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NOMINATION OF MICHAEL O. LEAVITT

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

ON

THE NOMINATION OF GOVERNOR MICHAEL O. LEAVITT, OF UTAH, TO BE ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY

SEPTEMBER 23, 2003

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ONE HUNDRED EIGHTH CONGRESS
FIRST SESSION

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NOMINATION OF MICHAEL O. LEAVITT

TUESDAY, SEPTEMBER 23, 2003

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

The committee met, pursuant to notice, at 9 o'clock a.m. in room 406, Senate Dirksen Building, Hon. James M. Inhofe [chairman of the committee] presiding.

Present: Senators Inhofe, Jeffords, Voinovich, Wyden, Thomas, Clinton, Baucus, Reid, Murkowski, Cornyn, Warner, Allard, Boxer, Crapo, Chafee, and Bond.

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

Senator INHOFE. I would like to make one comment before moving on to Governor Leavitt and whomever else would come forward, Senator Bennett, I think Senator Hatch is here for introductory purposes. While you are being seated, let me comment briefly on some criticism directed at the Governor concerning the nomination protocol.

Last week, Senator Lieberman issued a press release announcing his intention to place a hold on Governor Leavitt's nomination citing his refusal to answer pre-hearing questions. As I stated in my response last week, Governor Leavitt never officially received questions from the EPW committee. In fact, it is unprecedented for this committee to subject a nominee for the EPA Administrator to pