a State petitions the EPA to administer one of the delegable programs. This process is commonly known as "delegation," or more legally as "assumption," or "primacy." The Governor files a petition after the legislature has passed authorizing legislation that must be at least as stringent as the Federal standard and after the State has shown that it has adequate resources.

Most Federal programs are actually delegated in a piecemeal fashion, however. For example, a State may have created a program for new source performance standards, but may not have everything in place yet to run the hazardous air pollutant part of the Clean Air Act. Such a system aids the States in that it allows a State to proceed incrementally, but it complicates the discussion about what is delegated and which level of government runs which program.

Nevertheless, it has become clear that the delegation of environmental programs to the States has increased dramatically in the past 5 years. In the summer of 1998, ECOS completed a delegation study for 22 of the programs from most of the major delegable Federal acts. ² This study showed the number of States with delegated programs for the following:

Clean Air Act: 42 States ³
Clean Water Act: 34 States
Waste (RCRA): 37 States
Drinking Water: 39 States
Pesticides (FIFRA): 39 States

The overall delegation rate to the States in mid-1998 was about 65 percent, and about 74 percent for the major environmental programs. This means, for example, that of the portions of these Acts that could be delegated, about 74 percent had been delegated.

Contrast this delegation rate to that of 1993, when EPA had delegated 39.5 percent of 22 environmental programs to the 50 States. By 1998, EPA had delegated 757 of 1,166 possible Federal environmental programs to 53 States and territories, nearly a 75 percent increase from 5 years prior. States also operate many of their own, nondelegated environmental programs. Some of the rapid increase was attributable to programs like the wellhead protection program of the Safe Drinking Water Act (from 8 to 36 States) and the New Source Review program of the Clean Air Act (from 15 to 42 States).

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With such an increase in delegated programs, one might expect a parallel increase in both EPA and State funding to support the new programs. Starting with fiscal 1986, the Council of State Governments periodically researched each State's budget to compile total State spending for environmental protection and natural resources for each State. Data exists for 1986, 1988, 1991, 1994 and 1996. This State spending can be coupled with EPA and U.S. Office of Management and Budget data on funds supplied to the States to present a picture of the source of environmental protection funds in the States.

¹ECOS has prepared two papers detailing the legislative history of the Clean Air Act and the Clean Water Act. We expect to publish these in early summer 1999.

²Currently presented on the ECOS u eb page at: http://www.sso.org/ecos/states.htm

³These are averages for the delegable programs under each Act for which ECOS has informa-

In 1986 States spent about 55.2 billion on environmental protection and natural resources. ⁴ The EPA provided just over \$3 billion of that, almost 58 percent. ⁵ But by fiscal 1996, a very different story had emerged. States spent about \$12.5 billion, ⁶ with the EPA providing about \$2.5 billion, or about 20 percent. ⁷ During the 10-year period from 1986 to 1996, State spending on the environment increased about 140 percent, while total EPA funding to the States decreased about 17 percent. 8 Most of the decline is attributable to reductions in water infrastructure support programs. In 1996 the States spent nearly twice as much (\$12.5 billion) on environment/ natural resources as the entire EPA budget (\$6.5 billion).

It should come as no surprise that the States have also increased the size of their environmental staff over this 10-year period. In 1986 the State agencies expended about 38,000 work-years, but by 1996 that effort had increased to about 61,000

work-years, almost a 60 percent increase.

Enforcement

States are the primary enforcers of environmental law for delegated programs. The States also enforce many State environmental laws that are not related to the national laws. EPA tracks and reports the enforcement actions that it and the States take each year, but only for delegated programs—enforcement actions that the State takes on non-delegated programs are not counted. Furthermore, EPA may not count some State enforcement actions for a variety of other reasons, such as differences in data management. Even with those limitations, over the past 10 years the States have consistently conducted about 75 percent of the enforcement actions 9 taken, with EPA doing the rest. ¹⁰ In recent years, the State workload has risen to 80 percent of the actions ¹¹.

Many States have also emphasized "compliance" over "enforcement." Methodologies for counting compliance assistance activities appear to still be inadequate and are a matter of current research by EPA and the States. As a result, it appears EPA and many States themselves do not track compliance assistance efforts that the States undertake. Unfortunately, this means that States and EPA may not be able to count some of the most important "enforcement actions" that States undertake. While EPA data shows that States perform most of the administrative enforcement actions, we know the number to be even higher because compliance assistance ac-

tivities are not part of the enforcement action count.

One of the most visible "products" of any environmental protection agency, State or Federal, is information. Each State agency gathers, compiles, houses and analyzes a great deal of environmental information, both for delegated programs and for other environmental purposes important to them. When a State is delegated a program, it usually agrees to forward key information to EPA to one or more of 13 national environmental data bases that EPA maintains. Six of these national data bases house environmental quality data (the others have toxicology information, or information about regulated facilities). In the summer of 1999, ECOS and EPA expect to jointly publish a report that describes the source of the data in these six Air data: >99 percent of EPA's data comes from States ¹³

⁴R. Steven Brown, et al., Tile Resource Guide to State Environmental Protection. Lexington, Kentucky: The Council of State Governments, 1988. Page 93.

⁵ECOS calculation, based on U.S. Office of Management and Budget data. Some funding is also provided to the State environment/natural resource agencies by other Federal agencies, but ECOS' preliminary research indicates that most Federal funds are from EPA.

⁶Karen Marshall, et al. The Resource Guide to State Environmental Protection Fifth Edition. Lexington, Kentucky: The Council of State Governments, 1999. p.32

⁷As per footnote 4.

⁸EPA believes it has "held the States harmless" by protecting the State categorical grant budgets during times of budget cuts. EPA has stated to ECOS that these grants are about S850 million per year. ECOS has used OMB numbers (which are higher) to reflect total EPA funding provided to the States for any purpose. Thus, total EPA funding to States has decreased, while categorical grants are reported to have increased over the past 10 years.

9 Administrative actions and judicial referrals.

³Administrative actions and judicial referrals.

¹⁰ US EPA, Office of Enforcement and Compliance Assurance; February 18,1998, web page:http://es.epa.gov/oeca/96accomp/appa6.html.

¹¹ EPA has told ECOS that it is more likely to spend its time on large, complex enforcement cases, which it believes have a significant qualitative impact, if not a quantitative one.

¹² Environmental Reporting Data in EPA's National Systems: Data Collection by State Agending ECOS/EPA 1000 In praces

cies. EGOS/EPA, 1999. In press.

13 Aerometric Information Retrieval System (AIRS) and AIRS Facility Subsystem (AFS). Essentially, AIRS/ AFS is states' data base.

Water data: ?91 percent of EPA's data comes from States 14

•Hazardous waste data: >92 percent of EPA's data waste data comes from States 15.

That is, over 94 percent of all the environmental quality data in EPA's national data bases was first collected and compiled by State environmental agencies. The States and EPA share this data for a variety of purposes (for example, environmental performance measures)

The States also collect additional environmental quality data that is not contained in national data bases. Some of this data is collected for delegated programs, but is not usually forwarded to EPA because EPA does not require it (for example,

water quality reports from minor point sources).

Some data is collected because of environmental laws that States have that are not related to delegated programs (for example, most solid retaste, water quantity, natural resource management, growth management or land use planning data). ECOS has not yet assessed the amount of this other data that States collect, but we believe it to be a significant amount, perhaps even exceeding the environmental data reported to EPA.

Policy Making

States implement most environmental protection programs, so they often see innovative solutions for environmental problems first. Each year since ECOS began its annual meetings (starting in 1994), it has compiled the program and implementation innovations that ECOS' members have presented. These cover the complete range of environmental protection, including delegated and non-delegated programs. ECOS has now compiled hundreds of these innovations. . ¹⁶ Some of these State ideas have been nationally recognized by Innovations Awards programs such as those of The Council of State Governments and Harvard University. Our members have consistently rated this kind of peer- sharing as one of the most important benefits of ECOS

However creative and inventive State agency solutions can be, from time to time legislative solutions are more appropriate. States have not shied affray from implementation of new environmental laws. According to the National Conference of State Legislatures, the States passed over 700 environmental bills in 1997 alone. 17 At least half of these dealt with non-delegated environmental programs such as pollution prevention and solid waste management.

States have proven to be serious about their responsibilities as stewards of the environment, and have more than fulfilled the expectations of the 1972 Congress that drafted some of the original legislation envisioning the State role in the Federal environmental protection system. In fact, almost 30 years later, the States are leaders in environmental protection. Whether the yardstick is delegation, fiscal, enforcement, information gathering or policymaking, the States are responsible for an increasing, and perhaps increasing, and perhaps surprising, amount of the work done to protect the nation's environment.

STATE AIR POLLUTION CONTROL PROGRAM SURVEY 1999

THE COUNCIL OF STATE GOVERNMENTS, LEXINGTON, KENTUCKY HTTP://WWW.CSG.ORG

Executive summary

From the lofty heights of Capitol Hill in Washington D.C., it may appear that the Federal Government makes all the important decisions about clean air policy. After all, U.S. EPA regulations and the detailed provisions of the 1990 Clean Air Act regulate pollutants that float in the air, pollutants released by industrial and mobile sources (cars and trucks), and the type of fines and sanctions levied against violators. From the Capitol Hill perspective, all these national standards and regulations are absolutely necessary. According to the cynics, if left to their own devices the States would adopt weaker and weaker environmental protection laws, creating a

¹⁴ Safe Drinking Water Information System (SDWIS), 99 percent; Permit Compliance System (PCS—a component of the National Pollution Discharge Elimination System), 83 percent of major sources and 94 percent of minor sources; and STORET, 90 percent.

¹⁵ Biennial Reporting System (BRS), 92 percent.

¹⁶ 1998 State Environmental Innovations. Washington, DC: ECOS, 1998.

¹⁷ George Hagevik and C. Kohler, "Trends in State Environmental Law 1997," NCSL Report, 1998.

"race to the bottom" in which States compete for economic growth by enticing indus-

try with less stringent—and less costly—regulations. regulations. Reality, however, is often at odds with popular perception. In 1998, the Environmental Policy Group at The Council of State Governments and the University of Kentucky Martin School of Public Policy and Administration conducted a survey to review State clean air programs, funding and regulations. Overall, the study found that the Capitol Hill perspective on clean air programs can be misleading. These days, the States conduct most of the important clean air activities, provide the bulk of air program funding and oversee a diverse array of air pollution control activities. Most importantly, despite perceptions to the contrary many States have adopted clean air standards and programs that are more stringent than U.S. EPA requirements due to each State's unique interests. So much for a "race to the bottom."

US EPA and the States

The States and the U.S. EPA share responsibility for nearly all air pollution control activities in the nation. Each State submits a State Implementation Plan to the U.S. EPA outlining its clean air program. For each major clean air activity—setting air quality and emissions standards, monitoring emissions and ambient air, enforcing policy, and issuing permits—the U.S. EPA sets minimum criteria for State programs. If the U.S. EPA determines that a State's program meets these standards, it converges the SEP and greater the Set full respective support of the program of the standards. it approves the SIP and grants the State full regulatory authority. If the plan does not meet the minimum criteria, the U.S. EPA can preempt the State program and create its oven air pollution program for the State. The U.S. EPA can preempt all or part of the State program, depending on how adequately it addresses the minimum criteria.

Setting Clean Air Standards

The CSG survey asked respondents to indicate whether their States' clean air standards exceeded the U.S. EPA minimum criteria in a variety of areas, from ambient air quality to emission limits for new sources. Ambient air quality standards are target levels which govern pollutant concentrations in the air that people breathe outdoors. The U.S. EPA has set National Ambient Air Quality Standards for six "criteria" pollutants that pose significant health hazards if people breath enough of them. The NAAQS pollutants are ozone, particulate matter, carbon mon-

oxide, sulfur dioxide, nitrogen dioxide and lead.

The States can expand on U.S. EPA criteria by setting more stringent ambient standards for criteria pollutants and by establishing ambient standards for pollutants not listed in the NAAQS. Of the 38 States responding to the CSG sure ey, six (16 percent) reported that their standards for one of the NAAQS pollutants exceeded the U.S. EPA's minimum criteria, and six more (16 percent) reported that their standards exceeded the criteria for two or more pollutants. Only two States— Michigan and Illinois-indicated that they did not have U.S. EPA authority to implement the NAAQS program, but they expected authorization in the near future. Surprisingly, 24 of the 38 responding States (63 percent) have set ambient standards for pollutants other than those regulated by the U.S. EPA's NAAQS standards. These States have set standards for pollutants such as hydrogen sulfide, calcium oxide and odors.

The survey shows that States are exceeding U.S. EPA standards in other areas. Eight of the 38 responding States (21 percent) reported that their emissions standards for new sources were more stringent than the U.S. EPA's New Source Performance Standards. And 25 States (66 percent) reported that their programs for monitoring ambient air quality exceeded Federal minimum requirements.

The States have also made considerable progress regulating hazardous air pollutants, which are thought to pose public health risks. The U.S. EPA has long sought to improve HAP regulations, and the 1990 Clean Air Act created an entirely new regulatory regime for 189 identified hazardous air pollutants. Thirty-three of the 38 responding States (87 percent) have received authority from the U.S. EPA to administer the hazardous air pollutant program, with some States again exceeding Federal requirements. Eighteen States (47.4 percent) regulate hazardous air pollutants in addition to those listed by U.S. EPA and another 18 regulate additional sources

of hazardous air pollutants.

In a true "race to the bottom," no State would voluntarily enact stricter NAAQS standards or regulate nonmandatory pollutants because doing so would risk losing economic growth to States with more lenient regulations. The CSG study, however, shows that in many different areas of clean air policy States have adopted standards and programs that are more stringent than what the U.S. EPA requires for SIP approval.

Funding State Clean Air Programs

Title V of the 1990 Clean Air Act mandated important changes in how States fund their clean air programs. Title V requires States to issue operating permits for every major emissions source specifying allowable levels of pollutant concentrations and the applicable emission control strategies. Title V also requires States to charge a fee of at least \$25 for each ton of pollutants emitted to help States fund their clean air programs. The goal of Title V is to facilitate enforcement by centralizing regulations that apply to each source of pollution.

The major categories of funding sources for State air quality programs are State

The major categories of funding sources for State air quality programs are State general funds, dedicated State funds (such as lottery proceeds or special environmental taxes), fees (including Title V permit fees), enforcement (fines and penalties), EPA/Federal grants, and other (usually mobile source) income. Title V permit fees have become the most important source of State air program funding, accounting for 57 percent of the total. Overall, the States still rely on EPA/Federal grants, at 22 percent of the total, the second largest funding category. State general funds are another major source of clean air funding at 12 percent of the total. The other budget source categories—dedicated State fund (7 percent), enforcement (2 percent) and other (1 percent), make up only a small percentage of State clean air funding.

State air program expenditures

The survey also investigated how States spend their air pollution control funds. On average, States spend 24.7 percent of their budgets on permitting activities, 15.8 percent on ambient air monitoring, 12.8 percent on enforcement, 12.1 percent on administration, 10.3 percent on source monitoring, 6.3 percent on technical assistance/industry outreach, 5 percent on policy analysis, 3.2 percent on environmental science research, 2 percent on community outreach, and 9.4 percent on other categories (usually mobile source issues). Many States estimated income and expenses, since they do not record the budget expenditures and sources in the categories listed in the survey.

Conclusion

The 1990 Clean Air Act contained a series of challenges for State clean air programs. The Title V permit section required many States to restructure their programs, including their regulatory structures and enforcement approaches. The HAP program expanded the scope of State clean air regulations to a vast new array of pollutants and sources. For the most part, States have met these challenges. Title V permit fees have become the most important source of State air program funding, as the 1990 Clean Air Act intended. By 1998, the U.S. EPA had granted the States authority to administer the vast majority of air pollution control programs, including the expansive HAPs program.

Most importantly, however, is the obvious intent of the States to pursue their own environmental protection agenda according to their unique circumstances. The CSG study shows that in many policy areas the States have gone beyond minimum Federal requirements to become leaders in establishing and implementing clean air policy. Rather than racing to the bottom, the States seem to be vying for the lead in protecting the health of their citizens and ecological resources in a manner as

unique and diverse as the States themselves.

RESPONSES BY R. LEWIS SHAW TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. The South Carolina Deputy Commissioner and ECOS President stated in his testimony that the time for command-and-control, top-down programs has ended and that it should be replaced by a set of mutually agreed upon national goals and standards. He also emphasized that a "one size fits all approach" has outlived its usefulness. He further stated that local and regional environmental challenges differ and that requires that States have the flexibility to take the lead in adopting environmental goals and standards, and apply innovative approaches to achieve them. What is the new direction and how do we get there?

Response. First, in response to this all-encompassing question, we are already heading in a new direction. For example, the respective roles of EPA and the States have changed dramatically in recent years. As I indicated in my written testimony, States have assumed the lion's share of environmental responsibility and service de-

livery.

The new direction would have the States and Federal agencies working as true partners in a Federal environmental protection system. States would have early, meaningful, and substantial involvement in the development and implementation of environmental statutes, national standards, policies, rules, programs, reviews, joint

priority setting, budget proposals, budget processes, and strategic planning. Under this new system, more programs would be delegated to the States and the appropriate Federal focus would be on program reviews and joint priority setting. EPA would intervene in such State programs only in rare and egregious cases after the State has had a chance to correct program defects. Where the Federal Government requires that environmental actions should be taken, it would fund those actions, and not at the expense of other State programs. And, this new direction would affirm that the Federal Government would be subject to the same environmental rules and requirements, including the susceptibility to enforcement that it imposes on States and other parties.

In this new direction, Congress and the EPA would provide the maximum degree of flexibility in the design and implementation of environmental programs. The Federal Government would support nonregulatory approaches to meeting Federal standards so that integrated environmental protection is encouraged and narrow

To avoid the "one-size-fits-all" standard and maximize limited resources, flexibility would include the authority for States to prioritize environmental problems and allocate resources on a "worst-first" basis, as well as the authority to shift EPA-administered grant funds among programs to target local priorities. In addition, EPA would look at the cumulative impacts of rules across program areas to ensure that unintended burdens could be avoided and inconsistencies minimized.

A climate that encourages regulatory innovation is critical as we face the next generation of environmental problems. The EPA and State environmental commissioners have agreed on the need to experiment with new approaches to improve our nation's environment, as embodied in the Joint EPA/State Agreement to Pursue Regulatory Innovation, signed in April 1998. These new approaches can help us identify cleaner, cheaper, smarter ways to ensure that all Americans enjoy a clean environment and healthy ecosystems. Through this joint commitment, EPA and the States agree to encourage, evaluate, implement, and disseminate ideas that seek

better ways of achieving our environmental goals.

Congress could play a key role in defining this new direction. For example, Con-

gress could:

• Expand incentives to encourage innovation, such as regulatory process changes (things like predictable, timely permitting and reduced administrative burdens), economic incentives (for example, tax credits, fee waivers, new funding), and greater use of environmental management systems;

Actively explore both regulatory and nonregulatory innovations directed specifically at existing unregulated problems, such as nonpoint source pollution, habi-

tat loss, diffuse use air pollution and urban sprawl;

 Enact legislation that provides protection to innovators pursuing agreed upon goals and objectives while working "outside the box;"
 Explore legislation directing EPA to approve delegated State programs that vary from Federal regulations under specific environmental laws, submitted to EPA under the regulatory innovation process described above, if the alternative program approach meets criteria established through discussions among States, Enact legislation that paves the way for an integrating environmental stat-

ute.

The new direction would also involve the appropriate use of risk assessment and cost-benefit analysis to improve environmental decisionmaking. My ECOS colleagues and I believe that the appropriate use of risk assessment and cost-benefit analysis will enable Congress, EPA and the States to ensure that increasingly limited public resources are used most effectively and efficiently in achieving environmental objectives.

Question 2. What transformation does ECOS see that is needed in the Federal-State structure to get us there?

Response. As my previous answer indicates, most of the change that we see as required involves relationships and processes. There are, nonetheless, certain trends

that suggest structural changes that may be on the way.

For example, many of today's challenges are multi-media and ecosystem-based, rather than single-source, single-pollutant issues. Yet, it is the single source/pollutant focus of the earlier years that has dictated our current environmental management structure. As a result, Federal statutes and all the actions that have flowed from them have had the effect of shifting pollution problems from one environmental medium to another. Contaminant-laden ashes and sludge from air and water pollution control processes destined for landfills are a couple of examples.

Meeting the challenges posed by meeting water quality criteria help illustrate the need for a new structure. Making a stream habitable for a particular fish may involve improvements at a wastewater treatment facility, the reduction of polluted runoff from farm fields and backyards, cleaning up contaminated industrial sites along the stream bank, controlling nitrogen oxide and mercury emissions from power plants many miles away, restoring wetlands and other fish habitat, preventing resuspension of toxics in the stream sediments—and more. Historically, these have been isolated and independent activities in State and Federal agencies, with little or no policy direction regarding the interplay among the problems or opportunities among the solutions.

Recognizing this integration problem, Minnesota has reorganized its environmental agency on a geographic basis, as opposed to along media lines (air, water, and waste). In order for a truly systematic and flexible system to evolve, not only the implementation but also the policy-making structure must change. We are concerned that Congress' structure, for example, might preclude the kind of comprehensive policy direction necessary to tackle watershed quality issues or coastal and estuarine challenges that can involve multiple Federal agencies and a multitude of

State and local jurisdictions.

Question 3. The GAO points out that there is no guidance for negotiating a Performance Partnership Agreement (PPA) and that there is a wide variance in content among the various agreements. Would some standardization be helpful in reducing

Response. I am not surprised that an auditor would find the PPA process a bit unstructured. But, that was the intent. The purpose of NEPPS was to move away from the cookie-cutter mentality and embrace the reality of State priorities and challenges. The fact that 38 States might negotiate completely different agreements with EPA was expected and embraced by the States. Our concern all along was how

EPA would react to this new way of engaging the States.

Understandably, EPA was concerned about its obligations under Federal statutes to ensure their mandates were met, the contents of individually negotiated PPAs notwithstanding. Given that understanding, and appreciating the need for certain information from the States on issues of national significance, ECOS has negotiated Core Performance Measures (CPMs) with the principal program offices at EPA

We, nonetheless, remain concerned about the interplay of the flexibility promised by NEPPS and the relatively rigid expectations of the Government Performance and Reporting Act (GPRA). ECOS has resisted attempts to transform the PPA process into a dictation by EPA of its expectations—whether derived from perceived obligations under GPRA or other Federal mandates. The States accept that the Federal environmental statutes provide the floor for PPA negotiations, and that the purpose of the PPA precess use to identify State priorities beyond the Federal requirements.

of the PPA process was to identify State priorities beyond the Federal requirements, and find a way to build the capacity to meet those priorities.

Unfortunately, the NEPPS process is still, to large extent, simply laid on top of the usual programmatic expectations. Some regions, for example, still require States to submit program workplans in addition to PPAs. NEPPS also needs to be more fully integrated into EPAs strategic planning.

In order to address these sents of issues, EPA, and ECOS convened a NEPPS.

In order to address these sorts of issues, EPA and ECOS convened a NEPPS Workshop late last year. Several short- and long-term issues were addressed. Rather than look for standardization as a way to inject efficiency, participants agreed to develop a Best Practices Handbook that would describe successful PPAs, practices and negotiations. This, rather than a more prescriptive process, would best meet each State's desire to shape a relationship with EPA that will meet their respective

Question 4. At the hearing held Tuesday May 2, 2000, by this committee, Senator Baucus read that quote to you and asked you to respond. Each of you said that you agreed with Mr. Jorling that there was a need for the Federal gorilla to remain in the closet. Would you please elaborate on that response. In your elaboration, would you please address the following issues

Question 4a. Is it necessary for the EPA, in order to ensure that the States protect the environment, to second-guess the States, or to be able to second-guess the States, regarding every exercise of a State's enforcement discretion, every permitting decision made by the States, and the like?

Response. The relationship between the States and EPA has in the decade of the 1990's moved from that of supervisor/employee where the States often disagreed with "management" on what were important tasks of the job and how to get the job done to a partnership where both parties make joint decisions. In a true partnership, there is no place for one partner to second-guess the other on individual decisions. Instead, the overall performance needs to be evaluated on mutually agreed upon outcome based measures. If outcomes are not being achieved, the mutually agreed upon corrective actions must be put in place.

Question 4b. Are the States able and willing to exercise reasonable, responsible, and vigorous enforcement and permitting discretion if the States are no longer subject to second-guessing in every case?

I. If so, please explain why that is true today, even if it was not true in past years

II. If so, please support your explanation why that is true with examples showing that the States have reasonably, responsibly, and vigorously enforced the following: A. Federal environmental laws, and

B. State and local environmental laws, over which the EPA exercises no super-

visory responsibility.

Response. The States have a demonstrated record of their willingness to exercise enforcement and permitting authority. The States are responsible for between 75 percent and 80 percent of all enforcement actions taken by EPA and the States combined. The large majority of permits are issued by the States. While many of us are concerned about "enforcement for enforcement sake" or bean counting, we realize that a strong, credible enforcement program is vital to the overall mission of environmental protection. In order to be credible, enforcement actions must be fair and equitable to all in the regulated community and must be timely in order to affectively deter repeat violations. Many States have developed penalty matrix to assure fair penalties applied consistently to similar violations.

Since States have largely adopted Federal law and rules into State law and regulations, we do not distinguish between enforcing Federal law and State law. They are equally enforced. In South Carolina, we have enforced against and fined the Department of Energy, Savannah River Site, just as we have enforced against and fined a local church for demolishing a building without properly inspecting for asbestos. My Agency has fined other State Agencies such as the Department of Education, Department of Transportation, and Department of Corrections for various violations of environmental rules over the years. These were obviously politically difficult actions for us to take, but they show our commitment to utilize our enforce-

ment authority fairly and equitably.

Question 4c. Are there alternative approaches to the current "second-guessing approach" that could still provide assurance to EPA that the States programs are protective of public health and the environment? For example, an approach that would allow EPA to review, on a 5-year, 7-year, or 10-year, basis, the overall performance of the State, and renegotiate the State's delegated authority based on the level of progress that the State had made toward a better environment during that period.

Response. I believe that it is appropriate for the States to continue to have periodic oversight from EPA. Being accountable for meeting long range goals and shorter term outcomes is an expectation all States should have. However, this process should focus on overall performances and not on individual decisions made by States on specific permits or enforcement actions. Such an approach should, however, allow EPA to act where a State has made an egregious error and has failed to take corrective action after notice from EPA.

Question 5.Please indicate whether you agree or disagree with the following statement: "Reasonable people, acting in good faith, can disagree over the best method for protecting the environment. For example, reasonable people can differ over the proper mix of enforcement and compliance assistance as generic tools, and the proper use of a particular choice of method(s) in a specific case. Accordingly, the best approach for gauging a State's environmental protection program is to evaluate the entirety of the State's efforts, both enforcement and compliance assistance, over a long period of time, and to determine whether the State has improved the condition of the environment, rather than focusing on a particular case or series of cases, the number of enforcement actions brought in a particular State (or any other similar so-called 'bean counting' system), and the preference (if any) between enforcement and compliance assistance.

Response. I agree with this statement. Without using the word "flexibility" this statement captures the essence of why flexibility is so important to States in their efforts to meet National and State environmental protection goals. As long as States are demonstrating reasonable progress toward meeting those goals within mutually agreed upon timeframes, then EPA should consider those State programs as accept-

RESPONSES BY R. LEWIS SHAW TO AN ADDITIONAL QUESTION FROM SENATOR Voinovich

Question. As a followup to Senator Baucus' question regarding the 1993 testimony

of New York's former environmental commissioner, Thomas C. Jorling, could you please explain in what ways States have changed since 1993?

Response. At the 1993 hearing, Mr. Jorling mentioned that among the appropriate roles for EPA was to play the "gorilla in the closet." The implication—or perhaps even the explicitly stated reason—was that at least some States lacked the commitment and conscient to meet their and the Endanged Consument's environmental or ment and capacity to meet their and the Federal Government's environmental expectations. A lot has changed since 1993.

States have demonstrated their commitment to environmental protection by taking responsibility for 75 percent of the environmental programs that can be delegated to States. They have increased spending on environment and natural resources by about 140 percent in the last 10 years. And, States have increased their work force devoted to the environment by about 60 percent in the same timeframe; the State work force is now approximately three and one-half times the size of the Federal work force.

Furthermore, the delegation of programs to the States is proceeding at an increasing rate, with approximately 75 percent of the total delegation having taken place in the last 6 years. And finally, States perform the vast majority of environmental protection tasks in America, including 80 percent or more of the enforcement actions; 97 percent of the environmental inspections; and actions which collect more

than 94 percent of the environmental quality data currently held by the EPA.

Rather than seeking an EPA gorilla, the States support the authorization or delegation of programs to the States and believe that when a program has been authorized or delegated, the appropriate Federal focus should be on program reviews and joint priority setting. We further believe that the Federal Government should intervene in such States program as he is the federal form. vene in such State programs only in rare and egregious cases after the State had a chance to correct program defects or in cases where the State and EPA are working cooperatively to force compliance or seek recompense from environmental bad actors." The recent Harmon decision suggests there is a solid a legal basis for this view.

RESPONSES BY R. LEWIS SHAW TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. Chart No. 2 in your handout shows that overall expenditures on envigrant funding has decreased. While this may be true, EPA is not the only government agency that provides environmental grants to States; the Department of Interior, the National Oceanic and Atmospheric Administration and the Department of Agriculture all provides grant funding Do you have one capes of how State outpending. Agriculture all provide grant funding. Do you have any sense of how State expenditures compare to TOTAL Federal expenditures, not just EPA programs?

Response. As of Fiscal Year 1996, States spent, on average, about 1.67 percent of the total State budget on environment and natural resources. This percentage has increased steadily since 1986.

It is true that States receive funding from other Federal agencies. For those States with surface mining activities, the Office of Surface Mining within the Department of the Interior can also be a significant source of Federal funding. The vast majority of Federal funding our environmental agencies receive, however, is from EPA. These other Federal agencies invest in natural resource activities, which in many of the States are performed in agencies separate from the environmental

Unfortunately, I do not have a sense of how State expenditures compare with the total Federal investment in State environmental and natural resource programs. That is important information, and it might be worth asking the Congressional Research Service to develop those figures. We would be happy to assist.

Question 2. In your testimony, you argue that "the time for command-and-control, top down programs has ended," and perhaps it should be replaced by a set of "national goals." Several of our environmental laws already set national goals; for example the Clean Water Act has a goal that all waters should be "fishable and swimmable." How would the national goals you refer to in your testimony differ from the goals already on the books?

Response. The Federal statutory goals are THE goals to which most of the State and EPA programs are directed. Fishable and swimmable are great and appropriate aspirations. Along the road to these goals are many others that relate to how one achieves them, how one measures progress toward them, and how multiple agencies with responsibility coordinate to meet them. EPA's GPRA goals and objectives are examples of "goals within goals." The States, as major players in achieving the will of Congress, simply desire to be a part of Congress' and EPA's processes for identifying the best course for achieving these aspirations—including the interim goals along the way.

Question 3. You propose a system in which the Federal Government and the States would agree upon goals, and the States would be left to achieve those goals. Should the States fail to attain the agreed upon goals, what would be the appro-

priate response of the Federal Government?

Response. In so many ways, the States are already at the vanguard of the process to meet Federal as well as their own goals. States already manage 71 percent of the programs that Congress has said are delegable to them, and over 75 percent of that delegation has occurred over the past 6 years. Clearly, both the States and EPA agree that the States have the will and much of the capacity needed to meet Federal environmental goals. Furthermore, Congress has already made clear what should happen to States who fail to live up to that responsibility. At any time a State has demonstrated such an inability or incapacity, its authority should be revoked.

What the States seek is relative autonomy to meet the goals established by Congress, rather than be second-guessed step-by-step. EPA should evaluate overall State performance on a regular basis, but day-to-day operation of the programs—including permitting and enforcement and compliance activities—should be the sole province of the States. Where irregularities and insufficiencies crop up, EPA should discuss those programmatic shortcomings with the States, not inject itself into individual cases. In that way, EPA and the States can become true and most effective partners, focusing their respective skills, abilities and responsibilities on achieving desired environmental results.

Responses by R. Lewis Shaw to an Additional Question from Senator Lautenberg

Question. Do you agree with the notion that a highly performing State should get less oversight than a State that is having difficulty implementing a program? Is there a method of measuring performance agreed to by both EPA and the States? Are States gathering and disclosing to EPA and the public the information necessary to evaluate the performance of the States? If so, which States are performing well?

essary to evaluate the performance of the States? If so, which States are performing well and which are not performing well?

Response. Generally, we agree that highly performing States should get less oversight than a State that is having difficulty implementing a program. But, more to the point: this is a partnership, and States and EPA should be working together to identify goals and helping each other to achieve them on an on-going basis. NEPPS provides a great model for developing that cooperative working relationship. EPA should evaluate State performance under delegated programs. Where there are problems, the partners should work to resolve them. Under this system, States with difficulties will naturally get more "oversight" and better performing States.

EPA should evaluate State performance under delegated programs. Where there are problems, the partners should work to resolve them. Under this system, States with difficulties will naturally get more "oversight" and better performing States will get less. The NEPPS agreement of 1995 envisioned this sort of "differential oversight," but because of the difficulty of measuring comparable State performance, ECOS has not pursued this option with EPA. The States of Region 8, however, have agreed with EPA to try such a program. Under their agreement, the States are rated and ranked on their enforcement activities by a set of agreed upon performance measures. Those States ranking the lowest receive additional assistance from EPA.

Each State in negotiating its Performance Partnership Agreement (PPA) with its EPA regional office identifies the variety of performance measures by which its programs and efforts would be measured. This information is shared with EPA and the public—often through State of the Environment reports—and is used as part of the PPA evaluation process and as a basis for negotiating subsequent PPAs.

To my knowledge, there is no recent composite list of good and bad State performers. Typically, certain States excel in certain areas, whereas they and others may be relatively weak in others. For example, States and the General Accounting Office have identified significant shortfalls in the resources of some States to meet the TMDL requirements of the Clean Water Act. States and EPA have jointly identified significant resource shortfalls affecting their collective efforts to meet certain Clean Air Act requirements. Gaps have been identified in several other programs, as well.

Furthermore, States should not be evaluated as good or bad performers based solely on whether or not they have passed so-called "no more stringent than Federal requirements" laws. The Natural Resources Defense Council in its testimony before

your committee on May 2, 2000 tried to suggest that 19 States were deficient in their environmental commitment because they had such provisions on the books. These provisions include up-ramps that permit more stringent requirements if deemed necessary. In any case, legislatures are free to change such a requirement at any time. Most, if not all, States have some environmental requirements more stringent than those mandated by the Federal Government. In 1997 alone, State legislatures passed 700 bills concerning environmental issues.

STATEMENT OF ROBERT W. VARNEY, COMMISSIONER, NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

Good morning Mr. Chairman and members of the committee. I am Robert W. Varney, Commissioner of the New Hampshire Department of Environmental Services. I have held that position for the last 12 years serving under the last three Governors. I am also the immediate Past President of the Environmental Council of the States (ECOS), and it is in that capacity which I appear before you today. I would like to highlight the success of two cooperative programs that ECOS and the U.S. EPA have developed jointly—the National Environmental Performance Partnership System or NEPPS and the ECOS/EPA Regulatory Innovations Program.

NEPPS was created 5 years ago and grew out of an awareness that Federal and State government could be more effective if they cooperated as equal partners in planning, implementing and reporting environmental protection. The States and EPA believed that they could be more efficient if priorities were determined jointly, and that any planned environmental work was based upon an agreed set of goals. The States directly implement most environmental laws and often have a better understanding of what is needed to effect environmental improvement. This demands flexibility to respond to local circumstances so that environmental problems can be addressed quickly and effectively. As a final component of the NEPPS concept, ECOS and EPA wanted to reduce the data reporting burden by improving and streamlining how information is gathered and reported from the States to EPA.

NEPPS agreements are called PPAs, Performance Partnership Agreements. In New Hampshire, for instance, we just signed a 2-year PPA with the EPA-New England. Our comprehensive agreement sets forth the goals, activities and measures of progress for a full range of Federal and State programs, which represents a comprehensive plan for all of our agency's programs. I should mention that the full agreement is available to the public on our Department's website at www.des.state.nh.us. ECOS is linking its home page to many other State NEPPS agreements also available electronically.

To gauge how NEPPS is working, Congress has asked the National Academy of Public Administration to study that question and provide you an answer in approximately 2 months. I appreciate this opportunity to tell you why we think it is successful? To date, 38 States have PPAs under the system. Many of them have been accompanied by Performance Partnership Grants (PPGs) which allow some realignment of EPA funds so that limited resources can be allocated for the most pressing ment of EPA funds so that limited resources can be allocated for the most pressing problems. There now is a cadre of experienced environmental professionals who have committed to the NEPPS process and whose work is dedicated to continually improving the system. As a result of the third national meeting in Baltimore, Maryland, last fall, ECOS and EPA have re-committed to improving the NEPPS process through renewed emphasis on improving how the agreements are forged and how they are carried out. The commitment we have to NEPPS was renewed by the adoption of ECOS Resolution 00-5, at our national meeting on April 12, 2000. I have attached a copy of the resolution to this testimony.

Regulatory Innovation Program

I would like to now talk about another cooperative State/EPA program which was designed to stimulate innovative approaches to regulation. Here I distinguish "innovative approaches to regulation" from "technical innovation" which will be addressed by another witness. The States have been a well stream for inventiveness. In dealing with specific circumstances unique to a State location or problem, we are forced to develop innovative approaches. ECOS and EPA recognized that some of these innovations might be transferable to other locations with similar issues. In April 1998, ECOS and EPA signed a "Regulatory Innovation Agreement" to review and approve State proposals that exhibited such promise. In the words of the agreement itself, "this agreement presumes that EPA and the States will find ways to help good ideas succeed, and that joint EPA and State efforts to promote and test new ideas will result in the maximum benefit to the American people and their environment." Texas was the first State to submit a project under the Innovations agreement. The Texas Natural Resource & Conservation Commission (TNRCC) wanted to extend the opacity certification period for all air inspectors from 6 months to 2 years. Measured opacity is a common test of air quality and a certain level of training and certification are required to ensure the validity of test results. Texas argued that opacity readings are not used often enough in enforcement actions to justify the hundreds of person-days lost for training and certification each year. TNRCC and EPA agreed to reduce the number of opacity certified inspectors from approximately 100 to 50 each year, thus freeing up 75 more person-days to do facility inspections. This innovative tradeoff is now transferable to other States wanting to explore the

This example demonstrates the goal of identifying innovative approaches to make available faster, cheaper, better approaches to environmental protection. It is especially useful when, as in this instance, the approach can be tailored by other States to meet their needs.

Last month at the ECOS Spring Meeting, EPA reported that five State proposals have been submitted and four have been approved. Five additional proposals were recently received for review and another two are expected in early May. It is evident that the Agreement is proving to be a useful tool, but there is much innovation occurring independently of the agreement as well.

I have provided for the committee's use several other ECOS publications describ-

ing myriad State innovations. These innovative approaches demonstrate what can be accomplished when States work in partnership with each other and with the U.S.

EPA, and when we strive to develop innovative approaches.

Thank you for the opportunity to address the committee this morning and to tell part of the story of the States. I would be pleased to answer any questions I may have raised in my remarks.

RESPONSES BY ROBERT VARNEY TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. Commissioner Varney suggested in his testimony that States and the Federal Government need to be equal partners in planning, implementing and reporting environmental protection. Does this partnership exist today? How can the

partnership be improved?

Response. The relationship is evolving. In 1995, EPA and the States entered an agreement to implement the National Environmental Performance Partnership System (NEPPS). The theory behind NEPPS, in part, was to facilitate a shift from paternalism to partnership in the attitude of EPA toward the States. The evolution would include a process of identifying State environmental priorities and jointly wilding the conscitute meet these priorities.

building the capacity to meet those priorities.

The State/EPA relationship is highly variable—from State to State; from program to program; from year to year. The concept of partnership involves not only process, but also perspectives. Whereas the intentions of EPA's leadership and the leading State officials regarding partnership are generally honorable and good, there are many instances where the partnership fails to live up to the promise.

A great deal of investment has been made by the Environmental Council of the States (ECOS), EPA, the General Accounting Office, the National Academy of Public Administrators and others to determine whether the partnership exists and what can be done to improve it. My assessment: partnership exists, and like any mar-

riage, it will require continuing care and respect to meet expectations.

The partnership can be improved by ensuring that the Performance Partnership Agreements (PPAs) are indeed the foundation for the State/EPA relationship. These agreements are the opportunity for the partners to lay out their concerns, set goals and objectives, agree upon measures of performance, and ensure that everyone is pitching in appropriately to ensure that national as well as State needs are being met. Not only should the EPA regions that negotiate the agreements respect them, but also the national program managers in Washington.

Another major obstacle in the partnership is ensuring that the cultures in both the States and at EPA adopt a partnership perspective. As Lewis Shaw pointed out in his testimony, no matter how you slice it, the States are carrying an increasing majority of the environmental management load. That reality needs to be recognized and appreciated throughout the system. Given that fact, it is clearly time to reassess the relative capacities and charges of the States and EPA to make sure the right people are doing the right job. A better partnership will be achieved once those roles and responsibilities are clearly articulated.

Question 2. States are currently taking a leadership role in many areas of environmental protection, but lack of resources is often an obstacle. Some have sug-

gested that the Federal Government can play an important role in this respect by serving more as a resource to the States, instead of as a hammer—making available both funding and technical assistance. Does the Commissioner agree with that and how would the Commissioner suggest that the government's role be enhanced in that regard?

Response. ECOS and I agree with this assertion. The issue of defining appropriate roles for States and EPA is crucial. States are already doing so much of the dayto-day business of managing the environment-roughly 80 percent of the enforcement actions, over 90 percent of the data collection, the vast majority of interactions of any sort with facilities and citizens.

Question 3. Please describe in more detail how the New Hampshire Performance Partnership Agreement works. Please address how and what does the Agreement allow the State to do and how does it allow the State to prioritize resources? How

would you improve it in the future?

Response. Performance Partnership Agreements (PPAs) are the strategic documents that provide the framework for States and EPA in the National Environmental Performance Partnership System (NEPPS). These Agreements are a product of joint planning and priority-setting between States and EPA, with the ultimate goals of improving environmental performance and strengthening relationships. Performance Partnership Grants (PPGs) are the financial mechanisms to ensure that the work outlined in the associated PPA can be carried out. As envisioned through NEPPS, the PPA and its associated PPG are the two key enabling tools allowing flatibility in label and its associated PPG are the two key enabling tools allowing flexibility in both setting environmental priorities and directing appropriate financial resources.

The most current New Hampshire PPA (available on-line at www.des.state.nh.us/ ppa/ppa—intro.htm) covers the 2-year period October 1, 1999 through September 30, 2001, and sets forth the goals, activities and measures of progress for the full range of cooperative State-Federal environmental programs under the New Hampshire Department of Environmental Services' (DES) jurisdiction, as well as all of DES's non-Federal programs. Thus, all DES programs are represented, regardless of the funding source. In total, the Agreement describes how the available financial, human, and technical resources will be used in New Hampshire to address the environmental quality issues of the greatest concern to the Department and EPA New Eng-

The 2000-2001 New Hampshire PPA is distinctly different from the previous Agreement in that the core section of the document have been organized around the Department's 12 Strategic Goals, rather than simply by the three Division—Air Resources, Waste Management, and Water. Taken together, the newly formatted 12 goal sections form the DES Comprehensive Action and Assessment Plan. This substantial formatting change was the direct result of stakeholder comments, and is an

important step in making the Agreement a key directing document at DES.

For the current PPA, DES communicated its environmental priorities and in-For the current PPA, DES communicated its environmental priorities and intended resource shifts upfront via detailed program tables, as well as through a discrete list of jointly prioritized "Focal Points of Cooperation." The information in these tables (and in the Focal Points list), in most instances, is the result of frequent staff interactions with many on-going and ad hoc stakeholder groups, as well as with program counterparts at EPA New England. Also reflected are the priorities outlined and discussed at two annual joint planning meetings (EPA/States meeting on enforcement and P2 and compliance assistance and a regional PPA meeting). EPA New England staff typically review the tables and focal points in great detail on at least two points in the PPA development provide and provide comments to DES which are reviewed and incorporated as is, or are set aside for more detailed negotiations. All issues of importance to both agencies must be negotiated before a negotiations. All issues of importance to both agencies must be negotiated before a signed PPA can be secured.

A key component of a fully functioning PPA, is the State self-assessment process. At a frequency agreed to by the State and EPA (typically annually), the State must conduct a self-assessment of progress made at accomplishing the work outlined in the PPA, as well as specific progress made at addressing identified environmental priorities and goals. The intent is for these self-assessments to do an increasingly better job of reporting actual environmental results, not simply environmentally related activities conducted by the State. While good progress has been made, both DES and EPA New England continue to struggle with to best conduct and gain improvement value from the self-assessment process, as well as how to most effectively report on the state of the environment in New Hampshire. To help answer these, and other, results-based questions, DES has identified "Environmental Indicators and Program Measures" as a Focal Point and has been focusing resources to work

through the issue.

DES has had success working with EPA New England to redirect resources to those environmental issues of most importance for New Hampshire, both at the upfront PPA negotiation stage, as well as when there are limited PPG funds availupfront PPA negotiation stage, as well as when there are limited PPG funds available at the end of the fiscal year cycle. One of the significant potential advantages of the PPG is the ability to look at the grant funds in total and allocate specific funds as appropriate to the different programs and activities according to an assessment of State-specific needs and priorities. In the past, DES, received different grant awards for each program, and those funds were earmarked specifically for that program and could not be used for any other purposes. Now, the Department receives a single grant award—approximately S4.8 million in Federal fiscal year 2000—that provides funding for a range of air quality, waste management and water quality programs, and the Department and EPA New England can agree to shift resources across the programs to reflect the needs and priorities set forth in the PPA. The PPA is the single, comprehensive work plan, and the PPG is the single funding mechanism to implement the work plan. Some recent success stories that reflect refocused State (and EPA) priorities include shifting PPG resources to address sprawl, mercury strategy, restoration of shellfish beds, and protection of instream flow in rivers. stream flow in rivers.

stream flow in rivers.

While DES has had some success in both reprogramming priorities and funds through existing PPA and PPG mechanisms, there are barriers in the process. There appear to be some disconnects between the regional and national program offices relative to the earmarking and utilization of the various funds (i.e., "strings"). The national program managers appear to be adhering to more stringent standards compared with the Region, and therefore may be stifling some of the possible flexibility. One example would be strict pass-through requirements for 319 Nonpoint and 104(b)(3) Wetland funds. This is an area that could possibly use some attention.

Finally, it is vital that I stress that PPG funds are riot keeping place with inflation. The PPG in particular has reached a point where flee funds it provides are no longer adequate to support core staff positions or the associated core program responsibilities. Without increased Federal funding for DES, any flexibility possible through the PPA and PPG is a moot issue.

Overtion 4 The FPA-State Regulatory Innovation Agreement appears to lay the stream of the provided of

Question 4. The EPA-State Regulatory Innovation Agreement appears to lay the foundation for better collaboration between States and the Federal Government to explore new ideas. But again, it seems limited; only five proposals have been approved so far, although a few more are in the pipeline. How can the Congress encourage SPA and the States to take advantage of these programs? Is additional funding or flexibility in the laws needed to make these kinds of programs work bet-

Response. The Agreement is beginning to bear fruit. As of May 20, 2000, 18 projects have entered the process and about one-third of them have been approved. Moreover, the principles underlying the Agreement are taking root broadly, and a lot of innovation is occurring that is not strictly done under the official rubric of the Regulatory Innovations Agreement.

Innovation does not mean changing flee basic objectives of a safe and healthy environment. But it does suggest a different way of getting there. Collectively, we can expand incentives to encourage innovation, such as regulatory process changes (like predictable, timely permitting and reduced administrative burdens), economic incentives (tax credits, fee waivers, new funding), and greater use of environmental management systems

An integrated Federal environmental statute would greatly assist our efforts to find innovative solutions to increasingly complex, multimedia environmental chal-

Congress can also help by fostering an accountability system that focuses more on environmental results and less on the host of administrative proxies that we call "beans." By emphasizing the results necessary to achieve our goals, the way would be cleared for all the partners—EPA, the States, local government, as well as the entire community—to exercise their collective desires, talents and experience. Existing prescriptions and a cumbersome process stifle creative solutions-including the

development of new technologies that are essential to attaining environmental goals.

EPA could be clearly authorized to delegate to the States a certain level of "innovation" authority which would enable the States to develop agreements and manage the day-to-day operations (like permitting) under the agreement, and retain for EPA a monitoring responsibility to ensure that desired results are achieved. This monitoring could be tied to an agreed-upon performance indicator process like that developed in Florida.

Having EPA focus on the agreed upon goal rather than second-guessing State decisions along the way (including permitting and overfiling) would greatly facilitate innovation. Along these lines, we would encourage Congress to adopt legislation that would provide protection to innovators pursuing agreed upon goals and objectives

while working outside the box.

It would be helpful to have clearly identified points of contact for innovation projects at both the State and Federal level. For these new initiatives, agencies tend to "borrow" folks from other responsibilities. Since these projects involve a different way of doing business, they frequently bring together a diversity of personnel-with no one explicitly charged with getting the innovation done.

In order to encourage commercially viable innovative technologies, developers

need quick review and acceptance from agencies. Certification processes like those

being developed by States and EPA need to be fostered.

In a broader sense, we might explore legislation that would direct EPA to approve innovative alternatives to delegated State programs that vary from Federal regulations if these alternative programs meet criteria established through discussions among States, EPA, Congress and other interested parties. Innovation includes risk of failure. Congress could include some indemnification provisions that would ease the legal consequences of failure, thus stimulating the willingness to take a chance on new ideas or technologies.

Question 5. Do you see an expansion of the EPA/State Innovation Agreement to produce a more holistic approach to the environmental issues?

Response. We would like to see the EPA/State partnership evolve to a point where, with the appropriate goals and accountabilities established, there would be no limit to innovation. There is growing interest in innovation projects, and several initiatives are in the works. We hope that the fears and concerns that have accompanied the ideas of innovation and flexibility will fade as we discover ways to produce desired environmental results visibly, accountably and efficiently. We agree that common sense and creative thinking should apply holistically to our environmental challenges.

One way we would like to see the innovations effort expanded is for States, EPA and Congress to pursue innovations directed specifically at existing unregulated problems, such as nonpoint source pollution, habitat loss, diffuse air pollution and

urban sprawl.

Question 6. In the area of regulatory innovations, SPA has committed to responding to State suggestions within 4 weeks for initial followup and within 90 clays for a preliminary decision. How are these deadlines working? Is this an appropriate length of time for these decisions?

So far, there have been no complaints, but EPA has voiced concerns that they must evaluate not only the process but also the substance of the proposals. From

A State perspective, these deadlines seem to be working fairly well.

Question 7. At the hearing held Tuesday May 2, 2000, by this committee, Senator Baucus read a quote from a 1993 hearing testimony given by Thomas Jorling, and asked you to respond. Each of you said that you agreed with Mr. Jorling Flat there was a need for flee Federal gorilla to remain in the closet. Would you please elaborate on that response. In your elaboration, would you please address the following

A. Is it necessary for the EPA, in order to ensure that the States protect the environment, to second-guess the States, or to be able to second guess the States, regarding every exercise of a State?s enforcement discretion, every permitting decision made by the States, and the like?

B. Are the States able and willing to exercise reasonable, responsible, and vigorous enforcement and permitting discretion if the States are no longer subject to sec-

ond-guessing in every case?

I. If so, please explain why that is true today, even if it was not true in past

years.

II. If so, please support your explanation why that is true with examples showing that the States have reasonably, responsibly, and vigorously enforced the following:

a. Federal environmental laws, and

b. State and local environmental laws, over which the EPA exercises no supervisory responsibility.

c. Are there alternative approaches to the current "second-guessing approach" that could still provide assurance to EPA that the States programs are protective

of public health and the environment?

Response. As you know, the role and capability of States has changed significantly over the past 15 years. From 1986 to 1996, for example, State spending on environmental protection increased 142 percent. In 1993, when Tom Jorling made his statement, only 41 percent of eligible programs had been delegated to the States. By 1998, that share had grown to 71 percent. Today, State environmental officials con-

duct roughly 80 percent of the approximately 12,000 enforcement actions taken each

year by environmental agencies at the State and Federal level.

In addition, it should be noted that many States leave requirements which exceed Federal requirements. For example, the New Hampshire Department of Environmental Services has established standards for the land application of sludge which are perhaps the most stringent in the nation, and much more restrictive than the Federal 503 standards. We also recently set a standard for Methyl tertiary Butyl Ether (MTBE) at 13 parts per billion, a level which is the most stringent in the nation. I could provide many more examples if necessary.

New Hampshire would prefer that EPA's limited resources be focused on research and program performance reviews, rather than waste offert on case by case reviews.

and program performance reviews, rather than waste effort on case-by-case reviews. Any decisions can be criticized or second guessed on a case-by-case basis—the key is to have an open, transparent and accountable system which relies on the States

as the primary implementation vehicles.

Question 8. Please indicate whether you agree or disagree with the following statement: "Reasonable people, acting in good faith, can disagree over the best method for protecting the environment. For example, reasonable people can differ over the proper mix of enforcement and compliance assistance as generic tools, and the proper use of a particular choice of method(s) in a specific case. Accordingly, the best approach for gauging a State's environmental protection program is to evaluate the entirety of the State's efforts, both enforcement and compliance assistance, over a long period of time, and to determine whether the State has improved the condition of the environment, rather than focusing on a particular case or series of cases, the number of enforcement actions brought in a particular State (or any other similar so-called 'bean counting' system), and the preference (if any) between enforcement and compliance assistance.

Response. I would fully agree with this statement. In fact, such a philosophy is embodied in an important DES document, the Compliance Assurance Response Policy (CARP), which is available on the DES website at http://www.des.state.nh.us/legal/carp/. As described in the CARP, DES is committed to a consistent, predictregarcarpy. As described in the CARP, DES is committed to a consistent, predictable, and appropriate compliance assurance response, which is protective of public health and the environment while creating a credible deterrence against future violations. DES believes that compliance with environmental regulations is best ensured by using a multi-tiered, multi-media approach starting with education and outreach, and proceeding successively to compliance assistance, compliance monitoring, and timely and appropriate enforcement. Compliance assurance is a fundamental goal DES endeavour to create incentions for examples and approach as a fundamental goal. tal goal. DES endeavors to create incentives for compliance and encourage the regulated community to surpass the minimum requirements of compliance through pollution prevention and innovation. Accordingly, DES maintains an open and on-going

dialog with the regulated community.

DES encourages early intervention to ensure that violations of environmental laws are identified and corrected as soon as possible in order to minimize impacts.

The thin and DES discloses violations to reto public health and the environment. To this end, DES discloses violations to responsible parties as soon as possible after they are discovered and will offer or recommend appropriate assistance to violators to correct deficiencies even while formal enforcement action may concurrently be in development to address the violations. To prevent recurrence of noncompliance, DES investigates root causes of noncompliance and takes action when appropriate. As environmental compliance has a direct impact on everyone, DES seeks expanded public involvement in compliance assurance activities, and supports the public's right to know which facilities are in or out

of compliance with environmental laws.

Over the last few years, and as a key component of the Performance Partnership planning process, DES has made significant progress with flee development and implementation of improved performance measures. The focus of our efforts has been on going beyond the traditional "bean-counting" system, to more fully employ the use outcome-based measures and environmental indicators. DES and many other environmental agencies have recognized that the sole reliance on the traditional measures does not recognize alternative and innovative approaches to problem solving and does not tell the entire, increasingly complex, environmental protection story. Our most recent initiatives in this area include the development of a comprehensive measures data base and work on a EPA grant project that will test better compliance measures.

RESPONSES BY ROBERT VARNEY TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. You note that 38 States have Performance Partnership Agreements under this system. Why don't all of the States have these agreements, is it because the program is relatively new, or are there structural obstacles to getting 100 per-

cent participation?

Response. The original NEPPS agreement between the States and EPA was signed on May 15, 1995. In terms of participation by the States, else record in flee short time since has been gratifying. It is not a perfect partnership yet, and all the full promise of the original agreement remains to be realized. The fact that not all States participate probably has more to do with obstacles than the newness of the

Among the obstacles is the need to foster a greater understanding and support for NEPPS among staff in EPA and the States, especially in merging the NEPPS approach with existing priority-setting systems. We are also concerned that EPA affirm that burden reduction remains a vital aspect of the NEPPS ideal and that the agency increase reporting burden efforts to implement and effect burden reduction as a necessary requirement of all EPA programs, offices and regions.

We also see EPA's continuing presence through direct inspection and enforcement as inconsistent with NEPPS' call for use of Federal resources ill jointly identified State-specific priorities, NEPPS or other joint Federal State planning processes.

EPA also needs to accelerate the transition to a more results-based environmental

management system by making investments necessary to develop improved environmental indicators, outcome-based goals, objectives, measures and information management systems for use in NEPPS, GPRA and other relevant systems.

We realize these transitions are a part of the partnership, and that States and EPA need to work on these challenges throughout our agencies.

Question 2. In your testimony, you emphasize the importance of State innovation. What do you feel are the greatest obstacles to State innovation? Given that innovation is an unpredictable process, how would one design national environmental laws to encourage innovation?

Response. Chairman Smith asked the same question, and I offer the same re-

sponse that I will share with you here:

Innovation does not mean changing the basic objectives of a safe and healthy environment. But it does suggest a different way of getting there. Collectively, we can expand incentives to encourage innovation, such as regulatory process changes (like predictable, timely permitting and reduced administrative burdens), economic incentives (tax credits, fee waivers, new funding), and greater use of environmental management systems. [from Resol. 98-3]

An integrated Federal environmental statute would greatly assist our efforts to find innovative solutions to increasingly complex, multimedia environmental chal-

lenges. [from Resol. 98-3]

Congress can also help by fostering an accountability system that focuses more on environmental results and less on the host of administrative proxies that we call "beans." By emphasizing the results necessary to achieve our goals, the way would be cleared for all the partners—EPA, the States, local government, as well as the entire community—to exercise their collective desires, talents and experience. Existing prescriptions and a cumbersome process stifle creative solutions—including the

development of new technologies that are essential to attaining environmental goals. EPA could be clearly authorized to delegate to the States a certain level of "innovation" authority which would enable the States to develop agreements and manage the day-to-day operations (like permitting) under the agreement, and retain for EPA a monitoring responsibility to ensure that desired results are achieved. This monitoring could be tied to an agreed-upon performance indicator process like that de-

veloped in Florida.

Having EPA focus on the agreed upon goal rather than second-guessing State decisions along the way (including permitting and overfilling) would greatly facilitate innovation. Along these lines, we would encourage Congress to adopt legislation that would provide protection to innovators pursuing agreed upon goals and objectives while working outside the box. [from Resol. 98-3]

It would be helpful to have clearly identified points of contact for innovation projects at both the State and Federal level. As new initiatives, alley tend to "borrow" folks from other responsibilities. Since these projects involve a different way of doing business, alley frequently bring together a diversity of personnel-with no one explicitly charged with getting the innovation done.

In order to encourage commercially viable innovative technologies, developers need quick review and acceptance from agencies. Certification processes like those

being developed by States and EPA need to be fostered.

In a broader sense, we might explore legislation that would direct EPA to approve innovative alternatives to delegated State programs that vary from Federal regula-tions if these alternative programs meet criteria established through discussions among States, EPA, Congress and other interested parties. [from Resol. 98-3 almost undecipherable]

STATEMENT OF JAMES M. SEIF, SECRETARY OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. Chairman and members of the committee, I am Jim Self, Secretary of the Pennsylvania Department of Environmental Protection. Pennsylvania is pleased to appear before you today to discuss some of the innovative environmental programs

that we and other States have developed.

When he took office, Governor Tom Ridge committed to make Pennsylvania a When he took office, Governor Tom Ridge committed to make Pennsylvania a leader among States and a competitor among nations. He has pursued that commitment by cutting taxes, promoting exports, and making Pennsylvania a "high-tech" State through the introduction of new electronic commerce and electronic government tools. Another important part of the Governor's plan was restoring and protecting Pennsylvania's environment by cleaning up old industrial sites—"brownfields"—and returning them to productive use.

Complicated Federal remedies of the late 1970's and 80's such as RCRA and Superfund have, at best, a mixed record in addressing the legacy of old industrial sites left from years of being the world's industrial leader. The unworkable liability

sites left from years of being the world's industrial leader. The unworkable liability scheme of Superfund often produced litigation instead of cleanups. Requirements that contaminated sites be returned to pristine condition—a standard that was fi-nancially and sometimes technologically prohibitive—left once-productive sites in many communities permanently off the tax roles and off-limits to renewal and reuse.

Governor Ridge, and the leaders of the Pennsylvania General Assembly, recognized that we needed a different approach to cleaning up contaminated sites. The passage of Acts 2, 3 and 4, the three acts establishing Pennsylvania's Land Recycling Program, provided the environmental platform to allow us to tear down the fences around these sites, to begin to restore our communities, and to turn our manufacturing heritage back into an asset.

Pennsylvania on May 2, 2000 is a much different place than it was 5 years ago on May 19, 1995, the day that Governor Ridge signed the Land Recycling Program into law. Had you been with us that rainy day in Western Pennsylvania at the site of the former U. S. Steel National Tube Works, you would have seen an environmental scene that could have been in Anytown, U.S.A.—a rusted hulk that resulted from the battles and success of our first industrial revolution.

The Lands Recycling Program is an innovative solution that evolved from concept to reality so successfully that Governor Ridge has described the program as "simply

a case of government making sense."

This common sense approach provides a statutory liability release, standardized procedures, realistic goals, cleanup options and funding assistance. These features destroyed the barriers that stood in the way of the Federal and early State remediation programs.

Don't think that the Land Recycling Program uses lax environmental standards. On the contrary, the program used sound science to establish cleanup standards that protect public health and the environment. The difference is that these standards are realistic enough to promote the reuse of contaminated sites.

The program's four cornerstones—uniform cleanup standards, standardized review procedures, release from liability, and financial assistance—all address crucial

business Issues.

Uniform standards, under four cleanup options, give communities the flexibility they need to attack this nationwide problem. Total costs and project time are also easier to establish. Agreements to protect buyers' rights and the financial viability of owners of multiple contaminated sites are available to business.

Standardized review procedures provide a uniform statewide process for cleanups. A technical guidance manual was published, in plain language, to help people use the program. The program imposed review time limits and guarantees a reply to applications within 60 days.

Releases from liability take the risk out of remediation. Anyone who cleans up a site to the new standards is released from any additional cleanup of the old contamination. This liability travels with the property and can extend to financial institutions, economic development agencies, and local authorities. It essentially puts the site back into the stream of commerce.

While the program has attracted millions of dollars of private sector investment in cleanup, funding assistance is also available to help reach sites that might not otherwise get addressed. The Industrial Sites Cleanup Fund, initially stocked with \$15 million, makes grants and low-interest loans available to cover up to 75 percent of the cost of site assessment and remediation. Pennsylvania's Department of Community and Economic Development has already provided in excess of \$20 million

in grants and loans to assist land recyclers.

The results speak for themselves. Since the inception of our Land Recycling Program, more than 700 sites have been remediated and hundreds more are in various stages of cleanup—compared to Superfund, in which only 16 of 112 sites on Pennsylvania's NPL have been delisted. Many of these brownfields properties are now back on the tax roles, and more than 17,000 people now have jobs on these redevelopment sites

As David Gergen from U.S. News and World Report has pointed out, "These results are impressive. Pennsylvania has created strong incentives for businesses to clean up and revitalize abandoned urban sites, while preserving farms and undevel-

oped land in the process.

Our program is not only producing environmental protection and economic development gains at individuals sites, but also is an effective strategy to accomplish broader policy goals such as reversing urban blight and developing a sustainable future. Working with redevelopment authorities, local government, lending institutions and the private sector, we are creating jobs, increasing tax revenues, improving transportation infrastructure, revitalizing urban areas, and preserving open

space.

Let me go beyond basic statistics though, to give you a flavor of how Pennsylvania's brownfields program has affected and influenced "real people."

• A particularly noteworthy Land Recycling Project is the site of Bethlehem Steel Corporation's original steel-making facility in Bethlehem, Pennsylvania. This represents the largest brownfield project currently being undertaken in the Nation (nearly 2000 acres). This site, which once supported heavy industrial processes, is being converted into a recreational educational, cultural and entertainment center being converted into a recreational, educational, cultural and entertainment center of regional, if not statewide, significance. The Smithsonian Institution will occupy a key location there to house and display artifacts of our nation's industrial herit-

Several other examples include a large industrial complex, the Transit America facility, in North Philadelphia that is being remediated and returned to open space use as an 18 hole public golf course. In West Chester, a turn of the century Laundromat has been converted into a fitness center. And in McKeesport, in the Mon Valley, a steel mill site has been converted into the eastern headquarters of Echostar Corporation and will house more than 2000 customer service representa-

- Our partners in redeveloping these sites have been most generous in their praise. A few quotes illustrate how successful the program has been. Michael Theisen of Woodmont Corporation, which turned an auto wrecking yard into a shopping center pointed out, "It would have been impossible to acquire tenants or the financing needed to make such a center feasible, particularly one located downstream from a Superfund site, without the support and assurances provided [by the Land Recycling Program]. Perhaps the success of our program is most easily summed up by Lou Marseglia of Grundy Recreation who said "If it wasn't' for the [Land Recycling Program], we couldn't have built it" in reference to the recreation center built on the site of a former carpet mill.

 Further, our program has been recognized as an "Innovations in American"
- Further, our program has been recognized as an "Innovations in American Government Award Winner" and a 1997 "Ford Foundation Award Winner."
 People in other nations have noted our success and looked at us as a model

for programs of their own. The Scottish Environmental Industries Association invited us to share our experience at the Contaminated Lands Forum in Scotland. We have also gotten inquires from Brazil and Eastern Europe on our program.

The flexibility offered by Pennsylvania's Land Recycling Program has allowed us to be innovative in our approaches to cleaning up sites. We have entered into a multi-site agreement with the U.S. Army, Air Force, Navy and Defense Logistics Agency to facilitate the cleanup of all sites used previously for military purposes and to prepare them for reuse a decade earlier than originally scheduled. This was a landmark agreement that will have tremendous economic development benefits for the Commonwealth and has formalized a plan of action for resolving Federal liabilities at 1,260 sites in 26 counties. This agreement was only possible because of the flexibility afforded by the State laws establishing the Land Recycling Program and clearly can be a model for other States to follow.

As often happens, one successful innovation points the way to others. To raise awareness of the availability of sites for redevelopment, DEP created the Brownfields Inventory Grant (BIG) Program, which provides grants to local governments, economic development agencies and other qualifying agencies to inventory

the brownfields properties in their area. Sites that are identified are added to the Pennsylvania Brownfields Directory on our Department's website, so that parties interested in developing sites will know that they are available. This data base cur-

rently lists over 130 sites.

As a further inducement for the revitalization of communities, Governor Ridge

As a further inducement for the revitalization of communities, Governor Ridge signed legislation creating Keystone Opportunity Zones, in which tax abatement is offered to businesses locating in economically depressed areas.

The unrealistic standards and open-ended liability of Superfund have often been strong deterrents to the use of new technologies at environmental cleanups. The cleanup options available to voluntary parties under our program are more conducive to the use of new technologies. Promoting the use of new technologies is another State success story that is shared by many States. States are working together to improve State permitting processes and to speed deployment of technologies by using the Interstate Technology and Regulatory Cooperation Work Group, or ITRC, which is an organization affiliated with ECOS. The ITRC is a State-led, national coalition of regulators working with industry and stakeholders to improve State percoalition of regulators working with industry and stakeholders to improve State permitting processes and to speed deployment of technologies through interstate and regulatory collaboration.

Currently, 31 States actively participate in ITRC activities and additional States are indirectly involved through participation in training events and technical work team activities. Other participants include the Departments of Energy and Defense, and the Environmental Protection Agency. The ITRC can document success stories in all 50 States, through the use of ITRC products or examples of institutional

change.

These innovations, taken together, have made the efficient re-use of industrial land far more attractive in Pennsylvania, and have reduced the pressure on unde-

veloped "Greenfield" areas.

We believe that we have gotten the fundamentals right. Now it is time to make it even easier for these sites to be cleaned up and returned to productive use. The Pennsylvania Department of Environmental Protection in collaboration with a number of other State agencies has launched additional new initiatives to do just that.

Financial Resources for the Environment is one of two initiatives of its kind in the Nation in which public sector entities are working together with lenders, utilities and corporations to develop a financing vehicle to provide funding for brownfields redevelopment. In many cases private financing for brownfields projects is difficult to obtain. This project will fill in that gap and promote more redevelopment without the necessity for increased public funding.

 We are developing a request for proposals to offer a Commonwealth-wide insurance policy that can protect owners and developers from the uncertain liabilities associated with conducting cleanups. By purchasing coverage under this—umbrella policy—owners and developers will receive coverage more affordably than seeking it alone and can even be insured against actions taken by our Department. This will provide even more confidence for individuals seeking to sell and buy brownfield

sites.

Many other States have also attacked the problem of brownfields with innovative programs of their own. At least 35 States have voluntary cleanup programs, and, while many share common elements, each is tailored to the particular needs of the State. Thousands of sites around the country have been cleaned up under these pro-

In short, Pennsylvania and the other States have figured it out. Brownfield redevelopment is becoming a common and natural aspect of real estate development and sound land use planning in our Commonwealth and across the nation. There are some legislative steps that can be taken to accelerate the pace at which these pro-

grams can restore our environment and revitalize our communities.

I encourage the Senate to consider passing brownfield legislation based upon the model developed and supported by many States. The key elements of such legislation are: (1) a release of Federal liability at State land recycling sites, (2) a waiver of Federal permitting requirements at State land recycling sites, and (3) Governors concurrence on proposed NPL listings.

A Federal release of liability will heighten developer confidence that EPA will not take judicial or administrative action should EPA decide to second-guess a State's decision regarding a clean up. Second, there needs to be a waiver of Federal permitting requirements at land recycling sites being addressed under a State voluntary cleanup program. In Pennsylvania, our General Assembly gave DEP the authority to waive State permits at sites being handled by our land recycling program, but only Congress can waive the requirement to obtain Federal permits. These are the same permitting requirements that EPA has the authority to waive at sites in the Superfund program. In asking for this waiver, be assured that discharges to the air and water are fully regulated by our State regulatory programs, and persons cleaning up sites in our State system have to meet all of our applicable emission and discharge limitations, both during cleanup an thereafter. In addition, Congress should reinstate the opportunity for Governors to concur on proposed Superfund listings. Governors can best decide whether sites have the potential to be redeveloped and, therefore, moved through a State land-recycling program as opposed to being relegated to the NPL

We are very proud of what we have achieved in Pennsylvania. Our Land Recycling Program has preserved open space, revitalized town and urban centers and made people feel better about their communities and the government's role in them. We believe our Program can serve as a national model and I thank you for the op-

portunity to speak with you today.
Thank you.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, June 1. 2000.

Honorable ROBERT C. SMITH, Chairman, Senate Environment and Public Works Committee, Senate Office Building, Washington, D.C. 20510-6175

DEAR CHAIRMAN SMITH: Thank you again for permitting the Environmental Council of the States to present some of its views to your committee at the hearing on May 2, 2000.

Toward the end of the hearing you had asked a question about finality and I apparently misunderstood it. Your question, as Mr. Conover later explained it, was about the need for or value of finality in the land recycling process. My answer

about the need for or value of finality in the land recycling process. My answer would be, and perhaps you will permit the record to be supplemented, as follows: Finality in land recycling transactions is the sine qua non for success. Choices made about how sites are selected, about the future use of the site, about future ownership patterns, and about financing are made by the private sector, and they will not be made at all in absence of certainty about the finality of government regulatory action. For many sites, this chilling effect of non-finality (for example, possible Federal action), will continue to stand in the way of cleanup and reuse.

Thank you again for the opportunity to testify and I am looking forward to an

Thank you again for the opportunity to testify, and I am looking forward to an informal visit with some members of your staff to develop some additional thoughts on improvements to the statutory structure of our nation's environmental programs.

Sincerely,

JAMES SEIF. SECRETARY.

RESPONSES BY JAMES SEIF TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. The brownfields success in Pennsylvania is a clear example of State innovation and a commonsense approach. In your testimony, you presented three recommendations for the Senate to consider: (1) a release of Federal liability at State land recycling sites, which will give the States "finality" in their decisions, something they do not currently have; (2) a waiver of Federal permitting requirements at these sites; and (3) Governor's concurrence on proposed NPL listings. How would such a release mentioned in (1) work in practice? Would there be instances where Federal involvement would be appropriate? What are those instances?

Response. The Federal Government, through statute, should establish that Federal enforcement authorities under CERCLA do not apply to sites that have been cleaned up in accordance with the provisions of effective State voluntary cleanup programs. Federal involvement at such sites could be appropriate if information about the existence of serious additional risks from contamination at the site came to light, and the State was either unable or unwilling to address those risks under the provisions of its own program. Additionally, contaminated properties exist which may not be attractive for private investment, and may be posing unacceptable risks to public health and the environment. It is these sites where Federal and/or State funded cleanup involvement is warranted and should be focused. Federal action under the emergency ("immediate removal") provisions of Superfund might also be useful in certain fact situations.

Question 2. What would be the result of providing State finality in decisions on cleanup of brownfield properties?

Response. The opportunity for voluntary parties to obtain both State and Federal finality would result in increased participation in the State program. We are con-

Question 3. Does the Secretary believe that States that adopt this model will find that more funding would be available for cleanup at these sites from private and State sources?

Response. States with proven and recognized voluntary cleanup programs have been and will continue to attract a greater level of private and public funding for assessment, cleanup and reuse of contaminated property.

Question 4. How important is it to the States' continued success that the uncertainty associated with the EPA's second guessing of a State's decision regarding cleanup be removed?

Response. Finality in land recycling transactions is the sine qua non for success. Choices made about how sites are selected, about the future use of the site, about future ownership patterns, and about financing are made by the private sector, and they will not be made at all in absence of certainty about the finality of government regulatory action. For many sites, this chilling effect of nonfinality continues to stand in the way of cleanup and reuse.

Question 5. At the hearing held Tuesday, May 2, 2000, by this committee, Senator Baucus read [a quote of Thomas Jorling] to you and asked you to respond. Each of you said that you agreed with Mr. Jorling that there was a need for the Federal gorilla to remain in the closet. Would you please elaborate on that response? Response. It is certainly not necessary for EPA to be able to second-guess every

Response. It is certainly not necessary for EPA to be able to second-guess every individual State decision. In fact, that second guessing is just as likely to reduce the effectiveness of State programs, as members of the regulated community grow reluctant to committing resources to achieving compliance if they believe that another opinion of what constitutes compliance is possibly to be substituted later. This reverses delegation, turning the day-to-day implementation of programs back to the EPA.

States are willing and able to exercise reasonable and vigorous enforcement. Governors are elected by the same citizens who elect Senators, and recognize the same strong support among those citizens for effective environmental protection. Governors are more likely than Senators, I suggest, to be held accountable by those citizens if environmental problems in their States are not appropriately addressed. The notion that States will "race to the bottom" is just not true.

As evidence of this, States have been shouldering a growing share of the effort of environmental protection in this country. States have sought and obtained delegation of the vast majority of Federal programs that can be delegated. State spending on environmental protection has risen steadily and the percentage of State environmental budgets that is provided by the Federal Government has shrunk to about 20 percent on average, and much lower in some States. States conduct the overwhelming majority of environmental inspections, and about 80 percent of the enforcement actions taken nationally.

There are a number of specific instances in Pennsylvania that demonstrate our willingness to take strong action against those who violate the law. We have assessed and collected a \$3.2 million penalty against Westinghouse for groundwater contamination at a facility in Adams County, using a combination of State and Federal authorities. Another example is Action Mining in Somerset County, where we brought enforcement action against the company for illegal discharges to a stream, resulting in \$625,000 in civil penalties.

An important point to make however, is that vigorous enforcement is not, in itself,

An important point to make however, is that vigorous enforcement is not, in itself, an adequate measure of an effective environmental program. We have achieved, for example, an 88 percent compliance rate with the Federal standards for upgrades of underground storage tanks in Pennsylvania. The large number of tanks and tank owners throughout the State, many of which are small businesses or "mom-and-pops", required the use of many different tools—outreach, education, compliance assistance, and, when needed, enforcement. The enforcement actions alone don't tell the story of whether the environment is being protected or not; the compliance rate does.

Also, we take some enforcement actions in cooperation with EPA. We recently decertified several laboratories in Pennsylvania for inaccurate or fraudulent environmental testing results. EPA then used Federal authorities to bring criminal action against those who generated fraudulent results. This is the kind of "gorilla in the closet" that works. We want to have the ability to do the best job we can with our authorities, and, only then, the option to turn to the Federal Government for help when their authorities or expertise are needed.

The current Federal laws already provide a mechanism whereby the Federal Government can maintain oversight without the need to second guess individual State

permitting and enforcement decisions. EPA must approve the delegation of any Federal program to a State, and EPA retains the right to revoke that delegation. If any State should fail to meet the requirements for operating a delegated program or fail to be protective of public health or the environment, EPA can initiate proceedings to revoke delegation, and instead run the program itself. EPA should delegate the programs, let the States run them, and take them back if the States fail. EPA should not pretend to delegate the program then continue to make the decisions.

Question 6. Please indicate whether you agree or disagree with the following statement: "Reasonable people, acting in good faith, can disagree over the best

method for protecting the environment.

Response. I agree with the statement. I would add that it is not just the mix of enforcement and compliance assistance that matters. We have made some of our best environmental gains in Pennsylvania through efforts that have little or nothing to do with patrolling a standard. The Land Recycling program about which I testified is a good example, where we created conditions under which private parties volunteer to spend their own money to clean the environment. Through pollution prevention and energy efficiency programs we are helping businesses and individuals in Pennsylvania go beyond what the law would require. Our work to promote new technology is bearing fruit not only for Pennsylvania's environment but also for the rest of the country and, in fact, the world. Enforcement is just one facet of compliance with the law, and compliance is just one facet of environmental protection.

RESPONSES BY JAMES SEIF TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. You note in your testimony that Pennsylvania is pursuing an "umbrella insurance policy" for Brownfield cleanups. How can environmental insurance facilitate further redevelopment?

Response. We have found that uncertainty is one of the primary inhibitions to private sector investment. Our request for finality is one important element in establishing the kind of certainty that will promote greater private investment in environmental cleanups. The insurance program we envision would establish another kind of certainty. Environmental insurance has come into favor as a hedge against unanticipated and unexpected costs. We will soon be selecting a qualified broker to establish underwriting that builds upon the strong points of the Land Recycling Program. Private parties will be able to take advantage of competitive premiums for primary coverage options including cost overrun, third-party and tort claims, and State and Federal reopener and compliance costs. We anticipate that this additional certainty as to cost will make potential redevelopment projects more attractive to private parties and the lending community in particular.

Question 2. Are most brownfield sites cleaned up under your State program brought to your attention by the volunteers or do you discover the sites first?

Response. In most cases, we do not know about a given site until a notice of intent to remediate is filed with us. As I mentioned in my testimony, we have offered grants to local governments and authorities to inventory brownfield sites within their geographic areas, and we maintain a data base of such sites for those who may be searching for a property to redevelop. The majority of the sites in our program however, are first identified by the voluntary party seeking to clean up and reuse them.

STATEMENT OF BRENT C. BRADFORD, DEPUTY DIRECTOR, UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. Chairman and members of the committee; my name is Brent C. Bradford. I am the Deputy Director of the Utah Department of Environmental Quality. I am here representing the views of the Environmental Council of the States (ECOS) of which I am a member and immediate past chairman of the State/EPA Information Management workgroup and current Vice Chairman of the ECOS Strategic Planning Committee.

I want to speak to you today regarding State activities and initiatives in managing environmental information. I'd like to give you four messages:

1) States generate most of the data in EPA's national data systems;

2) States are driven to manage this data effectively because they must have it to

operate their own programs;
3) States have become the greatest innovators in the management of environ-

4) States are working with EPA and the public to make this data available.

First, States collect and provide about 94 percent of the environmental pollutant information contained in Federal program data systems (report attached: "Environmental Pollutant Reporting Data in EPA's National Systems"). This includes data from the regulated community and direct measurements of environmental quality. It includes data for water, air, waste and drinking water. States provide EPA nearly all the environmental pollutant and compliance data it uses to manage the environment. Data that EPA passes on the to the public through programs such as Envirofacts often originates in the State environmental agencies.

Second, States use this data themselves to manage their own programs, and so are driven to make sure that the data is managed usefully. This became especially true during the 1990's as the States assumed more and more of the delegated protrue during the 1990's as the States assumed more and more of the delegated programs from EPA. More States over the past 2 years have invested in information technology and moved toward data integration. This increases the effectiveness of environmental program management and provides for sharing and exchange of information, and thus improved public access to data and improved data quality. States work together through ECOS to share experiences and knowledge and thereby assist one another and EPA in developing capabilities to manage environmental information. Some States have made significant investments of State funds and others have relied heavily on Federal funds coming through EPA's One-Stop program. Such Federal funding has been particularly helpful to smaller States such as ours. My third point is that the conditions I have already mentioned have led the States to become great innovators in environmental data management.

My third point is that the conditions I have already mentioned have led the States to become great innovators in environmental data management. In my home State of Utah, our agency has developed a standard used by all programs to identify facilities and link them between program data bases. We also created a global data catalog to allow public access to information contained in our data bases. We have developed an electronic reporting capability to allow regulated facilities to report required information and to provide for sharing of that information among the media programs within the department. From these efforts we defer the department of the programs within the department. tion among the media programs within the department. From these efforts, we developed an Internet access capability that will allow public access to information 24 hours per day, 7 days per week. We especially wanted to make permitting and compliance information available.

Other States have also made remarkable progress in this area. For example,

1) Pennsylvania was one of the first States to present timely multi-media compliance information on facilities on line to the public. They are now sharing that system with other States.

2) The State of Washington's led other States in developing a de facto national standard its Facility Identification Template for States is now in its second version and is being used by at least 25 States to help them jump-start their data reinvention efforts, saving each State about a quarter of a million dollars

3) New Jersey's Environmental Management System fully integrates all regulatory and permitting systems one of the first anywhere to do so when it's completed

later this year.

4) Virginia's Centralized Enterprise Data System was created in 18 months, merging 77 legacy systems that were not compatible into a single integrated system. The State itself invested \$12 million of its own State tax dollars to create this system. Virginia is now offering the system to other States at no cost.

5) New Hampshire is integrating its environmental data bases by linking facility and site data, and has begun making site remediation, UST, and air permitting in-

formation accessible via the Internet.

My fourth and final point is that States are committed to working with our Federal partners in making our data available to the public. The States and EPA created the State/EPA Data Management Workgroup in January 1998. We developed a vision statement and a set of operating principles (see attached: "State/EPA Vision and Operating Principles for Environmental Information Management"). These decommit States and EPA to a partnership in building locally and nationally accessible information systems. Major accomplishments of the workgroup include:

1) the creation of a data standards council,

the development of a vision for a national data exchange network,

3) establishment of a joint process for addressing burden reduction in data reporting and
4) a discussion forum and action plan for public access to environmental data.

A full summary of the activities of the workgroup is attached for your information.

Conclusions and Plans

States are making significant accomplishments in environmental data management. But the cost is high. Currently, the President's budget proposes \$30 Million for environmental information management (proposed as \$16 million for States and \$14 million for EPA). States believe that this funding is essential in addressing a new vision of environmental information management. States and EPA will use this funding to develop data exchange standards, and enhance the capability of both States and EPA to exchange data. Continued Federal investment is critical for this vision to be realized, and we need to make sure that all States have a full opportunity to participate. Collective investments in standards development will be needed to make such a network viable.

States envision a national environmental information exchange network that recognizes that the agencies that collect information would be responsible for its stewardship, and will provide access to such information through the network. Such a network is based on common standards that will provide a common base for information access, exchange and use; but will allow flexibility in meeting individual State and EPA needs regarding data housing and handling. This would move the focus away from a common national data "system" toward a focus on data quality and interpretation, while providing States, EPA and others the ability to use their on-going work to create "portals" for access to information sources. This will require both State and EPA effort to make such an exchange work and must be developed in such a way that all States, both large and small can participate in the exchange. (A copy of the working version of the State-EPA "Shared Expectations for a National Environmental Exchange Network" document is attached).

Given the impact of decisions made based on environmental information and the need to assure its accessibility and accuracy, it is important that States and the Federal Government continue to work together to develop and utilize data management technology in a sound, responsible and efficient way. There is a long way to go, but significant progress is being made. States have provided leadership in this important effort and are committed to continuing to do so to assure that the ever-increasing demands for information are met and that necessary information is available for responsible environmental decisionmaking.

EPA Vision and Operating Principles for Environmental Information Management

APPROVED BY STATE/EPA INFORMATION MANAGEMENT WORK GROUP AT SALT LAKE CITY MEETING

The States and U.S. Environmental Protection Agency (EPA) are committed to a partnership to build—locally and nationally accessible, cohesive and coherent environmental information system that will ensure that both the public and regulators have access to the information needed to document environmental performance, understand environmental conditions, and make sound decisions that ensure environmental protection.

Joint State/EPA Operating Principles For Effective Environmental Information Management

Working closely with local governments, the regulated community, the public, and tribal governments, the States and EPA will adhere to the following Operating Principles in their efforts to build efficient and effective environmental information systems that recognize customers" needs, ensure full public access, strengthen environmental program management, minimize reporting costs, and ensure fairness and due process in the protection of trade secrets.

1. Data collected by the States and/or EPA chould have a market and the process.

- 1. Data collected by the States and/or EPA should have a specific and demonstrable use that:
- contributes to public understanding and decisionmaking about environmental and health risks in their communities;
- supports States' and EPA's ability to manage environmental programs effectively and enables regulators, legislators and other oversight bodies, and the public to measure success in the implementation of such programs, in a manner that is increasingly based upon environmental results; and??
- imposes the least burden on the private and public sectors, consistent with the above public requirements.
- 2. The States and EPA commit to developing ways of sharing core environmental information based on jointly developed data standards and compatible system design. To this end, business processes and information systems designed by either or both States and EPA should:
- be designed and managed employing methods and technologies that will assure that the burden of collecting, storing, maintaining, and retrieving these data is minimized and provides for timely data sharing among all users;

· be managed and maintained to provide enhanced data quality, reliability, secu-

rity and overall system stewardship;

• be integrated across programs and facilities based on data standards, in part so that information collection duplication and or redundancy is reduced as much as possible:

 provide the context, purpose, reliability, and collection methods for these data, in order to enhance users' understanding and use of data to address environmental issues; and

promote ready access to quality environmental information for all levels of gov-

ernment, the regulated community, and the public.

3. The States and EPA will leverage and share existing and future State and Federal investments in the use of information technology. Recognizing the opportunities and risks associated with the rapid pace of developments in information technology, the States and EPA will work as partners to modernize environmental information systems as rapidly and efficiently as possible, while doing everything possible to ensure that all EPA components and all States participate fully in this process.

4. The States and EPA recognize that there is a critical need to share information

for each agency to be successful in its general mission. While recognizing that both have special data needs for specific programs that do not require information to be shared or for which information sharing may not be necessary, States and EPA recognize the overriding importance of transparency in public activities and decisionmaking and of respect in the use and dissemination of each other's information.

5. The States and EPA will improve the collection, management, and sharing of environmental information to support the achievement of their respective and shared environmental goals and priorities. Integration of and agreement on these goals and priorities will occur through a structured dialog (such as the National Environmental Performance Partnership System [NEPPS]).

RESPONSES BY BRENT C. BRADFORD TO ADDITIONAL QUESTIONS FROM SENATOR **SMITH**

Question 1. The EPA's testimony stated that Core Performance Measures are needed to paint a national picture of environmental progress. Can you describe what some of these core performance measures are? How are the data collected by the States related to the Core Performance Measures and environmental indicators

Response. Core Performance Measures (CPMs) have been developed through the joint efforts of EPA's program offices and ECOS. The 1995 NEPPS Agreement established a system for developing Performance Partnership Agreements (PPAs) between States and the EPA. The PPAs, in turn, provide a vehicle for articulating both State and national environmental priorities and for establishing results-based performance measures. In 1997, the States and EPA signed a Joint Statement on Measuring Progress and produced the first set of CPMs for fiscal year 1998.

CPMs are a set of environmental indicators, program outcome and output measures used to assess progress in certain subject areas, such as protection of aquatic ecological health, reduction of pollutant discharges, and others. They have been developed for air, waste, water and accountability measures have been developed for air and compliance assurance programs. There are no CPMs for pollution enforcement and compliance assurance programs. There are no CPMs for pollution prevention, pesticide, and toxic programs in fiscal year 2000.

As an example, within the air and radiation programs, ECOS and EPA have agreed upon the following CPMs for reducing air toxic emissions and health risks: Core Environmental Indicator: Trends in emissions of toxic air pollutants as reflected in EPA's National Toxics Inventory; Core Program Outcome Measure: Reduction in air toxic emissions from 1990 levels; and Core Program Output Measure: State progress in collecting and compiling ambient and emission source data for

toxics to better understanding the nature and extent of the air toxics problem.

Each media committee of ECOS and its EPA program counterparts, as a part of the Core Performance Measures development process, determined not only the measures, but the information needed to evaluate the measures. In most cases, it was jointly determined that the data were already being collected and that additional information was not needed. However, it was determined that States and EPA would have to work together on interpretation of information and assure that the data were used for the purposes for which it was collected. This has come to be known between States and EPA as the issue of respectful use. This issue of respectful use resulted in a joint effort on the part of State, EPA, environmental groups and industry to address how environmental information is used and interpreted, how data quality is assured and how data gaps are appropriately filled. While States and EPA have agreed to continue to search for and eliminate nonproductive data collection, this does not seem to be nearly as important an issue as how those data are used and interpreted.

Question 2. What are the States doing now to ensure that the data they collect relating to core performance measures is of good quality and used in the right context? One concern that is heard often is that States collect different types of data that may not translate well into a national data base and, also, that data collected

that may not translate well into a national data base and, also, that data collected in one context may not be applicable when they are considered in another context. Do these issues affect the use of information for core performance measures? Response. The collective State/EPA process that led to CPMs ensured that the data supporting CPMs would be accessible and of good quality. By their nature, CPMs are a collection of data that translates well into a national data base—intended, as Mike McCabe's testimony on behalf of EPA indicated, to paint a national progress. It is important to understand that the information of environmental progress. It is important to understand that the information of the context of the con picture of environmental progress. It is important to understand that the information collected by the States is utilized to manage State programs. These data are the same information that is shared by States and EPA in the Core Performance Measures. Individually, States have taken steps to assure quality of data as they are used for the States own purposes and are available to those to whom the State agency is responsible. Thus, there is incentive for the State to assure the data are of highest quality. Many of the national data bases are outdated and unworkable. This has been recognized by both the States and EPA. Therefore, the current work of the State/EPA Data Management Workgroup is focused on the creation of a new data exchange network that would eliminate the needed for inputting data into national program data bases and would allow EPA direct access to State data. This system would preclude double entry of data and create new ways for States and EPA to share information and assure its quality and accuracy.

Of course, the envisioned data exchange network does not imply that all Stategenerated and transmitted data will be used as originally or appropriately intended. There are occasions, for example, when States and EPA have disagreed about the release of certain data or the proposed use of that data. We understand and share the urgency to ensure our citizens have access to environmental information. For that reason, we must continue to work with EPA to ensure that the information and its characterizations have received the necessary quality assurance, peer review, and appropriate instructions for interpretation and use. Fortunately, EPA and ECOS have established a solid working relationship focused on the need for relationship.

evant, reliable, high-quality, accessible, and useful data.

Question 3. What is the impact on the type and quality of the data collected, if the EPA and the States have not agreed on the environmental priorities and goals? Response. One of the big challenges facing EPA and the States is identifying what data is necessary to support our collective priorities and goals. ECOS and I believe that greater attaction reads to be placed by EPA, and the States on developing high. that greater attention needs to be placed by EPA and the States on developing high quality environmental goals, objectives and performance measures that the majority of Americans can understand and rally around. These goals, objectives and measures will be significantly enhanced if they are developed in close consultation with State environmental agency leaders who possess significant expertise and experience in environmental management along with significant responsibility for environmental protection. We give credit to EPA for its recent effort to reach out to State environmental leaders to identify their priorities as EPA undertakes its strategic, operational and budget planning.

One of the challenges of an increasingly results-based environmental management system is that old measures of activities are increasingly irrelevant. Some may still be important, but many others are not. New measures, particularly environmental indicators, will require new monitoring efforts—and resources are a major concern. As States and EPA tackle increasingly complex environmental issues such as nonpoint source pollution, ecosystem health, and toxic risks, new data and analytic tools will become necessary. The good news is the science is now available. The bad

news is that the funds frequently are not.

National data collection that does not support the attainment of agreed upon priorities is suspect, and as the process of collective priority setting moves ahead, my colleagues and I are looking for opportunities to drop unnecessary data burdens.

Question 4. What additional assistance, if any, do the States need from EPA to

develop and implement core performance measures?

Response. For the CPMs that are currently in place, States do not need much more assistance. However, ECOS continues to push for increasingly results-based measures, and these will require a joint commitment of resources to identify and implement. One of the reasons we are still heavily reliant on output, or activity, measures is that they are relatively easy to measure, we are already measuring them, and they are relatively cheap. Besides, we have been measuring those things for years; they are part of the culture. Unfortunately, they are poor proxies for real

measures of our environmental condition.

We also need the ability to collect data over substantial periods. Environmental results often take a long time to develop and materialize. Good, long-term, data are needed to ensure that the trends are in the right direction and the investment is

paying off.

As the States and EPA continue—through NEPPS and other joint planning efforts, like GPRA—to identify our environmental priorities, appropriate results measures will also become evident. We need a culture at the State and EPA levels, as well as in Congress, that will embrace this new management approach and which will provide the resources necessary to put it in place.

Question 5. Is it necessary for the EPA, in order to ensure that the States protect the environment, to second-guess the States, or to be able to second guess the States, regarding every exercise of a State's enforcement discretion, every permitting decision made by the States, and the like?

Response. Not only is it unnecessary for EPA to second guess the States, it is unproductive, contentious and costly. It results in delays in compliance and undermines the ability of the State to effectively take and complete enforcement actions. It is important to realize that State environmental agencies are much closer to these enforcement issues than EPA and are also held much more closely accountable by the public and elected officials. Further, it is important to understand that States have the knowledge and ability to take into consideration local conditions and situations that may have a significant impact on achieving and maintaining compliance. EPA generally fails to consider such situations in taking actions. In Utah, our experience with EPA enforcement has generally been very negative. EPA has waited until cases have been negotiated by the State, said little or nothing regarding those negotiations and then, after a settlement has been reached, come in to reopen the case and attempt to extract additional or different penalties. This has a significant

case and attempt to extract additional or different penalties. Inis has a significant adverse impact on the State agency, on the local community and on the facility. By way of example, the experience of the town of Spanish Fork, Utah may be helpful. The town of Spanish Fork is a rural Utah community with a population of approximately 8000 people. The town built a new sewage treatment facility, for which our agency issued a permit. The design of this facility is similar to that of others that are currently operating in the State. The facility did not operate in compliance with permit requirements and the town contacted. DEO and reported the pliance with permit requirements and the town contacted DEQ and reported the noncompliance problem. After reviewing the available data, we issued an enforcement action and the town hired a consultant to try to identify and correct the noncompliance problem. A second consultant was brought in to assess the problem and determine the reason for high residual chlorine. Our staff that had reviewed the plans and also worked onsite to help identify the problem. Finally, the city expended an additional \$800,000 for a de-chlorination unit and the problem was corrected and compliance was achieved. The State settled the case without penalty because of the good faith shown by the city in identifying the problem and coming forth to fix it. Four years after the issue had been resolved, EPA notified the State that they wantattempted to dissuade EPA from this position given that compliance had been achieved and maintained over a lengthy period. EPA insisted on pursuing the case. The Region was requested by the State to meet with representatives of the town and the State, including State legislators, prior to initiating any action. EPA refused, issued an enforcement action and then, reluctantly, met with the community indicating that if the State had "done its job", they would not be there. They further indicated that if the town wanted to appeal the action, a hearing could be requested, but would be held in Denver. This precludes attendance of many who may be interested, including elected officials who serve part time. EPA then contacted the State and indicated that they would back out of active participation if the State would reopen its action and obtain a minimum penalty of \$100,000. The community approached DEQ about the possibility of having the State join them in a suite against the EPA action. Ultimately, the community did meet with EPA in Denver and EPA cettled the case for \$24,000. (After telling the State, that they would accent nothing settled the case for \$24,000. (After telling the State, that they would accept nothing less than \$100,000 in a State-negotiated settlement). Subsequent to this action, the State legislature passed, and the Governor signed, a joint resolution stating the State position on enforcement, identifying what they believe is the appropriate EPA role in environmental enforcement and requesting action on the part of EPA. EPA has never acknowledged or responded to the resolution This case is typical of the heavy-handed EPA approach to enforcement and an example of second guessing the State. The EPA action cost the State, the town, the elected officials and the public time and funding, accomplished no further progress in environmental protection and may have permanently damaged relationships between the State, town and Federal

Government. The DEQ has seriously questioned whether this was what Congress intended when they empowered EPA to enforce environmental statutes. If, in good faith, an entity is attempting to understand and comply with environmental requirements should they be treated as a criminal? This is the question that the elected officials of this State continue to ask as a result of this and other cases brought by EPA in our State.

EPA in our State.

EPA's goal in this case was not compliance. That had been achieved. EPA was intent on flexing its Federal muscle and establishing a presence in enforcement in Utah. In doing so, EPA only delayed work on the problem, alienated all associated with it and undercut the ability of the State to take effective enforcement actions. When EPA takes this kind of approach, it significantly undermines the ability of the State to enforce, because facilities are reluctant to negotiate with the State for fear that EPA will not accept the settlement. The result is delay in achieving compliance continued threat to the environment because of legal positioning of the reg-

fear that EPA will not accept the settlement. The result is delay in achieving compliance, continued threat to the environment because of legal positioning of the regulated facility, a lesser commitment on the part of the facility to cooperatively correct the problem and finally, damage to relationships between the State agency, elected officials, the public and the regulated community.

Another example that may be of interest is that of the State action regarding excess emissions at the company's Salt Lake Refinery. The State initiated an enforcement action for excessive emissions at the refinery. After reviewing the Federal and State rules and evaluating the information received during inspections and from the company in response to the enforcement action it was determined that the emissions company in response to the enforcement action it was determined that the emissions were a result of unavoidable breakdown as defined in Federal and State rule and therefore, penalties were not appropriate as actions had been taken to correct the problem. EPA determined that the State action was inappropriate and that the rules had been interpreted incorrectly. EPA sought a \$1 million penalty from the company. The action has been in the legal process for 2 years. The State has recently been informed that EPA now believes that the State interpretation was, in

fact, correct and that violations did not occur.

In the meantime, both the company and the State have incurred substantial legal costs. The EPA action did nothing to achieve compliance, but did create a costly and contentious process for a period of 2 years.

Question 6. Are the States able and willing to exercise reasonable, and vigorous enforcement and permitting discretion if the States are no longer subject to second-

guessing in every case?

If so, please explain why that is true today, even if it was not true in past years. Response. In Utah, we have always taken our responsibility to enforce environmental requirements seriously and have aggressively pursued compliance with environmental requirements of both State and Federal laws. It is important to recognize that the majority of compliance actions taken are State, not EPA actions. In Utah, we have the capability to take such actions and we take our stewardship to protect the environment seriously. It is our belief that much of the current problem, at least between our State and the EPA, is a result of two things: 1) a difference in the philosophy of enforcement and 21 differences between the State and EPA in what constitutes a measure ot success In enforcement and compliance issues. The position of the State has been that the goal is compliance with environmental requirements. There are many tools to help us gain that compliance and the enforcement tools represent an important part of the toolbox but not the only tool in the box. However, if compliance is the goal, then it may not be necessary to always utilize extensive penalties, orders, and court actions if the facility is cooperative and compliance can be achieved with lesser actions.

EPA has placed emphasis in three areas: 1) deterrent value of penalties, 2) national consistency and 3) the importance of a Federal presence in each State. All three of these areas have been troublesome to Utah. While we don't disagree that there is value in penalties, when the penalty becomes the major objective in settling a case at the expense of compliance, this is problematic. This has been our experience with EPA in Utah. National consistency may be important for EPA, however, it has not allowed for consideration of local circumstances and conditions that may be important in assuring an adequate solution to the problem. Federal presence has generally not been to the benefit of the State, because of the credibility issues that have resulted from the unwillingness of EPA to work with the State and local government in solving compliance and enforcement issues. Federal presence only tends to entrench the parties further and undermine the ability of the State to expeditiously resolve compliance issues. If measures of success are shifted to problem resolution and compliance rates as opposed to actions taken and penalties collected, the effectiveness of State actions becomes readily apparent. In Utah, we are achieving compliance. For example, recently, we shared with EPA the compliance rates that had been achieved in the Underground Storage Tank program as a result of imple-

menting a compliance assistance program to help tank owners understand and comply with tank requirements. Current compliance rates are substantially higher as a result of such assistance than they were when an aggressive enforcement program was underway. In this example, enforcement and penalties were not achieving the compliance goal. Assistance was the key and compliance was the result. This is an example of using the right tool for the right job. EPA had refused to use this tool. While we have used enforcement vigorously where it is needed, other approaches have also been effective in achieving compliance if it becomes the goal.

Question 6a. If so, please support your explanation why that is true with examples showing that the States have reasonably, responsibly and vigorously enforced the following: A. Federal environmental laws, and

B. State and local environmental laws, over which the EPA exercises no supervisory responsibility

Response. The following are some typical examples of State actions to enforce Fed-

eral environmental laws:

The State filed a natural resources damage claim against Kennecott Copper Corporation for contamination of soils and ground water throughout the western portion of the Salt Lake Valley. The State negotiated a settlement which has resulted in a program for cleanup processing a program for cleanup progr and a program for cleanup of contaminated sites and ground water. That cleanup program is ongoing. The State has taken action against other major industry violations in the mining, oil and power industries. In addition, we have focused efforts on minor sources which contribute significantly to the nonattainment status along Utah's Wasatch Front. We have aggressively administered the provisions of the Clean Air Act relating to prevention of significant deterioration to protect the unique canyon country of southern and southeastern Utah.

The following are examples of actions taken regarding State environmental laws over which EPA has no responsibility:

The State has developed an underground storage tank program that includes certification programs for tank installers and inspectors. The State vigorously enforces this certification program. There is also a State underground storage tank financial trust fund established for meeting the financial assurance requirements of the State and Federal law. The compliance requirements for a tank owner to get onto the fund and Federal law. The compliance requirements for a tank owner to get onto the fund and utilize it are much more stringent than the Federal requirements and are vigorously enforced by the State. The State has established a ground water protection program and groundwater permitting requirements that do not exist at the Federal level and these are vigorously enforced. Individual waste water disposal system rules are a joint responsibility of the State and local governments. These are critical given the growth being experienced in rural Utah. Such rules do not exist at the Federal level. These rules are aggressively enforced by the State and local government. Utah has designated nerve agents as hazardous waste and has enforced hazardous waste requirements against the U.S. Army at the Tooele Army Depot chemical agent destruction facility. Federal rules do not treat nerve agents as hazardous cal agent destruction facility. Federal rules do not treat nerve agents as hazardous waste. Utah has established requirements for Air Quality permits for minor sources of air pollution. This is above and beyond the requirements for permits under the Federal clean air act. These are just a few examples of where the State has established and enforced requirements above and beyond those established under Federal law. Each of these requirements is designed to assure appropriate environmental protection in the State and address concerns that are either unique to Utah or are of higher priority to the State than to the Federal Government.

Question 7. Are there alternative approaches to the current "second-guessing approach" that could still provide assurance to EPA that the State programs are protective of public health and the environment? For example, an approach that would allow EPA to review, on a 5-year, 7-year, or 10-year basis, the overall performance of the State, and renegotiate the State's delegate authority based on the level of

progress that the State had made toward a better environment during that period. Response. EPA could have a number of significant and helpful roles in enforcement. First, EPA could continue to provide resources to the State in the form of funding, training and technical assistance. Second, they do have an oversight responsibility under the Federal environmental statutes and it is appropriate that such a role exist. However, the problem is the "philosophy" enforcement. If EPA continues to take an "enforcement for enforcement sake" position when the State takes "compliance is the goal" approach, it doesn't matter whether EPA reviews State actions once a month, once a year, or once every 10 years, the conflict will continue to exist. Until EPA and States can agree to a common goal tor enforcement and agree to measures that appropriately reflect that goal, it will be difficult, at best, to find a productive resolution to this problem. Third, EPA can assist the State enforcement and compliance issues where the State has a jurisdictional issue or a resource problem that precludes the State from appropriately addressing the issue. When programs are delegated to a State, Federal law requires EPA to make a determination that the State has adequate resources, expertise and authority to conduct the delegated program. When such a determination has been made, EPA should shift its emphasis from over sight to collaboration.

shift its emphasis from over sight to collaboration.

By partnering with the State, EPA can bring its expertise, resources and authorities to the table to work with the State in a State driven process for addressing compliance and enforcement issues. This kind of partnership would allow focus of limited State and Federal resources on problem solving instead of continuing an unproductive dispute over who controls enforcement.

Question 8. Please indicate whether you agree or disagree with the following statement: "reasonable people, acting in good faith, can disagree over the best method for protecting the environment". For example, reasonable people can differ over the proper mix of enforcement and compliance assistance as generic tools, and the proper use of a particular choice of methods in a specific case. Accordingly, the best approach for gaging a State's environmental protection program is to evaluate the entirety of the State's efforts, both enforcement and compliance assistance, over a long period of time, and to determine whether the State has improved the condition of the environment, rather than focusing on a particular case or series of cases, the number of enforcement actions brought in a particular State (or any other similar so-called "bean counting" system) and the preference (if any) between enforcement and compliance assistance.

Response. This statement is basically true. If the goal is environmental protection, then measuring progress toward that protection is important and may be the best measure of effectiveness of any environmental program. However, there may be value in measuring compliance to be able to ascertain the effectiveness of programs. There is a significant difference between measuring compliance rates and measuring enforcement activities. In certain cases, compliance may be achieved effectively with methods other than enforcement. There is too much emphasis placed by EPA on the negative incentives of enforcement and not enough emphasis on positive incentives that can be used in achieving compliance. The net result is that many compliance approaches other than traditional enforcement are not being utilized effectively. Measures of success which evaluate all aspects of the compliance process along with trends in environmental protection would be much more appropriate.

RESPONSES OF BRENT C. BRADFORD TO ADDITIONAL QUESTIONS FROM SENATOR LAUTENBERG

Question 1. How long have EPA and State agencies been working to integrate environmental information management and to streamline environmental reporting? Response. The State/EPA Data Management Workgroup was formed in the fall of 1997 and held its first meeting in January, 1998. The first effort of the workgroup was to establish a shared Vision and a set of Operating Principles. These have become the foundation upon which States and EPA have built their work around environmental data issues (copy attached). After the establishment of the joint vision and operating principles, the three initial priorities of the work group were to look at the issues of what information is being collected for what purpose, how is it being housed and shared and how is it being used. The workgroup formed a series of action teams to address issues around technology transfer, facility identification, appropriate use of data, etc. As the work of these teams went forward it became evident that several issues were important to address. Standards became a central theme around which all data discussions had to revolve and a data standards council has now been formed. Data quality and data gaps have become significant issues for both industry and environmental groups and a forum for discussion of these issues has been formed as a part of the respectful use discussions. In 1999, EPA realized the importance of this effort and created their Of flee of Environmental Information to establish a structure within the agency to better handle data issues within the EPA and to focus work with States in this important area. There has been a recognition on the part of EPA and States that 94 percent of the environmental program data are collected and managed by States; but, that both States and EPA rely on those data for program management. This makes it critical that a way be found to share information, make it easily available to those who have a need for or interest in it and assure that the information is accurate and used appropriately. The most r

eliminate the need for reporting on the part of regulated entities and States. This has been an evolutionary process which has developed as States and EPA have come to better understand needs, relationships, technology, interests and importance of data issues. It continues to evolve.

Question 2. Which of the following attributes will the integrated reporting system envisioned by the EPA-State partnership be expected to have:

Will a facility be able to identify, through one point of contact, all the EPA reporting requirements that apply to it? Will a facility be able to identify as well, through the same point of contact, all the State, Tribal, and local environmental reporting

requirements that apply to it?

Response. The environmental information exchange network envisioned by the States and EPA is not about creating a single point of contact to determine applicable reporting requirements. It is about sharing information through direct access to it. It would be virtually impossible to have a single point of contact that could keep track of all Federal, State and local reporting requirements or needs. However, real-izing that States collect a majority of information and are the stewards of that information, a system can be created that will allow sharing of that information between States and EPA and thereby reduce reporting burdens on industry and States and allow EPA access to necessary information.

Question 3. Will a facility be able to submit, through the same point of contact, all information that is normally submitted directly to EPA programs? Will a facility be able to submit as well, through the same point of contact, all information required under applicable State, Tribal and local environmental reporting require-

Response. The data exchange network would recognize the importance of the State role as collector and steward of information and would provide for EPA to be able to access information directly within a State data base. EPA would then create the capability to share that information within the agency with those programs that need the information. This would eliminate duplicate reporting on the part of the regulated entity, eliminate a significant reporting burden on States and ensure better quality of information by eliminating multiple inputting of data into various systems. While the discussions have focused on the relationships between State and EPA, local and tribal needs could be addressed through this same mechanism.

Question 4. Will the reporting system direct the facility to information on applicable OSHA reporting requirements and environmental reporting requirements ad-

ministered by Federal agencies besides EPA?
Response. The data exchange network currently being discussed would not address reporting requirements from OSHA and other Federal agencies as the basis for the current vision is access to and sharing of information, not the reporting requirements themselves. The reporting requirements have been addressed in two other forums: the work of ECOS and EPA around Core Performance Measures and the burden reduction efforts of the State EPA Burden Reduction Action team. The data system discussion is not the place that discussions about appropriate reporting requirements have been held.

Question 5. Will the reporting system use data standards for units of measure, terms for chemicals, pollutants, waste, and biological material, and methods of identifying reporting facilities, developed in consultation with industry, environmental groups and other stakeholders?

Response. Data standards are a fundamental component of the information exchange network. States and EPA have created a Data Standards Council to discuss these and other standards issues. Tribal interests are also included on the Council. A standards development process is envisioned which would allow participation of interested stakeholders.

Question 6. Will the reporting system use an "open data format" that allows facilities to download information from their own internal data management systems di-

rectly to the integrated reporting system?

Response. Again, it is important to note that we are not discussing a single national reporting system; but, rather an information exchange network which allows sharing of information once it is reported and which recognizes most environmental information as collected. Electronic reporting is currently the subject of discussion in many States. In Utah, for example, we have developed electronic reporting capability that allows regulated entities to report air emissions inventory and water quality monitoring data electronically. The information can then be accessed and shared by various programs within the Department of Environmental Quality. In the data exchange network envisioned, these data would be accessible to EPA but would continue to reside in our State data warehouse. The State/EPA data management workgroup is working with the National Governor's Association and the EPA One-Stop program to evaluate and encourage electronic reporting, but; given the nature of environmental data collection today, such capability will have to be developed at the individual State level in order for electronic reporting to be effective.

Question 7. To ease reporting by businesses with facilities in more than one jurisdiction, will EPA and State, tribal and local agencies all use he same data format and standards?

Response. The previously mentioned Data Standards Council will address the issue of standards. The question of format becomes important at the point of collection, but given that once the information is collected, it will be shared by direct access to it, it would relieve the reporter of the burden of having to concern themselves further with data format.

Question 8. Will a facility be able to receive information on pollution prevention technologies and practices through the reporting system.

Response. This issue has not been specifically discussed to date. The focus of the

data exchange network discussions have been data flows and information itself. Pollution prevention information could be made accessible through such an exchange network to the extent that such information is being collected.

Question 9. By what date may we expect the envisioned integrated reporting system, or aspects of the system, to be in place?

Response. Significant progress has been made, a facility identification standard

has been developed and other standards are under discussion, the vision for the national environmental data exchange network has been developed and discussions between States and EPA are on-going. One key factor to the success of this effort is the continuation of Federal funding. In the President's budget there are \$30 million identified for environmental information management (\$16 million for State and \$14 million for EPA). This funding is critical if this effort is to go forward. States have committed significant resources of their own to develop the capability to manage environmental information, the EPA one-stop program has been key for many smaller States to enhance their capabilities. The realization of this national data exchange vision can only happen if the resources necessary to create the structure are available. Without such funding, the States and EPA would have to divert existing resources to this effort. For many States, this may be impossible.

Question 10. Are the air, water and waste programs of EPA and the State agencies fully participating in the development of the integrated reporting system?

Response. EPA has created the Of flee of Environmental Information and charged

it with the responsibility of overseeing and coordinating this effort within EPA. OEI is having discussions with EPA's Quality Information Council regarding this issue. The QIC in an internal EPA group made up of executive representation from the various programs which is advisory to the Office of Environmental Information. ECOS is coordinating this effort through the Information Management Workgroup, a part of the ECOS Strategic Planning committee and through the committee structure extelligible within ECOS. ture established within ECOS. In addition to these efforts, the joint State/EPA Data Management Workgroup has representatives from EPA programs who are actively participating in these discussions.

RESPONSE OF BRENT C. BRADFORD TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. You note in your testimony that the States are making significant accomplishments in environmental data management, but the cost is high and continued Federal investment is essential. On average, how much of their own resources do the States spend on environmental information management?

Response. States spend, on average, about 1.67 percent (as of Fiscal Year 1996) of the total State budget on environment and natural resources. This has increased steadily since 1986. Unfortunately, we do not yet have any estimates on average State spending on environmental information management.

In Utah, in the past 3 years, we have expended approximately \$3.5 million of State Funds to enhance our data management capabilities and make information accessible to EPA and the public. In addition, we have utilized a \$500,000 EPA onestop grant to develop a specific project related to public accessibility to permitting and compliance information, electronic reporting or inventory and water quality monitoring data. States such as ours rely heavily on Federal funding to accomplish our data management goals.

Some States have spent significant State funds on information management. For example, the Commonwealth of Virginia has spent about \$12 million over a 2-year period for its Comprehensive Environmental Data Systems (CEDS). Other States

are making considerable investments, as well. On the other hand, many States have not yet made or had the capability to make substantial investments. One thing seems certain, however. In order to manage better the data that already exists, and to be able to maximize its utility to managers, government partners, industry and the public, substantial investments will be required across the board. While States are stepping up to that need, Federal assistance would be valuable considering States generate well over 90 percent of the data that EPA relies on to tell the nation's environmental story.

Question 2. The lack of adequate data has been cited as an obstacle to current environmental efforts. Do you feel that we as a nation are investing sufficient resources in data collection? How much do the States spend on monitoring programs?

Response. In many respects, we are data rich but information poor. We collect lots of data, but we cannot always make sense of it without additional resources for analysis.

Much of the question related to adequate data must be looked at in terms of what information may be needed to determine progress in environmental protection. This then relates to goals established for that protection and the measures of success associated with those goals. In some cases additional information may be necessary, in others, it may be more a case of how to appropriately use the information we have.

As we focus environmental management more on environmental results, we will have to begin to measure environmental conditions in a way and to an extent that is unprecedented. This may require additional or different information to be gathered. It certainly will require substantial work on the part of both EPA and the States to understand and properly utilize the information we collect. An investment in development of proper measures and the gathering and interpretation of data needed for those measures will be essential if the environment is to be protected.

I do not have figures on State spending on monitoring.

ENROLLED COPY H.C.R. 3

RESOLUTION ON THE ADMINISTRATION OF ENVIRONMENTAL LAWS

1999 GENERAL SESSION

STATE OF UTAH

A CONCURRENT RESOLUTION OF THE LEGISLATURE AND THE GOVERNOR REQUESTING THE ENVIRONMENTAL PROTECTION AGENCY TO REFRÂIN FROM OVERFILING ON STATE-NEGOTIATED COMPLIANCE ACTIONS AND TO DEFER TO STATE AND LOCAL PRIORITIES IN TAKING COMPLIANCE ACTION; AND REQUESTING CONGRESS TO INVESTIGATE ENFORCEMENT ACTIVITIES OF THE ENVIRONMENTAL PROTECTION AGENCY AND REQUIRE THE AGENCY TO DEFER TO STATE ENFORCEMENT AND COMPLIANCE ACTIONS WHERE ACTIONS ACHIEVE COMPLIANCE AND ARE PROTECTIVE OF HEALTH AND THE ENVIRONMENT

Be it resolved by the Legislature of the State of Utah, the Governor concurring

WHEREAS, protection of public health and the environment are among the highest priorities of State governments;
WHEREAS, Congress has provided by statute for the delegation of certain Federal

program responsibilities to the States; WHEREAS, to obtain delegation of Federal environmental programs, a State must demonstrate that it has adopted laws, regulations, and policies as stringent as Federal laws, regulations, and policies;

WHEREAS, over the past 25 years, the States have developed and demonstrated expertise in operation of Federal environmental programs enabling States to obtain and maintain the delegations;

WHEREAS, the States of Utah, Colorado, Montana, Wyoming, North Dakota, and South Dakota constitute an area designated by the Environmental Protection Agen-

cy (EPA) as Region VIII; WHEREAS, the States in Region VIII make compliance with environmental laws,

rules, and permits the highest priority;
WHEREAS, the State of Utah has full delegation in all Federal environmental programs;

WHEREAS, the EPA and the States have bilaterally developed over the past 25 years policy agreements which reflect roles and which recognize that the primary responsibility for enforcement and compliance resides with the States, with the EPA taking enforcement action principally when the State requests assistance or is un-

willing or unable to take timely and appropriate enforcement action;

WHEREAS, inconsistent with these policy agreements, the EPA has conducted direct Federal inspections within programs delegated to States, has taken direct enforcement actions, has levied fines and penalties against regulated entities in cases where the State previously took appropriate action consistent with the agreements to bring the entities into compliance, and has failed to notify the States in advance

WHEREAS, the EPA has begun to use its enforcement authority in cases where the State had worked with the regulated entity to achieve compliance, and the overfiling by the EPA accomplished no further protection of the public health or environ-

ment but only imposed an additional penalty on the regulated entity;

WHEREAS, the EPA's current enforcement practices and policies and the resultant detailed oversight and overfilling of State actions substantially weaken the State's ability to take compliance actions and resolve environmental issues;

WHEREAS, the EPA's enforcement practices and policies have had an adverse im-

pact on working relationships between the EPA and States;
WHEREAS, the EPA's reliance on the threat of enforcement action to force compliance may not result in environmental protection, but rather may result in delay and litigation, cripple incentives for technological innovation, and provoke animosity between government, industry, and the public; and
WHEREAS, the Western Governor's Association has adopted "Principles for Envi-

ronmental Protection in the West," which encourages collaboration not polarization, advocates the replacement of command and control with economic incentives and rewarding results, and encourages the weighing of costs against benefits in environmental decisions:

NOW, THEREFORE, BE IT RESOLVED that the Legislature of the State of Utah, the Governor concurring therein, requests the EPA to refrain from overfiling or threatening to overfile on State-negotiated compliance actions if the actions achieve compliance with applicable State and Federal law and are protective of health and the environment.

BE IT FURTHER RESOLVED that the Legislature and the Governor request that the EPA, in taking enforcement and compliance actions, recognize and defer to individual State and local priorities that are important for the protection of the environ-

BE IT FURTHER RESOLVED that the EPA should work with and assist States in evaluating the overall effectiveness of State compliance programs and not focus

on the detail of individual actions.

BE IT FURTHER RESOLVED that the Legislature and the Governor request the Congress of the United States to investigate EPA enforcement activities and require the EPA to defer to State enforcement and compliance actions in delegated States where the actions achieve compliance and are protective of health and the environ-

BE IT FURTHER RESOLVED that copies of this resolution be sent to the President of the United States, the President of the U.S. Senate, the Speaker of the U.S. House of Representatives, each member of the Utah congressional delegation, the Administrator of the U.S. Environmental Protection Agency, the Assistant Administrator of the U.S. EPA Office of Enforcement and Compliance, the Regional Administrator of the U.S. EPA Region VIII, the National Governor's Association, the National Council of State Legislators, the Council of State Governments, the Western Governor's Association, and the Environmental Council of the States.

STATEMENT OF LYNN SCARLETT, EXECUTIVE DIRECTOR, REASON PUBLIC POLICY INSTITUTE

Senator Smith and members of the committee, thank you for inviting me here today. My name is Lynn Scarlett. I am Executive Director of Reason Public Policy Institute, a nonprofit, nonpartisan policy research organization located in Los Angeles, California.

Earth Day Legacy

April 2000 marked the 30th anniversary of Earth Day. After three decades of environmental policy initiated since that first Earth Day, environmental policy is in a state of transition. The environmental model that emerged after the first Earth

Day had four characteristics. First, the model engendered relatively prescriptive regulations that both set goals and required particular technologies and methods to meet those goals. Second, the model emphasized process over performance, with permits often serving as a proxy measure of performance. Third, the old model segregated environmental problems into discrete categories air, water, and waste, for example and addressed each separately. Finally, the model tended to focus on punishment enforcement actions as the central strategy for achieving environmental progress. "Sticks" rather than "carrots" predominated.

This regulatory strategy produced some successes. Open dumps were virtually eliminated. Phosphorous levels, a major indicator of water pollution, had fallen 40 percent or more in the Great Lakes by the 1990's contrasted with pollution levels in the 1970's. In Los Angeles, stage one smog alerts declined from more than 120.

in the 1970's. In Los Angeles, stage one smog alerts declined from more than 120 in 1977 to 13 in 1995.

But all is not well. The punitive model often engendered high conflict and litigation. The prescriptive emphasis tended to stifle innovations in pollution prevention and environmental restoration. Segregating problems into distinct categories sometimes resulted in unintended consequences shifting of pollutants from one medium to another. And, finally, costs to achieve results were higher than might have been possible in a context that inspired innovation and wider implementation options.

Moreover, circumstances are changing, giving rise to increasing tensions between the regulatory model of the 20th century and the complex and dynamic 21st century

context.

First, new kinds of problems are moving center stage. The old model focused primarily on "point" sources of pollution. By 2000, many remaining challenges took the form of "nonpoint" pollution from agricultural waste, stormwater runoff, and so on.

Second, a new breed of industry had emerged that reflected the environmental values of the broader American culture. By the 1990's, industries had begun to move toward "knowledge-based" production and products and "closed loop" production, accelerating the process of dematerialization using fewer resources for each good or service produced. "Industrial ecology" the deliberate incorporation of environmental values into product-design and process decisions began to flourish. In this context, a survey of large American corporations showed that 77 percent cited pollution prevention as an important business strategy

Architects of environmental policy thus face a new "problem set." There is a growing mismatch between permit-focused compliance and the reality of complex, often dispersed problems. There are growing tensions between prescriptive regulations and the broadening press for fast-paced innovation within firms and on farms and ranches. Finally, the punitive model has limited scope for inspiring environmental

excellence a nation of self-motivated environmental stewards.

Put another way, four recurring challenges confront environmental stewards in both the public and private sectors

How can policies better ensure environmental innovations?

How can policies better focus on results and take into account simultaneously many interrelated goals and complexity of the physical world?

How can policies better foster private incentives for stewardship? How might policies better take into account specific, or local, knowledge the knowledge of time, place, and circumstance?

New Environmentalism

In this changing context with its combination of new and old challenges, a new environmentalism is emerging. The States and their environmental protection agencies, working with the private sector, are at the forefront of this "discovery process." Programs and policies emerging as part of this new environmentalism have four features. These features include: (1) greater flexibility in how firms, farmers, and local communities might achieve environmental goals; (2) a focus on performance rather than on process; (3) a move toward incentives rather than punishment as the strategy of choice; and, (4) a move toward place-based decisions where the "devilish details" of local circumstance become part of the decision process. tails" of local circumstance become part of the decision process.

Flexibility. By the 1990's, States were overseeing, implementing, and enforcing the majority of all environmental programs. That day-to-day, hands-on experience made State regulators acutely aware of some of the challenges, missed opportunities, and unintended consequences of prescriptive and process-focused environmental regulations. Acting upon this recognition, State regulators have launched an array of programs intended to inject greater flexibility into the way the regulated

community may achieve desired environmental goals.

These experiments in flexibility do not imply "roll back" quite the opposite. Most of these endeavors involve extending the performance envelope upward and outward to cover more environmental problems and with higher ultimate goals. Some of these endeavors have been initiated independently by the States. Others have advanced in tandem with Federal programs such as Project XL and the National Environmental Performance Partnership system.

These programs include the development of "environmental performance compacts" with firms and farmers; facility-wide permitting programs that move away from source-by-source permit requirements; and industry-wide permits. Some are pilot programs; some have become more broad-based initiatives. States with both Democratic and Republican legislatures and Governors are moving in this direction. Among the trend setters in developing these programs are Wisconsin, Oregon, Illi-

Allong the trend setters in developing these programs are wisconsin, Oregon, Illinois, Minnesota, Massachusetts, New Jersey, and Florida.

Wisconsin's Green Tier program establishes a two-tier permit option. The first, the Control Tier, applies traditional source-by-source permits. The second, the Green Tier, allows firms that demonstrate high levels of compliance an opportunity to develop a "performance compact" in effect, a single, facility-wide permit. This permit establishes a set of performance criteria, potentially on a multi-media basis, spelled out in a "contract" or "compact" between the firm and the public. The compact is onforceable in the courts. enforceable in the courts.

Under its Green Permits program, Oregon's Department of Environmental Quality (DEQ) offers two types of permits available to facilities that have achieved superior environmental performance a Green Environmental Management System (GEMS) Permit and a "Custom Waiver Permit." The GEMS permit requires that firms use a formal environmental management system through which firms establish and maintain environmental goals. The custom waiver allows limited waivers of normal permit requirements if a waiver is needed for the facility to achieve gives

of normal permit requirements if a waiver is needed for the facility to achieve superior environmental results (for example, through pollution prevention).

Florida is developing a Phosphate Industry permit that establishes a single permit for an entire mining operation over its life. The permit agreement sets performance standards and identifies environmental data the industry must report and make available to the public. It will allow reductions in paperwork and process burdens explite head performance and increased while accounts hilling.

dens, results-based performance, and increased public accountability.

Massachusetts introduced an Environmental Results Program, which establishes performance goals and compliance assistance for selected industries on an industry-wide basis. Under the traditional permitting program, some 10,000 facilities in the target industries were regulated using over 16,000 permits. The Department of Environmental Protection spent significant resources issuing permits rather than focusing on achievement of environmental results. For example, the department was issuing air permits to some 4,400 facilities, of which two-thirds were small- and mediant of the contraction of the co dium-sized companies that accounted for just 5 percent of the State's total air emissions. Under the new program, the State created industry-wide standards. Participating firms agreed to comply with the standards; the State focused on auditing and enforcement. The program resulted in a 43 percent reduction in fugitive emissions from participating dry cleaners and a 99 percent reduction in silver discharges by photoprocessors

In the mid-1990's, New Jersey experimented with a facility-wide permitting program. Through the program, participating facilities must keep emissions below specgram. I hrough the program, participating facilities must keep emissions below specified performance caps but may achieve those goals in whatever ways they deem most effective and efficient. For one firm, the old, source-by-source permitting process had generated ten binders of paperwork. The new system reduced paperwork to a 1.5-inch thick packet. A single permit replaced 80 separate permits and could be processed in 90 days rather than 18 months. One firm estimated that it reduced 8.5 million pounds of emissions per year because the permit allowed them to modernize their facility (without getting new permits for each individual process change). Through the modernization, the firm eliminated 107 of 350 pieces of equip-

Performance. While most State-initiated new environmental programs emphasize results (rather than process), several programs have particularly focused on developing performance indicators. Among these efforts are programs in both Florida and

Florida, for example, has developed a three-pronged set of performance measures that move away from simple "bean-counting" of enforcement actions as the proxy for performance. The first tier of measures sets forth direct indicators for environmental and public-health outcomes. These include indicators of air quality, surface and groundwater quality, aquatic and marine-resource protection, public health and safety, and public recreational opportunities. The second tier evaluates behavioral and cultural measures that go beyond mere compliance statistics. While the State measures regulatory compliance, it also looks at voluntary adoption of environmental technologies, pollution prevention achievements, energy consumption, per capita freshwater consumption, and so on. Tier three includes traditional enforce-

ment statistics, but they attempt to measure internal agency efficiency and effec-tors are ranked as "good," "watch," or "focus" areas, allowing State regulators to set priorities by focusing on those areas in which resources are most needed to solve

Incentives. The ultimate goal of environmental policy is to foster a nation of self-motivated environmental stewards. As States grapple with how to inspire firms and farmers to move "beyond compliance", many have introduced environmental-incentive and compliance-assistance programs. Through its Texas Clean Industries 2000 program, for example, Texas has attracted over 140 participating firms into pollutions. program, for example, Texas has attracted over 140 participating firms into pollution-prevention activities. The firms commit to achieving a 50 percent reduction in toxic chemicals over a 2-year period. After one year, the program was credited with fostering reductions in hazardous waste by 43,000 tons; reductions in energy consumption by 11.3 million kilowatt hours; and reductions in 317 million gallons of water consumption. Also in Texas, the State established a landowner incentive program to encourage farmers and ranchers to restore and maintain habitats to attract threatened species given as the leases precise shields. threatened species such as the lesser prairie chicken.

threatened species such as the lesser prairie chicken.

Mississippi launched a voluntary stream protection program in which the Department of Wildlife, Fisheries, and Parks worked jointly with farmers, riparian landowners, and individual citizens to reduce water pollution, primarily through pollution-prevention efforts. Pennsylvania, through its Pollution Prevention Site Assessment grants, helps small-business owners identify pollution-prevention and energy-conservation strategies. Wyoming has an Outreach and Environmental Assistance program also designed to help participants meet environmental goals. Illinois, through its Clean Break Amnesty program, offers compliance assistance to small businesses. In exchange for their participation and completion of pollution-reduction efforts, the small businesses are exempted from various fees and fines.

Among the more notable incentive programs are those designed to clean up

Among the more notable incentive programs are those designed to clean up "brownfield" (abandoned hazardous waste) sites. A number of States, including Michigan, Pennsylvania, Illinois, New York, and many others now have voluntary remediation programs. The programs typically have several central features. First, they often tailor clean-up standards to the proposed use of the property, so stand-

they often tailor clean-up standards to the proposed use of the property, so standards are based on expected exposures to hazards rather than on a single, bright-line clean up standard. Second, they often provide some liability protection to developers that invest in site clean up to the prescribed levels. Liability protection does not extend to future pollution but applies to pre-existing conditions only.

Place-based Decision-making. As experience with environmental problems builds, one observation recurs many environmental challenges involve location-specific details. A landfill in Florida, with high water tables, faces different challenges compared to a landfill in a desert. Fast-moving streams involve problems that differ from slow-moving dalta streams. Expects in low, wet latitudes require different manpareu to a tanditi in a desert. Fast-moving streams involve problems that differ from slow-moving delta streams. Forests in low, wet latitudes require different management practices than forests in high, dry mountains. The recognition of location-specific challenges of many environmental problems has led many States to experiment with place-based decisionmaking. Local settings also have the potential to bring together diverse people with varying interests and needs in relationship to local resources.

To some extent, voluntary remediation programs represent a move to place-based decisionmaking, because local economic, environmental, and social interests are woven together in final clean up decisions. But one of the most fertile arenas for place-based decisions has centered on watershed management challenges. Numerous States and localities have attempted to tailor decisions about watershed management to local circumstances and priorities by devolving decisions to those most af-

fected by such decisions.

In Minnesota, for example, the Department of Natural Resources, City of St. Paul, University of Minnesota, and the Ramsey-Washington Metro Watershed District joined forces to develop a watershed management program for the Phalen Chain of Lakes in the Mississippi River basin. Since the project's inception, another seven city governments and two counties have joined the effort. The project moves away from the single-problem focus of the more traditional regulatory process, addressing simultaneously water quality, fisheries, wetland protection, vegetation and wildlife management, and river corridor protection and restoration.

Minnesota and Idaho have both pioneered effluent-trading schemes that improve water quality by involving "point-source" and "nonpoint" (for example, chemical run-off from farming practices) sources. The Minnesota Pollution Control Agency (MPCA) has capped new and existing discharges into the Minnesota River. Because the cap made it difficult for firms to modernize or upgrade, the MPCA agreed to work with the Coalition for a Clean Minnesota River and one brewing company to institute an effluent-trading program. Under the program, the brewing company was permitted to discharge effluent from its new wastewater treatment plant in its new wastewater treatment plant in helped reduce other discharge sources along the river. The company agreed to offset its emissions by investing in programs that helped farmers reduce their chemical

runoff and other pollution sources.

On the Upper Clark Fork River basin in Montana, initial disputes between environmental activists and farmers over instream flows yielded to consensus for a leasing arrangement after a local, collaborative decision process was initiated. The lease agreement allowed for temporary transfer of pre-1973 water rights rather than the outright sale or relinquishment of those rights. The lease allayed fears of ranchers that they would lose prior claims to those water rights, while still allowing them to be remunerated for conserving water and leasing the "saved" water for instream flow maintenance. Increased instream flows, in turn, helped to maintain wildlife habitats.

Challenges and Opportunities

State environmental innovations toward flexibility, performance focus, incentives, and place-based decisionmaking invite substantial new opportunities to improve enwironmental performance. In general, these programs allow for a more holistic approach to environmental problem-solving that recognizes the interconnectedness of many of these problems. They also nurture private-sector innovation and private stewardship, creating a context in which firms and communities are better able to set priorities, target resources to critical problems, and craft more cost-effective ap-

set priorities, target resources to critical problems, and problems, are problems.

But these efforts face both political and implementation challenges, including constraints imposed by the existing Federal regulatory context. For example, an April 2000 survey by the Environmental Council of the States, an association of State environmental regulators, ranked problems with EPA's existing policies, procedures, and are the most significant harrier to their efforts at innovation.

and rules as the most significant barrier to their efforts at innovation.

In general, challenges cluster into three categories. First are challenges posed by fitting new regulatory structures within the old regulatory context. These include uncertainties about allocation of enforcement responsibilities between Federal and State agencies. Lack of clarity in this regard has given rise to concerns about poten-

tial overfiling in enforcement cases by Federal regulators.

Another central challenge tied to regulatory structures is how to ensure that permits or agreements initiated under the new programs, which often deliberately avoid issuance of traditional source-by-source permits, will supplant the source-bysource permits without: (a) triggering an enforcement action, or (b) requiring a negotiation process with Federal regulators on each and every source-by-source permit that is intended to be avoided through the flexible-permitting, or multi-media permitting process. Some streamlined Federal mechanism to allow the new permits to supersede the old may be warranted. Currently, through its Project XL and other programs, U.S. EPA has attempted to create conditions for this blending of the old and the new to occur. However, these processes remain unevenly implemented; procedures and qualifying conditions remain unpredictable.

States also face difficulties in meshing new data-reporting mechanisms that emerge from more holistic and performance-focused programs with the data-report-

ing requirements of the old regulatory model. The second set of challenges are technical.

For example, as States move toward effluent trading, for example, establishing equivalencies among pollutants subject to trades is not straightforward. Allocation of initial baselines or emission credits as part of tradable credit schemes is also difficult and often contentious. At least one proposed State air-pollution trading program failed because of difficulties over these allocation questions.

Development of appropriate performance indicators by States also poses technical and conceptual challenges. Environmental problems are complex and numerous. Re-

ducing indicators to a workable set and determining appropriate measures for dif-ferent problems involves data aggregation and simplification. Regulators face a choice between what might be called "richness" detailed, highly tailored indicators and "reach" indicators that are sufficiently generic so that they can be reduced to a manageable and broad set.

The third set of challenges relate to stakeholder interests and concerns.

In developing facility-wide compacts with firms or in establishing place-based watershed management programs, a key question is which "stakeholders" should be at the decision table. These issues likely should not be settled at the Federal level but rather on an individual basis by States as they determine what decisionmaking forums work well in different circumstances.

Some stakeholders have also raised questions about "fairness" as well as about the certainty of outcomes that might emerge in programs with multi-media permits, compacts, or voluntary incentives. Air-permit trading, for example, may shift pollution to certain "hotspots," thereby unevenly benefiting different populations.

George Meyer, Secretary of the Wisconsin Department of Natural Resources, eloquently summarized the new environmental challenge to lawmakers:

It is time for public policymakers to unleash America's potential to solve its remaining and emerging environmental problems. . . . With Congressional direction, and adequate infrastructure, the States can create a learning system, with useful knowledge applied outward to each other and upward to Washington, their co-imple-

mentation partner.

New environmentalism involves a discovery process a search not only for new technologies but also for new institutional forms that inspire environmental stewardship and yield continuing environmental progress. There is no reason to think that, in our first attempts at constructing rules and decision processes to address environmental issues, we achieved institutional perfection. Current State innovations are pointing to new institutional forms that have potential to reduce conflict, enhance environmental performance, and more efficiently deliver environmental benefits.

RESPONSES BY LYNN SCARLETT TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. What legislative changes does the Institute think are needed to get to a new environmentalism approach?

Question 2. What changes does the Institute propose to the Federal role in the new environmentalism?

Response. The new environmentalism, as embodied in State initiatives toward flexibility, incentives, and a performance focus, shows substantial promise to deliver environmental performance more holistically and efficiently. While some innovations are occurring, without changes in Federal law these innovations will likely remain marginal "special" programs. Fostering these State initiatives does not require an overhaul of the major environmental statutes. It does, however, require what Debra Knopmann of the Progressive Policy Institute has referred to as "transitional legal space.

Crafting that transitional space requires a delicate balance between, on the one hand, asserting congressional commitment and authorization for flexibility and, on the other hand, resisting prescription and micro-management of the innovation process. Moreover, expression of congressional commitment to innovation may be inadequate. The new environmentalism places a premium on performance measure-ment, which may require additional resources allocated toward monitoring and helping States invest in developing indicators. Finally, a Federal commitment to a new environmentalism will require a more systematic way of tying priorities and resource allocation to results as measured through various indicators—a challenge States like Florida, Oregon, and New Hampshire have begun to address independently.

Options

Congress has a number of options that could facilitate the move toward a new environmentalism more focused on performance, incentives, and innovation made possible through greater flexibility for States and firms. Congress could institute changes through:

- the reauthorization of existing statutes, with provisions for greater flexibility in reaching environmental goals (it has been over decade since the last CAA debate, 13 years since the CWA received a full review, and 14 years since Superfund was overhauled).
- development of an EPA authorizing statute that would clarify Federal, State, and regional agency roles and specifically indicate congressional intent to foster State environmental innovations, perhaps by endorsing and clarifying the NEPPS mechanism to provide State flexibility. One mechanism could be through a tiered approach in which States would hold all permitting and enforcement authority for fully delegated programs, with Federal monitoring of real-world results. If results fell short of required levels as agreed to in the delegation (or NEPPS-style) agreement, EPA action would be triggered. The nature of that action would need to be clarified. Those programs that were not delegated would be implemented by U.S. EPA or its regions. Through periodic reauthorization of the EPA authorizing statute,

additional changes could be made to individual statutes to remove specific barriers

to integrated, flexible approaches to environmental management.

• development of an environmental indicators statute that allocated resources to States to support the development by States of their performance indicators. Such a statute could also require development by EPA of threshold measurement criteria to be used by the States to allow some consistency and comparability among measures (particularly for water and air quality). The statute might link to the GPRA process so that performance indicators are linked to resource allocation decisions and agency accountability (e.g., modeled after Australia or the U.S. Agricultural Extension Service, which has used analysis of performance measures to enhance out-

Whatever congressional mechanism(s) are selected, Congress should resist prescribing a particular "flexibility and incentive" environmental management regime. As experience with Project XL, the various State alternative permitting programs, and the control of t and other environmental management innovations have demonstrated, different permitting and decision models may be applicable in different circumstances. More-over, decisions regarding which firms might participate, what benefits they receive for participation in incentive-based or flexible programs, and so on, should be left to States to allow for maximum experimentation with different environmental management models.

Question 3. Is it necessary for the EPA, in order to ensure that the States protect the environment, to second-guess the States, or to be able to second-guess the States, regarding every exercise of a State's enforcement discretion, every permit-

ting decision made by the States, and the like?

Response. Clearer lines of authority and responsibility between the States and U.S. EPA are necessary to ensure less duplication of effort and greater certainty by States and the regulated community regarding the legal status of State permits or other performance agreements. The States now account for over 80 percent of enforcement actions. They have demonstrated an ability and commitment to effectively enforce environmental statutes. One possible arrangement of roles and responsibilities would be for U.S. EPA to maintain permitting and enforcement programs for nondelegated programs and for States that choose not to have authority delegated to them. For those States that have signed NEPPS agreements or have otherwise been delegated implementation authority for specific programs, the States should have sole permitting and enforcement responsibility. EPA's role, in these instances, should be to monitor the State's performance, ensuring that it is meeting its obligations. If it is not doing so, EPA can take action to challenge the delegation agreement. In other words, the "backstop" role of EPA should not be to overfile on enforcement matters, nor to require its own second set of permits. Rather, its backstop role should be to monitor State performance, with accountability assured through review of delegation or other partnership agreements with the States

Question 4. Are the States able and willing to exercise reasonable, responsible, and vigorous enforcement and permitting discretion if the States are no longer subject to second-guessing in every case? If so, why is this true today even if it was not true in past years? Support your explanation with examples showing that States have reasonably, responsibly, and vigorously enforced Federal environmental laws, State and local environmental laws over which EPA exercises no supervisory responsibility

Response. States have become the center of environmental activity.

- By 2000 70 percent of major programs that could be delegated had been delegated
- States undertake on average between 75-80 percent of all enforcement actions and 97 percent all enforcement inspections.

State spending on environmental and natural resource protection has grown from \$5.6 billion in 1986 to \$12.5 billion in 1999

- In 1986, the Federal Government provided 58 percent of spending dollars for States; by 1996, the Federal Government provided 20 percent (\$2.5 billion) of State environmental spending dollars. From 1986 to 1996, State spending increased 140 percent.
- States conduct many other nondelegated programs on their own, including in-novations toward more flexible, results-focused programs. States passed over 700 environmental laws in 1997 alone, at least half deal with nondelegated environmental programs (pollution prevention, waste management, etc.)

 • 80 percent of States have at least one clean air standard stricter than Federal
- minimums.

These data suggest that States have invested increasingly significant resources in environmental protection. The charge that States are likely to "race to the bottom"

appears unfounded given that 80 percent of States have at least one air quality standard that is stricter than Federal standards and have initiated programs for many environmental problems not addressed by Federal law, and many States have environmental protection programs that address issues unregulated by the Federal Government.

The vigorous commitment to environmental quality by States is particularly evident in the lead role they have taken in solid waste management and resource recovery. While the Federal Government does regulate landfill safety, it does not regulate resource recovery. Nonetheless, 48 of the 50 States have independently developed. oped recycling and waste diversion mandates or goals, with no Federal oversight or requirement that the States implement such programs. These programs have been

requirement that the States implement such programs. These programs have been responsible for increasing the Up. recycling rate from below I O percent of municipal waste in the early 1980's to nearly 30 percent by 2000.

Also notable are State efforts to clean up hazardous waste sites. For example, through their brownfields clean-up programs, Pennsylvania and Illinois have each cleaned up several hundred sites within a few years of having implemented their programs. By contrast, a recent GAO report notes that after nearly 20 years and \$14 billion sport, clean up at Edderal Superfund (bazardous weet), sites had not programs. By contrast, a recent GAO report notes that after nearly 20 years and \$14 billion spent, clean up at Federal Superfund (hazardous waste) sites had not been completed at over 40 percent of National Priority List sites. Numerous other States have now emulated the models set forth by Illinois and Pennsylvania.

A number of States have pollution-prevention programs not tied to any Federal program. Through its pollution-prevention program, California worked with the petroleum industry to achieve 66,000 tons of hazardous waste reductions in one year—

a 30 percent reduction. Examples of State programs implemented without Federal involvement are too numerous to catalogue here. For additional examples, please refer to Race to the Top:
State Environmental Innovations, by Alexander Volokh, Lynn Scarlett, and Scott

Bush (Los Angeles. RPPI, 1998).

Question 5. Would States be able to protect the public health and the environment if the EPA, instead of having the ability to second-guess every decision made by a State, were limited to reviewing on a 5-year, 7-year, or 10-year, basis, the overall performance of the State, with the EPA having the ability to withdraw a State's delegated authority if the State could not prove that it had made progress toward a better environment during that period?

Response. Most States have both the inclination and the skills to manage environmental programs to maintain public health and eco-system protection (and restoration). Some States, for example, California, actually have greater capabilities than the U.S. EPA in areas such as air quality protection. Only a handful of States have chosen not to invest significant resources in environmental protection, some have chosen to defer to EPA to implement and enforce programs.

A tiered approach to environmental protection would ensure that those States with the commitment and capabilities to manage environmental programs are able to do so, while those without this commitment or resources could defer to the Federal Government. Specifically, an EPA authorizing statute could clarify Federal, State, and regional agency roles and specifically indicate congressional intent to foster State environmental innovations, perhaps by endorsing and clarifying the NEPPS mechanism to provide State flexibility. One mechanism could be through a tiered approach in which States would hold all permitting and enforcement authority. ity for fully delegated programs, with Federal monitoring of real-world results. If results fell short of required levels as agreed to in the delegation (or NEPPS-style) agreement, EPA action would be triggered. The nature of that action would need to be clarif ed. Those programs that were not delegated would be implemented by U.S. EPA or its regions. Initially, the periodic review of State delegated programs should probably occur at intervals of no more than 5 years. Depending upon State performance, that interval could lengthen over time. Another option would be to have an initial "probation" period after program delegation, with EPA review occurring after a 2-year interval. If the State is successfully implementing and enforcing the program, subsequent reviews would extend to intervals office years, with the focus on review of actual outcomes and performance indicators rather than on "bean-counting" of enforcement actions and review of permitting activity.

Any congressional effort to clarify State and Federal roles and to support State innovations should also be accompanied by development of an environmental indicators initiative that would allocate resources to States to support the development by States of their performance indicators. Such an initiative could also require development by EPA of threshold measurement criteria to be used by the States to allow some consistency and comparability among measures (particularly for water and air quality). The statute might link to the GPRA process so that performance indicators are linked to resource allocation decisions and agency accountability (e.g. modeled after Australia or the U.S. Agricultural Extension Service, which has used

modeled after Australia of the U.S. Agricultural Extension Service, which has used analysis of performance measures to enhance outcomes).

Whatever congressional mechanism(s) are selected, Congress should resist prescribing a particular "flexibility and incentive" environmental management regime. As experience with Project XL, the various State alternative permitting programs, and other environmental management innovations have demonstrated, different permitting and decision models may be applicable in different circumstances. Moreover decisions regarding which fams might participate what benefits they received over, decisions regarding which f rms might participate, what benef ts they receive for participation in incentive-based or flexible programs, and so on, should be left to States to allow for maximum experimentation with different environmental management models.

[From the Reason Public Policy Institute]

MOVING TO A NEW ENVIRONMENTALISM SUMMARY: BARRIERS AND NEXT STEPS FOR CONGRESS

(By Lynn Scarlett)

What, if any changes are needed to encourage innovation and improve environmental performance? How can these changes be orchestrated? What are the respective roles of the legislature through policy modifications and the executive branch through executive orders and agency policy changes?

Modern environmental regulations developed over the past 30 years have yielded some successes. But persistent challenges remain, and new circumstances require different policy directions. Specifically, environmental laws and regulations have generated high conflict, stifled innovation in some instances, and least-cost options have not generally been pursued. In addition, lines of responsibility have been unclear among the U.S. Environmental Protection Agency (EPA), its regional offices, the States, and regulated entities. Lack of clarity has resulted in some duplication of effort. of effort.

Moreover, the traditional regulatory model is sometimes ill suited to new problems, such as those created by dispersed (nonpoint) pollution, and the traditional model limits the possibilities for holistic environmental management by firms.

Finally, the traditional regulatory approach, with its focus on permitting of pollution sources and hazards by medium (air, water, waste), inhibits opportunities for integrated environmental management. The regulatory focus on prescribing technological solutions and tying permits to those technologies has also turned attention away from development of clear performance indicators and priority setting based on measuring results.

State Environmental Policy Innovations

Scope of State Initiatives

As embodied in the Clean Air Act (CAA), Clean Water Act (CWA), Resource Conservation and Recovery Act (RCRA), Safe Drinking Water Act (SDWA), and other Federal statutes, the traditional regulatory approach offers some latitude for program variations. Through several special Federal programs and through programs operated by States under delegated authority, experiments with a new environmental model are surfacing.

States have, in fact, become the center of environmental activity:

- By 2000 70 percent of major programs that could be delegated had been delegated
- States undertake on average between 75-80 percent of all enforcement actions and 97 percent all enforcement inspections.

• State spending on environmental and natural resource protection has grown from \$5.6 billion in 1986 to \$12.5 billion in 1999

- In 1986, the Federal Government provided 58 percent of spending dollars for States; by 1996, the Federal Government provided 20 percent (\$2.5 billion) of State environmental spending dollars. From 1986 to 1996, State spending increased 140
- States conduct many other nondelegated programs on their own, including innovations toward more flexible, results-focused programs.
 States passed over 700 environmental laws in 1997 alone; at least half deal
- with nondelegated environmental programs (pollution prevention, waste management. etc.)

 80 percent of States have at least one clean air standard stricter than Federal minimums.

A New Environmentalism

Of particular note among these State activities is the proliferation of experiments with a new environmental model that emphasizes flexibility, incentives, and results. An informal survey of regulated industries indicates interest in the following State program features:

- Permitting flexibility (e.g., Wisconsin)
- Fewer inspections Fewer or consolidated reporting (e.g., New Jersey and Colorado)
- Longer permit duration
 Credits for reductions in emissions or discharges (Colorado)
- Credits for reductions in emissions of discharges (Colorado)
 Acceleration of review and processing of permits/equipment changes (Oregon)
 Single agency point of contact for permitting (New Jersey, Oklahoma) Plantwide applicability limit permit (Michigan)
 Expedited permitting (New Jersey, Oregon)

Deterrents to Participation: Private-sector Perspective

Deterrents to participation in some of these programs limit the breadth and scope of their implementation. These deterrents fall into two categories: 1) persistence of some highly prescriptive implementation details in some cases; and 2) limited benefits or extra costs associated with Federal constraints or a lack of clarity in the respective roles of State, regional, and Federal agencies.

Prescriptive deterrents include provisions in which States have linked program

flexibility or incentives to requirements that firms employ specific environmental management systems such as ISO 14001, that ISO 14001 systems be externally certified, that firms recycle 100 percent of onsite residuals, or that they conduct mandatory audits.

Deterrents also result from unclear Federal, State, or regional roles. On the one hand, lack of clarity sometimes constrains States to offer only minimal or public relations benefits since they do not perceive that they have full authority to supplant source-based Federal permits with flexible alternatives. A corollary to this limitation is that details regarding the scope of flexibility offered are sometimes lacking. On the other hand, lack of clarity also sometimes induces increased costs and workload, since participating firms must navigate two, or even three, regulatory systems (State, regional, and Federal) to get approvals for alternative permits. To avoid this challenge, some States have limited permit flexibility to State permits only, thereby limiting the overall potential of the new programs.

Deterrents to Innovation: State Perspective

The Environmental Council of States undertook an informal survey of its member State environmental agencies to explore what they perceived as key barriers to State innovation toward improved environmental performance. Respondents ranked the following as notable barriers:

- EPA headquarters doesn't adequately consider States' opinions or recommendations in establishing priorities, procedures, and rules
 Resource limitations, including funding and expertise
 Congress doesn't adequately consider States and passes laws that limit innova-
- tion
- National environmental groups are a deterrent by charging States with backsliding if program changes are proposed

 • The innovation process is a barrier—it is time consuming, resource intensive,
- and often yields too limited benefits

State regulators consider their ability to innovate most limited by air regulations, followed by water and waste regulations.

Federal Innovations

Lessons of Project XL

A brief survey of 45 projects initiated under EPA's XL program showed that one-fourth of participants sought exemptions or changes in RCRA regulations, including reclassification of a chemical in order to treat hazardous materials more efficiently onsite. A handful of XL projects sought changes relating to the Clean Water Act and Clean Air Act. One each sought changes relating to Superfund provisions and to the Toxic Substances Control Act.

Types of changes sought were highly situation specific. However, some common themes emerge. For example, several firms sought pre-approval of modifications to their manufacturing processes; a number of firms sought multimedia permits. Both changes help firms innovate and maintain their competitiveness in a context of rapidly changing technology. Other desired changes sought through XL projects included a transition to incentive-based monitoring; continuous monitoring rather than permit-required "grab" sampling; simplified monitoring, online permit applications and renewals, and real-time compliance information.

In each XL project, participants sought to reduce permit acquisition, monitoring, and reporting costs as a prerequisite to improving their overall environmental and economic performance.

Lessons of the National Environmental Performance Partnership (NEPPS)

The NEPPS program was unveiled in May 1995 to provide a framework for improving the effectiveness of environmental programs. It emerged out of concerns about inconsistent oversight by EPA, micro-management of State actions by EPA, insufficient technical support, and inadequate consultation of State regulators by EPA. Under the program, States sign agreements with EPA designed to give to the States greater flexibility while setting forth core performance measures. Though NEPPS agreements have extended beyond the initial six pilot States to include 45 States by the end of 1998, the impact of these agreements appears to be limited. A review of NEPPS programs prepared for the National Academy of Public Administration concluded that their effectiveness in reducing Federal micro-management of States has been limited. Nonetheless, the NEPPS partnership agreements in some States (for example, New Hampshire) have been credited with improving priority setting and enhancing State flexibility.

Key Needs

The new environmentalism, as embodied in State initiatives toward flexibility, incentives, and a performance focus, shows substantial promise to deliver environmental performance more holistically and efficiently. While some innovations are occurring, without changes in Federal law these innovations will likely remain marginal "special" programs. Fostering these State initiatives does not require an overhaul of the major environmental statutes. It does, however, require what Debra Knopmann of the Progressive Policy Institute has referred to as "transitional legal space."

Crafting that transitional space requires a delicate balance between, on the one hand, asserting congressional commitment and authorization for flexibility and, on the other hand, resisting prescription and micro-management of the innovation process. Moreover, expression of congressional commitment to innovation may be inadequate. The new environmentalism places a premium on performance measurement, which may require additional resources allocated toward monitoring and helping States invest in developing indicators. Finally, a Federal commitment to a new environmentalism will require a more systematic way of tying priorities and resource allocation to results as measured through various indicators—a challenge States like Florida, Oregon, and New Hampshire have begun to address independently.

Options

Congress has a number of options that could facilitate the move toward a new environmentalism more focused on performance, incentives, and innovation made possible through greater flexibility for States and firms.

Congress could institute changes through:

- the reauthorization of existing statutes, with provisions for greater flexibility reaching environmental goals (it has been over decade since the last CAA debate, 13 years since the CWA received a full review, and 14 years since Superfund was overhauled).
- the creation of an Advisory Panel on Intergovernmental Liaisons, established by statute as an advisory body to EPA to function like the Science Advisory Panel, but with a focus on institutional interaction.
- development of an EPA authorizing statute that would clarify Federal, State, and regional agency roles and specifically indicate congressional intent to foster State environmental innovations, perhaps by endorsing and clarifying the NEPPS mechanism to provide State flexibility. One mechanism could be through a tiered approach in which States would hold all permitting and enforcement authority for fully delegated programs, with Federal monitoring of real-world results. If results fell short of required levels as agreed to in the delegation (or NEPPS-style) agreement, EPA action would be triggered. The nature of that action would need to be clarified. Those programs that were not delegated would be implemented by U.S. EPA or its regions. Through periodic reauthorization of the EPA authorizing statute,

additional changes could be made to individual statutes to remove specific barriers

 to integrated, flexible approaches to environmental management.
 development of an environmental indicators statute that allocated resources to States to support the development by States of their performance indicators. Such a statute could also require development by EPA of threshold measurement criteria to be used by the States to allow some consistency and comparability among measures (particularly for water and air quality). The statute might link to the GPRA process so that performance indicators are linked to resource allocation decisions and agency accountability (e.g., modeled after Australia or the U.S. Agricultural Extension Service, which has used analysis of performance measures to enhance outcomes)

Whatever congressional mechanism(s) are selected, Congress should resist prescribing a particular "flexibility and incentive" environmental management regime. As experience with Project XL, the various State alternative permitting programs, and other environmental management innovations have demonstrated, different permitting and decision models may be applicable in different circumstances. More-over, decisions regarding which firms might participate, what benefits they receive for participation in incentive-based or flexible programs, and so on, should be left to States to allow for maximum experimentation with different environmental management models.

STATEMENT OF ERIK D. OLSON, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

I. INTRODUCTION

I am Erik D. Olson, a Senior Attorney at the Natural Resources Defense Council (NRDC), a national, non-profit public interest organization with over 400,000 members dedicated to protecting public health and the environment. We appreciate the opportunity to testify on the important issue of State-Federal relations in environ-

mental programs, often referred to as "environmental federalism."

The appropriate State and Federal roles in environmental programs have been debated for decades, beginning well before President Nixon created the U.S. Environmental Protection Agency through a Reorganization Plan, shortly after the first Earth Day in April 1970, almost exactly 30 years ago. From the 1940's on, the Federal Government's role in the environmental field traditionally was limited to conducting research, assisting State authorities, and occasionally issuing generally vol-untary, hortatory Federal guidelines such as drinking water guidelines. States usu-ally were free to adopt or reject the Federal standards.

It became increasingly clear by 1970 that serious air and water pollution problems and other environmental crises had reached a critical point. Infamous problems such as the Cuyahoga River catching on fire, Lake Erie essentially dying, air pollution in Donora, Pennsylvania and elsewhere killing local residents, and a series of drinking water contamination problems and waterborne disease outbreaks made it clear that the Federal Government had to step into the breach. States were unable

or unwilling to address these and other problems.

The enactment of the major Federal environmental statutes by Congress, often The enactment of the major Federal environmental statutes by Congress, often lead by this committee, have been a widely touted triumph, immensely successful at cleaning up the environment, popular with the American public, and heralded internationally as landmark events in the history of environmental protection. These statutes, such as the Clean Air Act, Clean Water Act, and Safe Drinking Water Act, generally adopted the "cooperative federalism" model. The Federal Government sets national standards, while States use their special knowledge of local issues to implement and apply those standards, with some remaining Federal oversight and enforcement presence. States are expected to live up to national environmental and health standards, but generally are free to go beyond Federal minimum requirements

II. THE IMPORTANCE OF COOPERATIVE FEDERALISM

The concept of environmental federalism seeks to take advantage of the best the State and Federal Governments have to offer. This approach recognizes that States often have greater localized knowledge of environmental conditions and problems than the Federal Government may have, and recognizes that the Federal Government needs "the substantial resources, expertise, information, and political support of State and local officials" to make the programs work. It also acknowledges that State officials often are more knowledgeable about the local players and political landscape than are Federal officials. Moreover, cooperative federalism seeks to capture the benefits of the fact that the States are the "laboratories of democracy," be-

cause "States are a natural laboratory for testing new ideas."

However, cooperative federalism also acknowledges the realities that States can be more susceptible to local political influences and political "brownmail" from powerful local industries that threaten to withdraw from the State or to produce political repercussions if State officials crack down on pollution. This approach also seeks to recognize that States may not be able to muster the political wherewithal to address pollution problems that primarily affect downstream States, and acknowledges that States often have fewer scientific and technical resources than the Federal Government.

III. RATIONALE FOR A SIGNIFICANT FEDERAL PRESENCE IN ENVIRONMENTAL LAWS

In these days when the Federal Government's role in environmental programs has come under increasing attack from some State officials, it is worth briefly reviewing the rationale relied upon by this committee, academic commentators, and many other observers for supporting a significant Federal presence under our environmental statutes. Among the most critical factors are:

- State Inaction in the Face of Significant Environmental and Health Problems. Before the adoption of the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, and other major Federal statutes, many States simply failed to address critical and obvious environmental and health problems. For example, although the U.S. Public Health Service had issued drinking water standards since the 1940's, and although 130 waterborne disease outbreaks had been decumented in the previous decades as 6 1071 enby 14 States had adopted had been documented in the previous decade, as of 1971, only 14 States had adopted these standards, and enforcement of the standards was "poor." Similar State inaction was documented in the air, surface water, hazardous waste, and many other
- Need for a "Level Playing Field" Nationally for Industry to Avoid a "Race to
 the Bottom." In the words of a leading treatise by academic legal commentators, "it
 is widely accepted that Federal standards help prevent States from succumbing to
 local economic pressures." Without minimum Federal standards, there is immense pressure on States competing for industries and jobs to adopt weak environmental standards and enforcement policies even though over the long run, such weak policies are economically destructive. The "race to the bottom" is especially likely where the environmental or health problems are not immediately readily visible or traceable to particular sources of pollution. This makes it difficult for the public to recognize the problem even if objectively it is extremely serious. A legal brief recently filed by five States makes this point surprisingly bluntly. The States noted (in opposing a court decision that will undermine EPA's ability to enforce where a State later comes in and settles with the same polluter), that "by making it harder for EPA to maintain a level playing field nationally, the panel's decision opens up States to the risks that they will suffer the adverse effects of pollution generated in neighboring States and that regulated entities in other States will gain an unfair competitive advantage over another State's law-abiding competitors."

 • The Growing Use of State "No More Stringent Than Federal Standards" Clauses Demonstrates the "Race to the Bottom" is at Work Today. By 1995, 19 States had adopted at least one statute (and sometimes more than one law), prohibiting the State from adopting environmental rules that are more stringent than Fedable to particular sources of pollution. This makes it difficult for the public to recog-

iting the State from adopting environmental rules that are more stringent than Federal requirements. Some of these "no more stringent than" clauses apply to all State environmental programs; others apply only to certain State laws such as a State clean air law. The increasing use of such clauses lead a leading commentator to

the trend among State legislatures to embrace Federal minimum standards as State maximum standards, viewed in the context of the States' historical failure to produce socially desirable environmental improvements through State legislation and regulation, provides some evidence that the concern about a "race to the bot-

tom" in the absence of Federal minimum standards remains valid.

Right to Baseline Minimum Public Health and Environmental Protections for All Americans. When Americans travel across the country, they expect to be able to breathe the air, drink the water, swim, fish, and enjoy the environment wherever they go. They do not expect that their family's health, or that of their fellow citizens, will be put at risk, depending upon the State in which they are traveling or living. A healthy environment is the foundation of a long-term healthy economy and high quality of life for the U.S. Only with minimum Federal standards can we be assured that all Americans, and our national environmental heritage are protected. As one academician has put it, the Nation "decided to make a moral and arguably constitutional commitment to afford all citizens the same basic level of protection."

· Only the Federal Government Has the Scientific and Technical Resources and Expertise, and the Economies of Scale, to Adopt Many Standards. With the increasing complexity of the scientific and technical issues that are raised by standards for protecting public health and the environment, most States simply do not have the resources or scientific expertise to adopt standards that are scientifically sound and technically well grounded. This is particularly the case as we move toward more specific, highly technically sophisticated standards that must take into account the technical capabilities of major industries. The more tailored a standard is to a particular industry (as opposed to the often-criticized "cookie cutter" approach), the more scientific and technical expertise is required to promulgate the standard. Local and State authorities often lack the resources and political capability to face down major multinational companies that have the financial, technical, and political resources to bury them in studies, litigation, political challenges, and other diversions that may make it virtually impossible for the State to act. While in some areas a handful of States have developed significant scientific and technical expertise, because of "the substantial economies of scale in having environmental standards adopted on a national scale," often only the Federal Government has the resources to adopt complex standards.

• The Need for a Federal "Gorilla in the Closet." State officials, while usually not saying so in public, often admit privately that without mandatory Federal requirements, it can be difficult for them to muster the resources and political support to adopt important environmental and health standards, or to take enforcement actions. They sometimes need to point to the Federal "gorilla in the closet" to take actions that they feel are necessary, but politically difficult, to take.

• The Need to Address Interstate and Trans-boundary Pollution Problems.

States may have little incentive to impose restrictions on pollution by powerful local industries (or others for that matter) when the ill-effects of that pollution are most heavily felt in other States. Thus, the "river of smog" that travels from the Midwest to the Northeastern U.S., the acid rain problem exacerbated by tall stacks that put pollutants high into the atmosphere to come down and contaminate communities hundreds of miles away, and the pollution of interstate rivers, estuaries, and the Great Lakes, all are illustrations of the problem. The State of New Hampshire and several other States, for example, have filed petitions to seek redress for such interstate air pollution problems.

 National or International Industries Benefit from National Standards. Major corporations actually benefit from the relative predictability and centralized authority that comes with a Federal environmental legal framework even though the States are free to adopt more stringent State rules that tailor these minimum Fed-

eral requirements to local needs.

Ironically, Federal Minimum Standards Have Been Shown to Spur State Creativity and Experimentation. Because Federal environmental laws have stimulated States to establish their own agencies, staffs, and statutes to carry out environmental programs, experts have found that rather than stifling State creativity, adoption of Federal environmental law "paradoxically gives States greater opportunity and incentives to undertake policy experimentation."

IV. EXPERIENCE WITH ENVIRONMENTAL FEDERALISM: HOW IT'S WORKING

Most States have responded to the challenge in Federal environmental statutes by adopting State programs that EPA has approved for delegation. Thus, according to a recent law review summary, delegations include:

- Clean Air Act: 42 States
- Clean Water Act: 34 States
- Hazardous Waste (RCRA): 37 States
- Drinking Water: 39 States (49 States have at least partial primacy for public water systems)
 - Pesticides (FIFRA): 39 States.

Some of these State programs can be pointed to as models demonstrating that the "laboratory of democracy" truly is at work. Indeed, some States have put enormous effort into innovative laws and programs that build upon or take a different tack from Federal requirements. In many cases, these innovative State programs later are adopted by other States, or by the Federal Government.

Recent examples include California's and New York's drinking water right to know requirements, recently adopted into Federal law under the 1996 Safe Drinking Water Act Amendments. In other States, including Wisconsin, Iowa, and New Jersey, State authorities have adopted innovative programs to protect groundwater

from contamination.

However, these innovative State laws and EPA's delegation of programs to States does not tell the whole story. Programs that EPA delegated to many States are not living up to legal requirements. Enforcement problems at the State level abound, as do problems with inclassic States. as do problems with inadequate State resources, poor data management and compliance tracking, and failures to address significant environmental problems. For ex-

• Serious State Enforcement Inadequacies Have Been Repeatedly Documented by GAO and the EPA Inspector General (IG). A plethora of GAO and EPA IG stud-ies have documented that many States simply are unable or unwilling to effectively enforce certain Federal programs even in the face of legal requirements to do so. Among the most significant problems are: (1) inadequate monitoring of regulated parties; (2) failure to pursue "timely and appropriate" enforcement actions against significant violators; (3) failure to recover economic benefit of noncompliance; (4) inconsistencies in the approaches used to enforce and in the level of enforcement activity; and serious problems with enforcement and other data. One recent case is Virginia's failure for many years to take meaningful enforcement action against Smithfield Foods' swine slaughtering and processing plants for major violations of its clean water permit, ultimately requiring EPA to step in with Federal enforcement action, alleging serious environmental harm, false reporting, and destruction of records; a recent court decision affirmed liability and a large multimillion dollar penalty.

• Failure to Track and Document Violations. GAO, the EPA IG, and EPA itself have repeatedly documented that many States with delegated programs simply do not adequately track compliance and violations, nor do they report even many significant violations to EPA as required. In one recent example, EPA made front page news when it completed an audit of 27 States' drinking water programs and found that States were reporting only 19 percent of known Maximum Contaminant Level (health standard) violations for chemicals in tap water. Moreover, States reported just 11 percent of treatment standard violations, and only 10 percent of monitoring violations to the agency. The "good" news was that States reported 68 percent of total coliform violations to EPA.

• Inadequate State Resources. While some States have successfully sought significant resources to implement their environmental programs, others have fallen well behind the curve. A recent review of State spending found huge disparities among the States, and said that it was likely that "some States are committing severely inadequate resources to environmental protection." For example, State expenditures per capita on environmental programs varied by almost four-fold; spending per ton of toxic emissions varied even more, with Mississippi spending over 38-fold less per pound of toxics than Colorado. A recent study of State hazardous waste cleanup programs found serious State program resource problems. For example, New York's program ran out of money in 1999, Kansas, Idaho, Wyoming, and Puerto Rico had zero balances, Missouri had a negative balance, Nebraska and D.C. had no cleanup fund, eight States had balances of under \$1 million, and 14 States had fund balances of \$1 million to \$5 million.

State Inaction on Expired Permits. Recent studies by GAO, the EPA IG, and others have shown that there is a pattern in many States of failure to address expired State permits for water and air polluters. In Michigan, for example, 65 percent of major facilities were operating on expired water permits, and many other States had serious backlogs, according to a 1995 GAO report. A more recent analysis of 6,700 permits for major water pollution sources nationally found that more than half of all permits for major polluters had expired in seven States, and that more than one-third are expired in 17 States. Expired permits not only violate the law, they fail to assure progress toward improving air and water quality, and shut the public out of the process of seeking water quality improvements. public out of the process of seeking water quality improvements.

• State Failures to Address Major Environmental Problems. There is a long history, continuing over the past 30 years, of State failures to address significant environmental problems, sometimes even when they are required to do so under Federal

law. For example:

State Inaction on Cryptosporidium in Tap Water. Despite several significant outbreaks from this disease-carrying organism, including the largest documented waterborne disease outbreak in U.S. history in 1993 in Milwaukee Wisconsin in which over 400,000 people were sickened and over 100 died, to our knowledge not a single State adopted a Cryptosporidium standard for tap water until mandated to do so in 1998 EPA rules.

State Inaction on Concentrated Animal Feeding Operations (CAFO). While it is widely recognized that CAFOs are major sources of surface and ground water pollution, most States have done little to address the problem. Officials in the few States that have begun to tackle the issue, such as Maryland, have privately expressed concerns about threats that industry may move their businesses to other, more lax, States

Failure to Issue Maximum Pollution Loading Requirements for Nutrients and Other Water Pollutants. Over 25 States have been sued for failing to adopt the required "Total Maximum Daily Load" (TMDL) rules required by the Clean Water Act since 1972. These TMDLs are supposed to force a crack down on many unaddressed sources of pollution in watersheds that are seriously contaminated, since over 40 percent of the nation's rivers and lakes that have been assessed are not fishable or swimmable, according to EPA.

States' Failure to Address Trans-Boundary Air Pollution Problems. Acid rain problems in the Northeast are due in large part to long-range transport of sulfur dioxide and nitrogen oxides often from tall stacks at fossil fuel-fired power plants in the Midwestern U.S. Similarly, the "river of smog" problem is caused by long-range transport of air pollutants from heavily industrialized and urbanized areas, often to less populated down wind areas. These problems generally have not been voluntarily addressed by polluting States. Federal intervention has been necessary, and still is needed, to force States to deal with these classic "externalities" that they cause but that may not visibly directly affect them.

V. CONCLUSIONS AND OPPORTUNITIES FOR COOPERATIVE FEDERALISM IN THE FUTURE

Many observers suggest that there are opportunities to improve State-Federal relations in the future. EPA and States have initiated a program in 1995 known as the National Environmental Performance Partnership System (NEPPS), which allows States more "flexibility" to implement Federal laws.

While the concept of NEPPS is attractive in principle, it raises several significant issues. First and foremost among them is whether the States are able and willing to make this program work, and whether they will agree with EPA, through an open public process, to assure environmental protection by meaningfully tracking, measuring, and assuring adequate EPA oversight of progress in implementing the programs.

Academic observers have suggested that if this program goes awry and there is a significant chance that without improvements it may "we could lose substantial ground before the public or Congress realizes what is happening." A former State and EPA enforcement official recently suggested in a law review article that many States lack the resources for such an approach, and that it NEPPS "could lead to a further decline in deterrence-based enforcement, given States' lack of interest in conducting such enforcement and other factors.

However, it is possible to streamline and improve State-Federal relations in environmental programs, so long as the following key principles are observed: The Federal Government should:

- Establish national goals; Set national health and environmental standards;
- Establish minimum procedural safeguards for citizen participation
- Approves State programs and maintain a backstop enforcement role;
- Periodically publicly review and make findings regarding State performance;
- Provide resources and technical and scientific assistance.

States should:

- Assume primary implementation and enforcement responsibility, where qualified:
- Meet national goals and standards;
- Show they have adequate resources and procedural safeguards to make the programs work;
 - Develop innovative solutions to problems;
- Agree with EPA on performance tracking and documentation of successes or

Within this context of shared responsibilities, there is much room for State innovation. EPA has recognized that it must, in appropriate cases, loosen the reins of Federal oversight where a State can show that its is qualified and meets the criteria for flexible delegation. Such loosened reins cannot, however, mean that EPA gives up its oversight responsibility or waives basic legal requirements.

In conclusion, NRDC agrees that there is much room for improvement of State-Federal relations. While State flexibility can and does work in some cases, it must

be remembered that States must have the capability and willingness to make this work. States must agree with EPA upon specific measures to assure that the State is accountable for making the progress envisioned by Federal laws, that enforcement and implementation of basic requirements will not be compromised, and that EPA and public oversight and participation are meaningful.

STATEMENT OF JASON S. GRUMET, EXECUTIVE DIRECTOR OF THE NORTHEAST STATES FOR COORDINATED AIR USE MANAGEMENT (NESCAUM)

Introduction

Thank you Mr. Chairman. My name is Jason Grumet and I am the Executive Director of the Northeast States for Coordinated Air Use Management (NESCAUM). NESCAUM is an association of State air pollution control agencies representing Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont. The Association provides technical assistance and policy guidance to our member States on regional air pollution issues of concern to the Northeast. We appreciate this opportunity to address the committee regarding innovative

efforts to reduce air pollution in our region.

As we approach the 30th anniversary of the passage of the Clean Air Act, it is appropriate to reflect upon the tremendous achievements government and industry have made in reducing air pollution and protecting public health and welfare. The interlocking Federal and State authority and obligations set forth in the 1970 Clean Air Act are fairly understood to mark the modern era of environmental protection in our nation. The desire to provide all citizens with minimum standards of protection and to provide industry with consistent national obligations compelled Congress in 1970, and in every reauthorization since, to establish substantial Federal oversight and enforcement of our nation's clean air strategy. At the same time, public health protection in our Federal republic is appropriately vested within the obligations and police powers of State government. Through the creation of State Implementation Plans (SIPs), Congress recognized that States must bear the ultimate responsibility and represent the best hope to design and implement effective clean air laws. I believe that it is useful to reflect upon this most basic tension between the desires for national consistency and State autonomy when exploring how to promote and honor effective State innovation.

One of the central challenges of democracy is to communicate complex themes in simple and popular terms. In this discussion, the subtle complexities of federalism are often described as a choice between "command and control" Federal prescription and "innovative and flexible" State efforts. This construction results from the frustration many of us maintain as we watch government erect seemingly nonsensical barriers to the creative, well intentioned efforts of business owners and local officials who have the courage and ingenuity to suggest a different approach or a better way to achieve a clean environment. Even worse, under the time honored theme "no good deed goes unpunished," every close observer of clean air policy can cite several examples where innovation is met not only with disinterest but is actually penalized

by our regulatory system.

While my members live this frustration, we recognize that it is not borne of malice or incompetence at any level of government. Instead we recognize that these moments of apparent insanity flow inherently from a regulatory regime necessarily designed to protect the public in situations where private economic incentives and volunteerism are inadequate. While the "Command and Control vs. innovation" construct is rhetorically powerful, the polemic in this description suggests a false choice. I believe that a more productive inquiry follows from the premise that national standards, while essential, often fail to capture and channel the ingenuity of least government and industry. In this light improving our populary productive productive control productive in the control productive in the control productive in the control productive. local government and industry. In this light, improving our environmental regulatory system is a pursuit to refine and not replace enforceable Federal requirements. Congress' appreciation of the need for clear and enforceable national clean air requirements is evidenced by the fact that in every reauthorization since the first clean air public health statutes in the 1950's, Congress has consistently increased the Act's prescriptive national requirements and limited the discretion of both the EPA and the States. It is fruitful to reflect upon this history as we begin to contemplate the amendments that will guide the fourth decade of our nation's pursuit of clean air.

Let me now transition from the abstract to the particular and describe two innovative efforts in the Northeast. These initiatives demonstrate that through creativity and collaboration, States, EPA and industry can identify mutual interests and opportunities that the current regulatory system would otherwise squander and direct these energies toward environmental improvement. The first area I will discuss is an exciting array of projects to reduce pollution by retrofitting heavy-duty diesel equipment. The second initiative I will describe is an innovative effort that goes by the acronym P4 which stands for Pollution Prevention in the Permitting Process. The essential wisdom of this effort is that there is no better way to reduce air pollution than to never create it. In both projects, the northeast States have partnered with regional and national EPA offices and industry to achieve considerable successes. However, let me stress at the outset that these successes have not come easy and we are far from finished. While we have created effective beachheads within EPA to launch these collaborative efforts, the EPA is a large institution with an array of corporate cultures. Suffice it to say that those offices charged with the obligation of enforcing the statute and EPA regulations are struggling, at times awkwardly, to maintain a coherent enforcement regime that rewards innovation.

Diesel Retrofits

Overview of the Diesel Pollution Problem

Diesel engine pollution is one of the prime concerns of air quality regulators in the U.S. The 10 million heavy duty diesel engines operating in the U.S. emit millions of tons of soot and ozone-forming pollutants annually. Heavy duty diesel emissions comprise 33 percent of total NOx (from all sources) and 80 percent of mobile source particulate pollution in the northeast States. In addition, diesels contribute substantially to the nation's inventory of toxic pollution such as formaldehyde. The relative contribution from diesels to our nation's air pollution is rising annually. Several factors contribute to this trend of increasing heavy-duty diesel pollution. First, the use of diesel engines to power the nation's fleets of buses and trucks is becoming more pervasive due to the durability of these engines. Second, growth in annual truck miles traveled continues to increase steadily. Third, diesel engines pollute at a higher rate than do gasoline engines and thus replacing gasoline engines with diesels will cause continued increases in air pollution from mobile sources.

Technologies Exist to Reduce Diesel Engine Emissions

The good news is that there are commercialized technologies to reduce diesel PM, NOx, and toxic pollution such as formaldehyde. New technologies used in the New York City bus fleet and in Europe have proven that diesel engine NOx and PM pollution can be reduced by 90 percent. The Federal Urban Bus program (begun in 1993) has established the potential of rebuild/retrofit programs to significantly reduce emissions from heavy duty diesels. In 1993, the U.S. EPA began regulating engine retrofit/rebuilds in heavy duty urban buses in cities of over 750,000 population. The regulations require that newly overhauled transit bus engines meet more stringent particulate standards than required by the original engine certification. As part of this program, EPA has certified over ten products to reduce emissions from urban buses. Certified products have the potential to reduce particulate emissions by up to 80 percent. Over 40 urban areas have benefited from reduced urban bus emissions due to this program. Urban bus certified products can also be retrofitted onto most existing truck engines. California and New Jersey have established guidelines and methodologies for implementing retrofit/rebuild programs in non-urban buses.

Diesel Standards Lag Behind Gasoline Engine Standards

While new technologies exist, diesel engine exhaust standards currently lag behind standards for gasoline engines by 10 years or more. The Federal Government must close this gap by adopting strict new engine standards for future diesel vehicles. Implementation of protective diesel emission standards is contingent upon dramatically reducing the level of sulfur in diesel fuel. Like lead, sulfur can poison many of the after-treatment emission control strategies that must be employed to reduce diesel pollution. We understand that EPA is on the verge of proposing regulations that will cap diesel sulfur levels at 15 ppm by 2007. Once enacted, this proposal and the resulting emission controls that it enables will dramatically improve public health across the nation. Ensuring the timely implementation of a 15 ppm sulfur cap on all diesel fuel is the most important single action Congress could undertake to promote innovative diesel reduction strategies.

Slow Diesel Fleet Turnover Requires a Control Program for Existing Engines. While there is good news in the potential for cleaner new diesel engines, the problem of the existing, highly polluting fleet of 10 million diesel vehicles must also be addressed. Diesel engines last as long as 25 years and travel more than a million miles in many applications. Older engines pollute at a much higher rate than new engines due to 1) engine deterioration and 2) less stringent emission levels in older model year engines. Thus, targeting emissions from older diesel engines is essential to reducing the pollution from the nation's diesel fleets in the near term.

Legal Barriers Prevent Traditional Regulatory Programs

Unfortunately, while cost-effective retrofit technologies exist to significantly reduce diesel emissions from existing engines, and while Federal action has been

taken to reduce emissions from a small subset of diesels, States are substantially preempted by the Clean Air Act from taking large steps to reduce pollution from existing diesel vehicles. Historically, States have been given authority under the Clean Air Act to regulate in-use engine emissions from mobile sources, but are largely preempted from adopting independent requirements affecting new vehicles. However, a 1996 lawsuit brought by the Engine Manufacturers Association (EMA) resulted in a change to the nonroad engine rule which preempts States from requiring the retrofit of in-use nonroad engines (such as those found in construction equipment) to control emissions. Similarly, States face legal hurdles to the establishment of mandatory retrofit programs for highway vehicles. As an example, a State cannot pass a regulation requiring construction companies to install pollution control devices on construction equipment even though cost effective products are available. Similarly, a State cannot pass a law to require school buses to be retrofitted to reduce childrens' exposure to carcinogenic elements in diesel exhaust.

Collaborative Action to Overcome Regulatory Barriers

In the face of these legal barriers, Northeast State environmental staff have worked with the EPA, the Engine Manufacturers Association, the Manufacturers of Emission Controls Association, and many others to develop opportunities to integrate voluntary diesel-retrofit mechanisms into the existing regulatory regime. Through this collaborative effort we have encouraged the use of commercially available technologies by developing a standardized method for States to calculate State Implementation Plan ("SIP") credits for retrofit projects. To enable timely, cost-effective action and diminish administrative burden we have developed a third party verification system to review new technologies. Last we have developed a menu of recommendations on technology matches between retrofit equipment and heavy-duty engine applications.

EPA has provided an overarching forum for this collaborative effort by creating the Voluntary Measures Retrofit Program (VMEP). VMEP is a quintessential example of creating a space within the existing regulatory framework where innovation can flourish. The premise behind VMEP is to trust but verify. Through this program States are empowered to take credit for non-traditional measures to reduce mobile source pollution in their SIPs. Prior to VMEP, States often had to wait years for EPA to even consider new approaches before they could proceed with implementation. The VMEP pilot program inspires innovation by allowing States to credit innovative measures for a de minimis portion of a State's total SIP inventory so long as States commit to verify that these programs actually achieve their projected benefit in practice. As part of the VMEP retrofit program, EPA announced the establishment of a coalition to achieve the retrofit of 10,000 heavy-duty diesel vehicles within the next year. The program is also providing technical support to public agencies and State and local regulators that are implementing retrofit programs. Due in large part to this effort, a highly successful retrofit program has developed in the Northeast.

Specific Examples of Retrofit Projects

The specific examples that follow are each inspired to varying degrees by three main themes: 1) Compliance with regulatory requirements (SIP obligations, conformity requirements etc.); 2) Addressing community concerns over growth and new construction; and 3) The selfless desire to reduce air pollution.

New York Urban Bus Retrofit Project

New York City has just attained the existing PM 10 standards and recognizes that further regulatory efforts will be necessary to address levels of fine particle pollution in the coming years. In light of the City's recent non-attainment status and the overwhelming evidence of fine particle health consequences, New York State is devoting considerable energy to reducing in-use diesel emissions. In 1999, the New York City Transit Authority along with the New York Department of Environmental Conservation, fuel producers, and retrofit technology developers established a program to retrofit 50 urban buses with continuously regenerating particulate traps. To date, 30 buses have been retrofitted and testing results show that PM pollution is reduced 90 percent in the retrofitted buses. Because of the success of the program, Governor Pataki recently announced a significant expansion of the program. Under this breakthrough agreement, the New York City Transit Authority (NYCTA) will purchase low sulfur fuel and traps for the entire fleet of 3,700 hundred buses. Through the VMEP program, New York State will now be able to take credit for this substantial achievement in future PM attainment plans.

Big Dig Retrofit Project

In Boston, over 100 pieces of construction equipment are being retrofitted as part of the "Big Dig" retrofit project. The multi-billion dollar Big Dig project has concentrated hundreds of pieces of construction equipment in the City of Boston, many of them operating next to apartment and office buildings and hospitals. The retrofit program was initiated when residents living adjacent to the Big Dig complained about diesel exhaust from construction equipment. NESCAUM worked with Massachusetts transportation and environmental officials to fund and implement the retrofitting of nearly ★ of the permanent diesel construction equipment on the project. The project has evolved to include a strictly voluntary component and a mandatory component. The voluntary retrofits are being undertaken and paid for by the highway department and contractors. There is also a contractual requirement stipulating that machines operating near hospitals, apartment and office buildings be retrofitted. Massachusetts is pursuing similar requirements in a host of major construction initiatives in the State. Here, the need to reconcile the needs of the community with the need to accommodate development in Boston spurred meaningful innovation

Manchester Airport Retrofit Project

At the Manchester Airport in New Hampshire, airport operators, the New Hampshire Department of Environmental Services, and NESCAUM are collaborating in an effort to retrofit a majority of diesel ground service equipment. Like many airports, the Manchester airport is currently undergoing a major expansion in order to increase aircraft service and vehicle access for airport users. This expansion is likely to increase air pollution associated with airport operations. In part to offset this increase in emissions, the airport is moving ahead with a project to retrofit 60 airport owned nonroad vehicles such as de-icers and snow removal machines. The Manchester project is a combination of a program that aims to do environmental good combined with the need to comply with regulatory (conformity) requirements.

School Bus Retrofit Project

Another project under active consideration by Northeast air quality regulators is a school bus retrofit project. As part of the program, school districts in Northeast States will be encouraged to devote resources necessary to implement an varying array of diesel fuel quality improvements and emission control retrofits. In this case, the major impetus for the project will be to improve environmental quality and to reduce childrens' exposure to toxins.

Diesel Retrofit Conclusion

All told, we anticipate that up to 15,000 vehicles in the Northeast will be retrofitted in the first phase of this incentive driven initiative. As a result, thousands of tons of PM, hydrocarbon, and toxic emissions will be reduced in the Northeast. In all of these projects, a combination of regulatory requirements and voluntary measures have been combined to result in a highly successful program. Our model is presently being replicated in several cities in California and in Chicago. Based on the broad interest we have received from programs across the country, we are optimistic that similar retrofit efforts will be commonplace in the next several years.

Pollution Prevention in Permitting Programs (P4)

Overview of P4 Projects

Efforts to encourage pollution prevention within the existing regulatory structure reveal many of the barriers to innovation that I identified earlier. While the traditional Federal/State regulatory regime has achieved great success, the traditional focus on technology based control strategies presents several shortcomings:

- Overly prescriptive compliance approaches foster a focus on actions rather than results.
- The focus on pollution control rather than pollution prevention discourages industry from investing in less toxic and more efficient technologies.
- The emphasis on single media technology requirements tolerates the shifting of pollution from one media to another rather than eliminating it at the source.

EPA and the States have developed several innovative programs to address these shortcomings without jeopardizing the environmental gains that have been achieved through traditional regulatory efforts. One such program is the Pollution Prevention in Permitting Project (P4).

The logic of pollution prevention is unassailable. Rather than spending millions of dollars to manufacture, handle, and ultimately control the pollutant emissions of hazardous substances used in the creation of desirable goods and services, pollution prevention enables the creation of these same goods using comparably benign meth-

ods. By changing manufacturing processes, many industries have determined that they can reduce air pollution considerably and cost-effectively. Under this approach, facilities are given maximum flexibility to operate their business while still maintaining adequate measures to ensure compliance with environmental regulations. Ultimately, these permits create a regulatory incentive to design waste out of the process and increase production efficiency.

P4 Permits

In 1995, Intel and the Oregon DEQ wrote the first P4 permit. This permit had two goals; (1) to increase operational flexibility at Intel's Aloha facility and (2) create a regulatory program that creates incentives for facilities to use pollution prevention to meet regulatory requirements. To meet these goals, the permit contained pre-approvals for specific operational, pollutant-specific, plant-wide emission caps. Speed and flexibility to expand the facility were key factors for Intel wishing to seek a P4 permit. As a result of the P4 permit, both the goals of flexibility and pollution prevention were realized. In the first 2 years of the P4 permit, VOC emissions per product unit fell 47 percent, while production increased 70 percent. In addition, the facility was reconfigured without re-opening their Title V permit. Finally, the use of pollution prevention to reduce per-unit emissions and to keep emissions under regulatory thresholds resulted in Intel saving \$2 million in avoided control costs. This innovative effort brought considerable benefit to the environment and the company.

NESCAUM P4 Pilot Project

Seeking to replicate this success in our region, NESCAUM has embarked on a multi-State effort to incorporate pollution prevention into the next generation of environmental permits. The basic tenet of our effort is to set stringent environmental outcomes while providing companies with optimum flexibility to design their compliance strategy. To date, EPA's efforts to support P4 initiatives nation-wide have resulted in several important achievements:

Development of six enforceable Title V permits that meet all substantive and

procedural requirements;

Creation of permit terms which encourage pollution prevention to achieve com-

pliance; and

Integration of "living" Title V permits which include flexibility conditions that support rapid, cost-effective operational change and creates lower administrative

burdens for both sources and permitting authorities.

NESCAUM seeks to build upon these successes by leading an effort to fully integrate P4 approaches into traditional air permitting activities. Through this effort NESCAUM is working with our member States and EPA to identify and overcome regulatory barriers that stand in the way of integrating P4 into the traditional regulatory regime. In addition, NESCAUM will be working in targeted sectors to develop flexible Title V permits. Targeted sector includes chemical manufacturing, semiconductor (chip manufacturing), pharmaceutical manufacturing, metals manufacturing (coating, anodizing), and pulp and paper operations.

Our focus on these target sectors is premised on the recognition that P4 is not equally appropriate in all sectors or for all companies. P4 permits require considerable effort and resources to develop. Therefore, we have opted to focus our energies on those sectors with the greatest need for flexibility in order to evolve with dynamic market demands. In addition, P4 permits should only be written for those specific facilities that have demonstrated and credible environmental management systems. Facilities with poor compliance records tend to have poor process controls. Establishing flexible permits with such facilities could render the public open to unacceptable risks. By the end of our 2-year effort, NESCAUM expects to have identified a host of sources that are appropriate candidates for P4 and develop consistent approaches among our member States in crafting these permits.

Barriers to P4 Permits

A current barrier to promoting P4 permits is the overarching deadline for States to complete issuance of all Title V permits. Permitting agencies are under intense pressure to issue all their Title V permits by January 1. 2001. Permitting programs in the Northeast were among the last to receive interim approval and therefore have had the least time to write these permits. This situation puts the States at odds with P4. Working flexibility into permits requires significantly more time than writing a traditional permit. Given this pressure to issue permits, States are reluctant to devote significant resources to programs that will slow down the permit process.

Furthermore, barriers created in existing regulations and policies can often hamper innovative efforts. One such barrier is the "once in, always in" policy developed for MACT standards. Under Title III of the Clean Air Act, EPA regulates hazardous

air pollutants or HAPs. Generally, these regulations require significant amounts of monitoring, record keeping, and reporting activities. The "once in always in" policy creates a perverse disincentive to reduce the use of hazardous substances because even the elimination of hazardous production materials does not alleviate the unique regulatory burdens that were explicitly designed for HAP sources. Given this situation, facilities have little inducement to investigate alternative technologies that are less polluting.

P4 Conclusion

The NESCAUM project has been underway for nearly 6 months. Work to date has found that many facilities and permitting agencies are eager to engage in this process. Critics within the government and environmental communities however, continue to express the anxiety that flexible programs, such as P4, do not provide adequate protections for the public. The result of these fears has been to hold P4 permits to a far higher standard than that of traditional permitting activities. Our hope is that the scrutiny and transparency provided by our collaborative regional effort will help to overcome these fears and enable P4 permits to proceed efficiently.

Conclusion

While the focus of my remarks has reflected upon State and EPA efforts there are two fundamental roles that Congress must fulfill for this evolution to succeed. First, in the short term, innovation costs money. While our society will save billions of dollars each year by honing the regulatory system to appreciate the heterogeneity of our States and businesses, designing and administering flexible yet credible approaches is a far more complex and costly undertaking than the "one size fits all" schemes that many appropriately deride. EPA and the States must be provided the necessary resources and flexibility to use them if we hope to navigate this transition. Without increased resources, well intentioned efforts toward flexibility will ultimately be undermined by a small minority of interests who will seek to exploit this flexibility for private gain. Since change is always held to a higher standard than the status quo, Congress, EPA and the States must work together to ensure that we are collectively up to the test.

Second, even more than financial resources, successful innovation requires trust. Trust is ample when innovation succeeds. However, innovation will not occur unless trust isn't also dependable when well-intentioned, credible efforts fail. Sources must trust State agencies to provide constructive havens to remedy the creative control approaches that will inevitably fall short of expectations. States must trust the EPA to acknowledge and not penalize innovative State programs both when they succeed and when they do not. EPA must trust Environmental organizations to recognize that some efforts will not succeed and environmental organizations must trust that failed efforts will be remedied when critiquing perceived inadequacies. Of course in all cases, trust must be earned through dialog, access, and transparency of data. Congress, as the creator of laws and overseer of EPA plays a vital role in setting the tone for this evolution toward innovation and trust. I would like to thank Senator Smith for initiating this dialog and look forward to working with the committee in the months ahead.

HEAVY-DUTY DIESEL EMISSION REDUCTION PROJECT

RETROFIT/REBUILD COMPONENT

(Prepared by NESCAUM for the U.S. Environmental Protection Agency)

Executive Summary

The purpose of this document is to expand the use of retrofit pollution control technologies in heavy-duty engines through the development of consistent guidelines for voluntary retrofit programs. Such programs would be targeted to heavy-duty vehicles not affected by the Federal Urban Bus Program and would include control technologies not certified under that program as well as Urban Bus Program certified technologies. Specifically, this document recommends 1) a protocol for calculating State implementation plan (SIP) credits for voluntary retrofit projects; 2) the structure of a third party retrofit verification system for retrofit technologies; and 3) an in-use testing program to ensure that emission reduction credits claimed are achieved in the field. The last chapter of this document outlines model State policies to reduce heavy-duty engine pollution through retrofit initiatives.

This effort builds on the above mentioned U.S. Environmental Protection Agency

This effort builds on the above mentioned U.S. Environmental Protection Agency (EPA) initiative begun in 1993 to reduce urban residents' exposure to diesel exhaust, the Urban Bus Retrofit/Rebuild program. The program requires that urban

buses operating in metropolitan areas with populations over 750,000 be equipped with EPA certified retrofit pollution control devices such as oxidation catalysts or be rebuilt using certified low emission components at the time of engine overhaul. To date, approximately 10,000 of 42,000 eligible urban buses have been retrofitted or rebuilt as a result of the program. Two States, New Jersey and California, have undertaken retrofit programs or guidelines as well. These efforts are intended to expand the significant emission reductions gained through the Federal Urban Bus Program by promoting the use of pollution reducing technologies on the existing heavy-duty fleets in those States.

The need for reducing emissions from the nation's in-use heavy-duty diesel fleets is clear. Current inventories estimate that heavy duty engine emissions comprise 33 percent of all nitrogen oxides (NOx) pollution and 80 percent of all particulates (PM) from mobile sources in the Northeast States. Emissions from these engines contribute to serious air pollution problems in the region. NOx causes eutrophication of lakes and streams, acid rain, and is a precursor to ozone which aggravates lung disease. Hydrocarbon (HC) emissions are also ozone precursors and are made up, in part, of toxic substances such as benzene, toluene, and 1,3 butadiene, some of which are known carcinogens. PM emissions are very high from diesel engines and are known to aggravate lung diseases such as asthma, emphysema, and bronchitis. In addition, PM has been labeled a probable human carcinogen by EPA and a toxic air contaminant by the California Air Resources Board. In order for States to achieve air quality goals, significant reductions in heavy-duty diesel emissions will need to be made.

The recommendations contained in this document are based on discussions of a workgroup organized by the Northeast States for Coordinated Air Use Management (NESCAUM). The workgroup was created to provide guidance to State and local agencies, as well as to private organizations that plan to retrofit heavy-duty diesel vehicles with pollution control devices. It included input from State and Federal agency staff, testing laboratories, and control equipment manufacturers. In addition, a draft of these guidelines was distributed to EPA regional offices and the heavyduty engine manufacturers. Their comments and suggestions were reviewed and incorporated by the workgroup into the recommendations contained in this report.

PRIMARY RECOMMENDATIONS

All of the recommendations detailed below represent the views of the Retrofit/Rebuild workgroup and NESCAUM.

1. Use of Urban Bus Program Certified Technologies

Oxidation catalysts certified with the Urban Bus Program should be eligible without administrative or peer review for use in any highway heavy-duty engine, with States being allowed to claim a 20 percent reduction for PM, a 40 percent reduction for carbon monoxide (CO), and a 50 percent reduction for HC. These credits may be claimed before a project is implemented. Verification of emission reductions should be conducted during or after project implementation by 1) a review of retrofitting records and 2) through in-use emissions testing. These recommendations are detailed in Chapter I, section D and Chapter III.

For use of technologies certified with the Urban Bus Program that are engine specific such as rebuild kits, the workgroup recommends that a PM emission reduction credit of 20 percent be granted automatically when the rebuild kits are used in engines that the technologies are certified for under the Urban Bus Program. Chapter I, section B describes the credit allowed for ".1" technologies. As with the use of oxidation catalysts, reporting and in-use testing recommendations for rebuild kits are

detailed in Chapters I.D and III.

2. Use of Technologies Not Certified with the Urban Bus Program

For all products that have not been certified with the Urban Bus Program, emissions testing should be conducted by the manufacturer to determine the emission reductions potential (percent reductions) of the retrofit/rebuild product. Similar data should be required for the voluntary program as are required for certification with the Urban Bus Program (see Chapter III, section A for a detailed description). An engineering analysis should be conducted by the manufacturer to determine which engines the retrofit/rebuild equipment may be used on. These data and analysis will be reviewed by the third party verifier to establish the emission reduction level and applicability for engine families for the voluntary retrofit program.

3. Third Party Verification System

A third party verification system should be established which consists of an administrator and a peer review committee. The workgroup recommends that Environment Canada be the administrator for this program. The administrator will process all applications to the retrofit/rebuild program, review data for thoroughness, organize the work of the peer review group, make decisions on the level of in-use testing required, and communicate with EPA. The peer review committee should consist of temporary volunteer members from industry, laboratories, and trade organizations (such as the Society of Automotive Engineers) with expertise in heavy-duty engines and retrofit equipment. The committee will make determinations for emission control devices on the level of in-use testing, completion of the in-use testing requirement, acceptability of in-use testing method, emission reduction potential of emission control products, and engine families that control equipment can be used with

4. In-use Testing Requirement

In order to verify the emission reductions claimed from retrofit projects and to assess control equipment durability a percentage of all emission control products installed as part of a retrofit/rebuild program should be tested in-use. The procedure for establishing the number of units to be tested in the field is outlined in Chapter III and is adapted from EPA's in-use compliance testing requirements for new pleasure craft marine engines. An in-use testing trigger should be established for different types of technologies based on unit sales. A 70 percent pass rate on tested units will be needed in order for devices to "test out" of the in-use requirement.

5. Calculating SIP Credits

In order to calculate SIP credits from retrofit projects, baseline emission factors for heavy-duty engines to be retrofitted needs to be established. The workgroup recommends that Federal Test Procedure (FTP) certification data for engine families be used as baseline emission rates for retrofitted engines. Emission reduction percentages (as recommended in this document for devices certified with the Urban Bus Program and as established by the third party verifier for devices not certified with the Urban Bus Program) can be applied to these baseline rates. Mass emissions reductions can be calculated for individual fleets using the formulas detailed in Chapter IV and information available to fleet operators such as vehicle mileage, hours in operation, or fuel consumption. In some cases, States may choose to develop baseline emission rates through testing of heavy-duty engines in-use. The States will need to develop a testing plan in coordination with EPA to determine these baseline levels.

6. Retrofit/Rebuild Program Information/Website

The workgroup recommends that if possible all retrofit/rebuild devices certified with the Urban Bus Program and all devices "verified" through third party review be listed on a retrofit/rebuild website which States and others interested in undertaking retrofit projects can easily access. The retrofit website could provide SIP credit calculation formulas, information on emission control products, applicable engines, and EPA certification data for engine families.

7. Model State Retrofit Policies

States have policy and funding options to increase the use of retrofit devices to reduce heavy-duty diesel pollution. Retrofitting heavy-duty vehicles and machines to reduce PM, HC, CO, toxics, and in some cases NOx, can assist States in reaching air quality standards. Executive orders, contract requirements, and agency policies represent potential methods to increase the use of retrofit devices. Funding from Federal sources such as the Congestion Mitigation Air Quality Improvement program (CMAQ), State funding in the form of bond issues and agency budgets, and supplemental environmental moneys can provide financial support for retrofit projects. The last section of this report outlines model retrofit policies that have been used in the region, funding sources, and example strategies to increase the use of pollution control equipment.

Responses of Jason Grumet to Additional Questions from Senator Lautenberg

Interstate Transportation of Air Pollution

Question 1. NESCAUM has studied the movement of air pollution into the northeastern States from other States. What have you learned and what does that say about the need to maintain a strong Federal role in environmental policy?

about the need to maintain a strong Federal role in environmental policy?

Response. This response presents NESCAUM's work in two particular areas of air pollution transport that have received a great deal of attention in recent years. The first area concerns ozone (smog). The U.S. Environmental Protection Agency (EPA) recently implemented a regional plan to reduce emissions of nitrogen oxides (NOx),

the most important precursor contributing to ozone transport on a regional scale. The second area concerns acid rain. NESCAUM has done recent work on acidic deposition in New England and linkages with pollution sources in upwind regions. The 1990 Clean Air Act Amendments (CAAA) created the Federal Acid Rain Program that has resulted in a significant decrease in sulfur dioxide (SO $_2$) emissions, the precursor to acidic sulfate deposition. NESCAUM's work indicates that upwind reductions in SO $_2$ emissions correlate strongly with downwind reductions in acidic sulfate deposition. Unfortunately, environmental recovery appears to be slower than expected, and additional regional reductions are likely needed to adequately protect sensitive land and water resources from the damaging effects of acid rain.

tons in SO₂ emissions correlate strongly with downwind reductions in acidic sulfate deposition. Unfortunately, environmental recovery appears to be slower than expected, and additional regional reductions are likely needed to adequately protect sensitive land and water resources from the damaging effects of acid rain.

In keeping with the theme of the May 2 hearing before the Senate Committee on Environment and Public Works, NESCAUM would like to reiterate its strong support for State flexibility in addressing environmental problems. The NESCAUM States take pride in developing their own innovative efforts to reduce pollution within their borders—an approach that requires a cooperative framework with the Federal Government to provide sufficient flexibility for the States. While the NESCAUM States seek flexibility in addressing the pollution sources within their borders, they also recognize the need for a Federal role in addressing pollution caused by sources outside a State's borders. In light of NESCAUM's work on air pollution transport, we clearly see the need to maintain a strong Federal role in environmental policy to deal with these types of interstate air pollution issues. Unfortunately, an upwind State all too often has little incentive to reduce pollution from in-State sources when public health and environmental damage occur downwind outside the State. In the experience of the NESCAUM States, it seems that upwind States all too often believe a downwind State must control in-State sources almost to the verge of bankruptcy before upwind States feel obligated to reduce their own contributions to a downwind State's pollution problem. The Clean Air Act, however, places equal responsibility on all pollution sources for their contributions to downwind pollution problems, regardless of where the sources are located. When upwind States mistakenly believe they have less of an obligation to address their own contribution to downwind pollution problems, downwind States have little recourse but to appeal to the Fe

In addition to interstate pollution transport, there is another need to maintain a strong Federal role in environmental policy. A number of cost-effective pollution control options, such as low sulfur fuels and heavy-duty diesel engine standards, are often national in scope and fall outside State jurisdiction. These types of control options are the quintessential programs best addressed by the Federal Government.

I. Ozone and precursor transport

The transport of NOx and ozone in power plant plumes has been known since at least the mid-1970's. Measurements of power plant plumes have documented high ozone levels transported from Wisconsin into Michigan (Miller, et al., 1978), Tennessee into Indiana (Gillani & Wilson, 1980), and Missouri toward Chicago (White, et al., 1983). These studies show that NOx in power plant plumes produces significant amounts of ozone, and the ozone travels long distances into neighboring States.

Within the Ohio River Valley, where the concentration of large coal-fired power plants is greatest, there is a large and persistent area of high ozone during the summer months relative to air in other parts of the country (Husar, 1996). Within this region, winds intermingle ozone pollution from different power plant plumes (as well as other pollution sources). Because of this mixing, a large "reservoir" of ozone forms across much of the east-central United States. People living in southern Indiana, southern Ohio, northern Kentucky, and most of West Virginia actually experience higher long-term ozone levels than people living in metropolitan Chicago or Boston (see Figure 1).

The large ozone reservoir in the Ohio River Valley returns each summer with little abatement. Researchers have found no significant trends in regional ozone levels from 1980 to 1995 (Five, et al., 1998). While urban levels have decreased somewhat due to pollution controls on automobiles, regional ozone and NOx levels have not significantly changed. This is due in large part to the lack of significant NOx reductions from fossil fuel power plants which, in places such as the Ohio River Valley, contribute 40–50 percent of the total NOx emissions in a given region. Between 1987 and 1996, NOx emissions from power plants rose 3 percent nationally (EPA, 1998). Because regional ozone is more sensitive to NOx controls than volatile organic compound (VOC) controls, the lack of significant NOx reductions from power plants is impeding progress toward reducing ozone levels.

Researchers observed the movement of ozone from the Ohio River Valley into the

Researchers observed the movement of ozone from the Ohio River Valley into the Northeast as early as 1979. During early August in 1979, scientists tracked a mass of ozone leaving Ohio, crossing Pennsylvania and southern New York, and entering

into the Northeast Corridor (Clarke and Ching, 1983). When this mass of air from the Ohio River Valley entered into the Northeast Corridor, it contained about 90 parts per billion (ppb) of ozone. The current 1-hour Federal ozone standard is equivalent to 120 ppb (0.12 parts per million). Therefore, the amount of ozone observed entering the Northeast was 75 percent of the 1-hour ozone standard and represented a significant contribution to the overall ozone burden experienced in the Northeast during that time.

As the persistent ozone reservoir establishes itself every summer in the Ohio River Valley, large amounts of ozone continue to be transported into the Northeast from the west. During the summer of 1995, the North American Research Strategy for Tropospheric Ozone-Northeast (NARSTO-NE) conducted aircraft measurements of ozone in air masses along the western edge of the Northeast Corridor. During pre-dawn hours, scientists measured ozone levels up to and in excess of 100 ppb above Shenandoah, VA, Gettysburg, PA, Poughkeepsie, NY, and other locations in the Northeast (Lurmann, et al., 1997). During this time of morning, the ozone could not have been formed locally (no sunlight is present to initiate the formation of ozone), so it must have been transported during the overnight hours. Wind direction ozone), so it must have been transported during the overnight hours. Wind direction on some of the highest ozone days (e.g., July 14, 1995) was out of the west (Blumenthal, et al., 1997). Therefore, we can conclude that the ozone traveled into the Northeast from points to the west, i.e., the Ohio River Valley.

At transported ozone levels of over 100 ppb during the pre-dawn hours, the Northeast is already over 80 percent on the way to an exceedance of the 1-hour standard before the sun rises. The Northeast is in the predicament of achieving the 1-hour 120 ppb Federal ozone standard in situations where 100 ppb or more of the ozone is beyond its control. Only an additional 20 ppb of ozone generated within the Northeast will cause an exceedance of the 1-hour standard, and the situation is even worse for the more protective 80 ppb 8-hour standard. The high levels of transported ozone virtually guarantee that the Northeast will not achieve air quality goals without NOx reductions from upwind sources.

Estimating Ozone Transport into the Northeast

A range of ozone transport into the Northeast can be estimated from the field measurements mentioned in the preceding section, and from computer modeling of ozone formation and transport. Based on results from a model called CALGRID, 3 we estimate a plausible contribution of transported ozone from outside the Northeast to ozone exposure above the 1-hour 120 ppb and the 8-hour 80 ppb standards inside the Northeast in the range of 20-45 percent. This was estimated as described

in the following text.

Two modeled scenarios were generated for a severe ozone episode occurring on 11–15 July 1995 in the eastern United States. ⁴ In the first modeled scenario, the reductions proposed in the EPA NOX SIP Call were applied only within the Northeast Ozone Transport Region (OTR), and current Clean Air Act measures were put in place outside the OTR using emissions projected for 2007 (Run 1). In the second scenario, the EPA NOx SIP Call reductions were applied throughout 22 eastern

States (Run 2).

In each scenario, the total ozone exposure above the 1-hour 120 ppb standard and the 8-hour 80 ppb standard was determined. The total exposure to ozone above the 1-hour standard was calculated from the model by multiplying all calculated ozone concentrations above 125 ppb by the total hours above 125 ppb and the area of each modeled grid cell (144 km2) in which an ozone concentration above 125 ppb occurred. For the 8-hour standard, a surrogate 1-hour value of 110 ppb was used as the threshold exposure level in the model, and the total exposure was calculated in the same manner as for the 125 ppb threshold. The 1-hour threshold of 110 ppb is used because ozone monitoring data suggest that when a 1-hour concentration of

¹The researchers also indicated that as the air mass entered the Northeast corridor, it contained enough transported precursor emissions to generate an additional 35 ppb of ozone on top of the 90 ppb already formed. Consequently, the amount of background ozone and precursors entering the Northeast could have resulted in an exceedance of the 1-hour ozone standard in the Northeast even if only minimal additional precursor emissions occurred locally.

²The U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) has remanded the revised 8-hour ozone standard back to EPA, a decision currently on appeal to the U.S. Supreme Court. Although questioning the standard on constitutional grounds, the D. C. Circuit recognized that detrimental health impacts occur at ozone levels below the current l-hour standard.

³U.S. EPA has approved the CALGRID model for ozone attainment planning purposes in the New England Domain.

4 Communication from Mark Fernau, Earth Tech, Inc., Concord, MA.

110 ppb is reached or exceeded, it typically coincides with an 8-hour average above

85 ppb at the same monitor. ⁵
The reduction in ozone exposure within the Northeast Ozone Transport Region due to NOx controls outside the Northeast is shown in Table 1. The reduction is given as the percentage decrease in ozone exposure between Run 1 (EPA NOx SIP Call in the OTR only) and Run 2 (EPA NOx SIP Call in 22 eastern States).

Table 1. Percent reduction in ozone exposure (ppb hr/km2) greater than 125 ppb (1-hour standard) and 110 ppb (surrogate for 8-hour standard) within the Northeast Ozone Transport Region due to applying the EPA NOx SIP Call beyond the borders of the QTR.

Percent daily reduction in modeled ozone exposure within the Northeast Ozone Transport Region due to 22 State NOx SIP Call

	July 11	July 12	July 13	July 14	July 15
Reduction in ozone exposure 2125 ppb		-16% -27%		-33% -34%	

Modeled reductions are based on 11-15 July 1995 ozone episode

Based on the modeled reductions in Table 1 and the high levels of ozone observed entering the Northeast during the field studies mentioned above, NESCAUM estimates a plausible contribution range of 20–45 percent to ozone exposure above the 1-hour and 8-hour standards in the Northeast Ozone Transport Region due to trans-

ported ozone from outside the region.

The estimated range is consistent with modeling results from the Ozone Transport Assessment Group (OTAG). OTAG estimated ozone transport impacts by "turning off" all human-related sources of NOx and VOC emissions in various parts of the eastern United States. When human-related emission sources were set to zero in the OTAG model (OTAG used a model called UAM-V), changes in ozone levels in downwind receptor regions could be estimated. These modeling runs indicated that human-related emissions in various upwind regions significantly contributed to ozone levels in downwind receptor regions. For example, OTAG results for the July 1995 episode indicated that turning off NOx and VOC emissions in parts of the Ohio River Valley reduced ozone exposure above 120 ppb in the Philadelphia area by 41 percent, and in the Baltimore/Washington, DC area by 43 percent. ⁶

The Economic Impact of Ozone Transport Into the Northeast

The out-of-region ozone transport contributing to ozone levels above Federal standards within the Northeast Ozone Transport Region creates additional economic costs within the Northeast due to the need for more stringent local controls.

If no additional NOx measures beyond Clean Air Act acid rain controls are applied on sources upwind, the additional control costs in the Northeast to compensate for ozone transport could be from \$1.4 to \$3.9 billion each year. If upwind sources met the reductions in EPA's NOx SIP Call, the economic costs to the Northeast will be reduced to about \$0.2 to \$1.1 billion each year (NESCAUM, 1998).

In addition, there are significantly more low-cost opportunities for reducing NOx emissions at upwind sources than in the Northeast. Upwind power plants are estimated to be able to meet the EPA NOx SIP Call budgets at an average cost of \$662/ ton. Northeast power plants will spend about 50 percent more to achieve the same budget requirements—about \$1,013/ton. While the cost to Northeast power plants is still reasonable, there are not enough available reductions remaining from these emission sources to fully offset the impact of transported ozone. Any additional reductions in the Northeast must come from other emission sectors at higher costs.

The Need for a Federal Role

The NESCAUM States have struggled for years to overcome the amount of smog transported into their region from upwind sources beyond their jurisdiction. Without a Federal presence to implement a multistate regional smog strategy, there is little likelihood that air quality standards can be met for millions of people living in the

OTAGDC/aqm/uamv/jul95.

⁵The values of 125 ppb (1-hour) and 85 ppb (8-hour) are used to be consistent with EPA's monitoring test for an ozone exceedance. According to EPA's data truncation guidance, an exceedance of the l-hour ozone standard does not occur until monitored l-hour concentrations exceedance of the 1-nour ozone standard does not occur until monitored 1-nour concentrations reach or exceed 125 ppb, and an 8-hour exceedance does not occur until the 8-hour average reaches or exceeds 85 ppb. For the modeling test, this may be a conservative threshold to use because models often underestimate observed peak ozone concentrations.

6 Tables of ozone exposure data calculated from the OTAG July 1995 modeled episode can be found at the OTAG Northeast Modeling and Analysis Center web address: http://sage.mcnc.org/

Northeast. The U.S. EPA's regional NOx SIP Call, recently upheld in large part by the D.C. Circuit, is the first major step by the Federal Government toward addressing this problem. A Federal "cap and trade" program for NOx, similar to the successful SO_2 trading program under Title IV of the CAAA, promises a cost effective regional program for reducing smog that cannot be accomplished through individual, uncoordinated State action (or inaction). The program provides needed flexibility to the States to devise their own control options, but the application of the program's NOx reduction targets across many States is the proper and necessary role of the Federal Government.

II. Acid deposition in the New England States

A number of recent studies have investigated acidic deposition trends (sulfates and nitrates) since the 1980's in areas of the United States (Lynch et al., 1996; Husain et al., 1998; Holland et al., 1999; Shannon, 1999). NESCAUM's work focuses on the New England region and extends the period of analysis to 1998, which is the most recent year for which deposition data are currently available. Consistent with the results of the earlier studies, NESCAUM found a decreasing trend in annual sulfate deposition in New England since 1980 (Miller, 1999). The decline after 1990 is presumably a result of SO₂ emission reductions under Title IV of the 1990 Clean Air Act Amendments, although SO₂ power plant emissions have increased somewhat since 1995 following a period of significant decline. Nitrate deposition trends show no discernable change over the same period, nor do NOx emissions.

In general, NESCAUM finds that the decreasing sulfate deposition trend in New England strongly correlates with the SO₂ emissions trend from fossil fuel power plants located within a group of eastern States and the Province of Ontario. NESCAUM estimated the geographical scope of the SO₂ source region that influences downwind sulfate deposition in New England using results from EPA's Regional Acid Deposition Model (RADM) (EPA, 1995). The RADM model "tagged" SO₂ source from power plants and large industrial sources in 53 separate subregions emissions from power plants and large industrial sources in 53 separate subregions of the eastern United States and Canada. For each subregion, the model simulated SO_2 emissions in 1985 and projected for 2010 after implementation of Title IV of the Clean Air Act, and then tracked the SO_2 and its chemical transformations during downwind transport and ultimate deposition. From RADM's deposition contribution plots, NESCAUM identified the following States and province as containing sources that contribute some level of sulfate deposition in New England: Connecticut, Delaware, District of Columbia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Ontario,

Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia (see Figure 2). To correlate with the SO₂ emissions trend, NESCAUM used sulfate deposition data from ten monitoring sites in New England collected by the National Atmospheric Deposition Program (NADP). The usual caveat applies in assessing a correlation of the control relation. A strong correlation between emission and deposition trends does not necessarily imply a cause-and-effect relationship. The difficulty is that SO₂ emissions from power plants are decreasing across much of the eastern United States. Any deposition decrease in New England could be positively correlated with any decrease in SO₂ emissions no matter where it occurs in the eastern United States. Therefore, NESCAUM uses the RADM modeling results to better refine the scale of the potential source region. Determining which upwind areas, based on the RADM results, contain sources contributing to downwind deposition provides an objective rationale for narrowing the geographical scope of the potential source region. While not completely conclusive, it provides a reasonable basis for believing a positive correlation between SO₂ emissions and sulfate deposition in the New England region will be more than coincidental.

Figure 3 presents a plot of the emissions-related correlation with the scaled sulfate deposition. The trend in sulfate deposition in the New England region is strongly correlated with fossil fuel SO_2 emissions in the source region identified from the RADM modeling results (correlation coefficient R2 = 0.78). The results are consistent with previous trend analyses by other researchers (Holland et al., 1999; Shannon 1999). The strong correlation supports a conclusion that upwind sources in the region identified by th RADM results contribute to acidic deposition in New England, and recent SO₂ reductions at these sources have led to decreases in downwind acidic deposition.

 ⁷ National Atmospheric Deposition Program (NRSP-3)/National Trends Network, 1998, NADP Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820.
 ⁸ A correlation coefficient R2 approaching a value of one indicates a strong correlation. On the other hand, an R2 approaching zero would indicate a weak correlation.

The Need for a Federal Role

A report by the General Accounting Office (GAO, 2000) concludes that at the time Congress drafted the 1990 Clean Air Act Amendments, it did not recognize how lakes and soils in the Adirondacks and other eastern areas might lose the ability to neutralize acidic deposition or use excess nitrogen. Therefore, even with reduced emissions of acid forming pollutants under the 1990 CAAA, the Northeast's ecosystems may be too impaired to respond. Noticeable improvement in the environment may not occur unless pollution sources make deeper reductions beyond current CAA requirements.

Although pollution sources are meeting the CAAA acid rain requirements, the acidification of northeastern surface waters continues. Recent reports suggest that pollution sources will need to achieve additional substantial reductions in SO_2 and NOx emissions beyond what the CAAA Title IV requires (GAO, 2000; Acidifying Emissions Task Group, 1997). Action at the State level is beginning to respond to the CAAA shortcomings. Recently signed legislation in the State of New York attempts to discourage New York businesses from selling any available emission allowances to upwind States where the added emissions may contribute further to New York's acid deposition problem. While there is debate over whether New York's action will have much of an impact, it indicates a growing level of frustration with progress toward reducing acidic deposition that is beginning to manifest itself politically. Unfortunately, a State has only limited ability to compensate for environmental damage caused by pollution sources located over a broad region outside its borders. To realistically address this problem, States need action at the Federal level.

Conclusion

States need flexibility to develop innovative programs that will meet public health and environmental goals. At the same time, the Federal Government has an important role to play in ensuring that out-of-State pollution sources share equal responsibility in solving downwind pollution problems. Air pollution transport is one such area that requires in-State flexibility combined with a Federal role to that ensure all States recognize their mutual obligations to address interstate pollution problems.9

One approach that combines State flexibility with a strong Federal role is a multistate and multipollutant "cap and trade" program. Title IV of the CAAA has had great success in accomplishing cheap reductions of SO₂ pollution across a broad region of the country. The Federal Government set an overall target, but left it up to the States and pollution sources to develop the best approach for meeting the reduction target. The requirements of EPA's NOx SIP Call promise similar flexibility in reducing NOx emissions during the group season.

in reducing NOx emissions during the ozone season.

At the Federal level, a multi-pollutant cap and trade scheme along the lines proposed by Senator Smith would facilitate flexible State action in partnership with a Federal role. Under a multi-pollutant scheme, further reductions in SO₂ and NOx emissions could build upon the success of the current CAAA Title IV national SO₂ emission cap and trade program. The NOx SIP Call, as currently being implemented, will cap NOx emissions in a number of eastern States, but only during the 5-month ozone season. States will need Federal support to further tighten the SO₂ cap beyond current Title IV levels, and extend NOx limits from seasonal to annual requirements in order to fully address continuing acid rain problems. States could also pursue complementary reductions in other pollutants, such as mercury, and develop voluntary programs to reduce carbon dioxide, a potent greenhouse gas. The multipollutant approach would give States flexibility in developing innovative strategies to reduce a range of pollutants emitted in-State, but retain a Federal presence to ensure all pollution sources share in their mutual responsibility to address interstate pollution problems, regardless of where the sources are located.

REFERENCES

Acidifying Emissions Task Group, 1997. Toward a National Acid Rain Strategy, Submitted to the National Air Issues Coordinating Committee. Report available from Environment Canada, Ottawa (October).

Blumenthal, D.L., et al. 1997. Transport and Mixing Phenomena Related to Ozone Exceedances in the Northeast U.S., Sonoma Technology Report STI-996133-1710-WD1.1, February.

Clarke, J.F. & J.K.S. Ching 1983. Aircraft Observations of Regional Transport of Ozone in the Northeastern United States, Atmos. Envt., Vol. 17, pp. 1703–12.

EPA, 1995. Acid Deposition Standard Feasibility Study Report to Congress, EPA 430-R-95-001a (October).

EPA 1998. National Air Quality and Emissions Trends Report, 1996, EPA 454/

R-97-013, p. 17, January.
Fiore, A.M., D.J. Jacob, J.A. Logan, & J.H. Yin 1998. Long-Term Trends in Ground Level Ozone over the Contiguous United States, 1980-1995. J. Geophys. Res., Vol. 103, pp. 1471-80.

GAO (General Accounting Office), 2000. Acid Rain: Emissions Trends and Effects in the Eastern United States, General Accounting Office, Washington, DC (March). Gillani, N.V. & W.E. Wilson 1980. Formation and Transport of Ozone and Aerosols in Power Plant Plumes, Ann. N.Y. Acad. Sci., Vol. 338, pp. 276–96. Holland, D.M., P.P. Principe, and J.E. Sickles, II, 1999. Trends in atmospheric sulfur and nitrogen species in the castern United State for 1999 1997.

sulfur and nitrogen species in the eastern United States for 1989–1995, Atmos. Envt., Vol. 33, pp. 37–49.

Husar, R.B. 1996. Spatial pattern of daily maximum ozone over the OTAG region,

Web address: http://capita.wustl.edu/OTAG/Reports/otagspat/otagspat.html. Husain, L., V.A. Dutkiewicz, and M. Das, 1998. Evidence for decrease in atmospheric sulfur burden in the eastern United States caused by reduction in SO₂ emis-

sions, Geophys. Lett., Vol. 25, pp. 967–970. Lurmann, F.W., et al. 1997. Evaluation of the UAM-V Model Performance in the Northeast Region for OTAG Episodes, Sonoma Technology Report STI-996133-1716-

Lynch, J.A., V.C. Bowersox, and J.W. Grimm, 1996. Trends in precipitation chemistry in the United States, 1983–1994—An Analysis of the effects of Phase I of the Clean Air Act Amendments of 1990, Title IV, U.S. Geological Survey Open-File Re-

Miller, D.F., A.J. Alkezweeny, J.M. Hales, & R.N. Lee 1978. Ozone Formation Related to Power Plant Emissions, Science, Vol. 202, pp. 1186–88.

Miller, Paul J., 1999. Emissions-related acidic deposition trends in Maine and New England, EPA Project No. CX826563-01-0, NESCAUM, Boston, MA (December)

NESCAUM (Northeast States for Coordinated Air Use Management), 1998. The Costs of Ozone Transport: Achieving Clean Air in the East, NESCAUM, Boston,

Shannon, J.D., 1999. Regional trends in wet deposition of sulfate in the United States and SO emissions from 1980 through 1995, Atmos. Envt., Vol. 33, pp. 807–

White, W.H., D.E. Patterson & W.E. Wilson, Jr. 1983. Urban Exports to the Nonurban Troposphere: Results from Project MISTT, J. Geophys. Res., Vol. 88, pp. 10,745-52.

STATEMENT OF ROBERT J. HUSTON, CHAIRMAN, TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Mr. Chairman, members of the Senate Committee on the Environment and Public Works, I am Bob Huston, Chairman of the Texas Natural Resource Conservation Commission. I am pleased to provide information to you about the successes we've had in Texas in assuming delegation of environmental responsibilities from the U.S.

Environmental Protection Agency, in particular delegation of the National Pollutant Discharge Elimination System (NPDES) permitting authority.

I add my testimony to that of other representatives from across the United States: from South Carolina, from New Hampshire, from Pennsylvania, and Utah. There are many more like us who could also testify to the successes that come from devolution of environmental responsibilities. Because while the issues may be similar across the States, there are marked differences in how those issues should be approached. Quality air, good water, safe waste disposal these are the goals to which we all adhere. Geology, climatic conditions, topography, industrial and commercial activity, population clusters, diversity of natural resources these are some of the variables that make each of our States unique and that require responses that are tailor-made rather than cut down from a one-size-fits-all.

EPA cannot begin to respond to the unique needs and circumstances of each State. The sheer size of this country makes that a foregone conclusion. Rather, EPA works best when it serves as our partner, providing oversight, guidance and assist-

I say this with profound conviction born of first-hand experience through baptism by fire.

Let me lay out the scene for you:

I was appointed to the TNRCC by Governor George W. Bush in January 1999. I stepped into the position just as Texas, after 25 years of effort, was delegated re-

sponsibility from the EPA for administering the NPDES program. NPDES is the national program for issuing permits to all facilities that discharge wastewater. Permittees range from huge industrial complexes and municipal wastewater treatment facilities to confined animal feeding operations to facilities serving a single subdivision or mobile home park. Permits specify a whole host of criteria: the volume of wastewater that can be discharged under differing conditions as well as the composition of the discharge, such as the concentration of chemicals, nutrients, and other substances contained in the discharge. Those who fail to comply with the terms of the permit face significant penalties. NPDES permits expire after 5 years; when reissued, they often require the permitted facility to meet tighter discharge parameters. This process ensures continued progress toward enhanced water quality

... at least in theory.

In reality, the NPDES program for Texas was not in very good condition. When Texas inherited NPDES from EPA we also inherited a backlog of some 4,000 permit files, including many applications, some for renewals, others for new permits. Many of the files were obsolete. Some of the files included applications that were 20 years

. and had never been acted on.

old . . . and had never been acted on.

This is not to say, however, that no one in Texas was tracking, monitoring, assessing, and, when appropriate, enforcing water quality regulations. The State of Texas was handling these tasks and handling them well. Texas knows how to properly run a water permitting program. During the 25 years that NPDES had remained a federally managed program in Texas, we had been issuing State discharge permits to a much broader universe of facilities. Although NPDES requires permits of all facilities, the program as administered by EPA was focused on major facilities. As demonstrated by the backlog, it was unable to handle most of the minor facilities. Texas waste-water discharge permits, on the other hand, were being issued to all facilities, major and minor. This is significant because we are unique among States in having significantly more almost five times more minor facilities as major ones. Our current major and minor. This is significant because we are unique among states in naving significantly more almost five times more minor facilities as major ones. Our current tally is about 550 major facilities compared to about 2,500 minor facilities. Those minor facilities would have fallen through the cracks without our State permitting program. And as we all know, small facilities can have potentially major im-

pacts, and the cumulative effects of this universe of dischargers cannot be ignored.

Basically we were running a system that was parallel to the NPDES but much

more comprehensive. Furthermore, the discharge parameters for all permits whether written by EPA or by Texas have always been based on water quality standards set by the State, as provided by the Clean Water Act. The States are the ones with detailed knowledge about the water bodies within our boundaries.

Over the years, we continued to refine our system to reflect our ongoing work in the field. For example, Texas has successfully moved permit renewals to a basin rotation, so that all permits within a given river basin come up for renewal at the same time. This allows us to consider the cumulative impacts of wastewater discharges on water quality, rather than looking at each facility in isolation.

In Texas, like in many other States, the program was working and working well. Overlaying this comprehensive and effective State program with a Federal program provided little benefit to the environment and was burdensome to the regulated community

Fortunately, Texas was delegated the program in September 1998, along with its 4,000 files.

Now, with the new Texas Pollutant Discharge Elimination System, facilities no longer need both a Federal and a State permit. They can now apply for a single wastewater discharge permit through a streamlined and more cost-effective permitwastewater discharge per internogram a strainment and more concerned that the strain records a serious process. For entities with complex permits, this means thousands of dollars in cost savings and processing time. For Texas, it means more efficient and effective water quality protection, with permits tailored to the needs and conditions of each local water body and the communities it serves. The end result is efficient protection of our water resources.

Building this new system was not easy. We needed to quickly merge the two permitting systems, absorb the Federal backlog, and do so without unduly affecting the many permittees who expect and deserve their new and renewal applications be processed in a timely fashion. It was akin to changing a tire on a moving car.

The TNRCC workload increased dramatically. Nonetheless, after first organizing and categorizing the massive set of inherited files, we set for ourselves an ambitious goal of clearing out in one year (calendar 1999) the permit backlog accumulated by EPA over 20-plus years. I am proud to say we excelled at the job: by January 2000 we had erased the backlog and had the new TPDES program running on an even

How did we do it? There are three parts to that answer. Hard work and knowhow are one part. Certainly, we could not have accomplished this feat without the dedication of TNRCC staff and their years of experience in developing wastewater discharge permits, their thorough knowledge of the State's water bodies, and their comprehensive understanding of Texas water quality standards.

Another part of the answer is flexibility. We reallocated resources from other parts of the agency primarily permit writers from our air and waste programs so that we could focus intensive efforts on this project. This type of flexibility is the hallmark of State environmental programs; we can respond to priorities in ways not available to the EPA. In Texas, we see the future of environmental successes not always in prescriptive regulations and procedural mandates but rather in regulatory flowibilities that set clearly defined goals and standards for accountability. This is

lexibilities that set clearly defined goals and standards for accountability. This is the way we run our agency and the way we craft our programs.

Finally, the third part of the answer is EPA itself. Region 6, under Regional Administrator Gregg Cooke, provided us with \$2.5 million in grants to bring additional resources to the effort. Just as importantly, Region 6 furnished technical resources and provided oversight assistance. Region 6 made delegation work.

TPDES is a success story for everyone:

• for the TNRCC, which took an already massive State permitting program and merged it seamlessly with a Federal program;

• for Texas facilities, which now have a single efficient system for permitting wastewater discharges;

for Texas communities, which enjoy a sound and responsible program for protecting the quality of water in their lakes and rivers; and
 for the EPA, which can now focus on its proper role of overseeing and provid-

ing resources to ensure successful implementation of Clean Water Act objectives. Through delegation, it has achieved its goals.

Inrough delegation, it has achieved its goals.

In Texas, we firmly believe this success can be replicated in other areas, most notably with the Total Maximum Daily Load program. To EPA we say yes, set the goals, but give us the flexibility to achieve those goals in the most efficient and effective manner, taking into account our unique circumstances. Delegation, not micromanagement, is the key to successful protection of the environment.

Thank you for the opportunity to share this success story with you.

GEORGIA DEPARTMENT OF NATURAL RESOURCES, May 19, 2000.

The Honorable ROBERT C. SMITH, Chair, Senate Environment and Public Works Committee, U.S. Senate, Washington, D. C. 20510

Dear Chairman Smith: I appreciate the opportunity to enhance the testimony of my ECOS colleagues as to the role of the States in enforcement of the environmental statutes of the nation.

The Georgia Environmental Protection Division (EPD) is responsible for enforcing 20 State laws passed over the past 34 years to protect Georgia's environmental resources. In addition, the responsibility for environmental programs under four Federal laws is delegated to EPD.

The regulated community affected by these laws is extremely diverse, ranging from individual car owners to large corporations to most local governments.

EPD directly regulates over 60,000 facilities by permit, rule and license. There are 30,480 facilities regulated by permit, 29,260 regulated by rule and 772 regulated by license. In addition, there are 2,800,000 vehicles in metropolitan Atlanta regulated by emission testing and inspection.

EPD uses various mechanisms to assure compliance and to respond to non-compliance. These include inspections, review of self monitoring data, written violation notices, orders, monetary settlement (penalties) collection and referrals to the Attorney General for penalty imposition hearings.

We estimate the compliance rate of facilities in Georgia to be roughly 90 percent.

The remaining 10 percent is the subject of our enforcement.
From 1991 through 1997, EPD executed an average of 412 enforcement orders each year. However, starting in 1998 our enforcement has been increasing. In 1998, we issued 996 enforcement orders and in 1999,1410 orders. Since 1991, EPD has collected over \$50,000,000 in environmental penalties.

An important question is, "How many of our enforcement orders pertain to federally delegated programs?" The answer is "the vast majority". For example, in 1999,1263 of the 1410 orders were for such programs.

I would like to highlight an important Georgia enforcement policy. Starting in 1998, Georgia has "zero-tolerance" for violations of the Georgia Water Quality Con-

trol Act (the equivalent of the Federal Clean Water Act) for facilities located in sensitive river basins (basically all of highly populated North Georgia). This zero-tolerance policy provides that any violation, no matter how minor, results in a monetary penalty. This includes wastewater permit violations, sewer overflows or spills, and failure to meet construction schedules. This policy was put in place with the thinking that the owners and operators of wastewater systems have had adequate time to know the requirements and to adhere to them. This policy allows no excuse for violations. In 1998, 79 enforcement orders were executed and \$339,000 penalty dollars collected resulting from this policy. In 1999, the 75 enforcement orders were issued and \$552,000 were collected. It is our hope that theses numbers will decrease over time as our enforcement policy will convince cities and industries to avoid even the most minor infractions.

It would be inappropriate to fail to mention and commend Region IV of the U.S. Environmental Protection Agency for its support of our enforcement program. Although EPD carries out a very effective program, we typically ask and receive assistance from Region IV on a few key enforcement cases yearly. Region IV accepts our requests willingly and aggressively.

our requests willingly and aggressively.

Thank you for your consideration of our information and the testimony of other ECOS members.

Sincerely,

HAROLD F. REHEIS, *Director, The States Protect the Environment.*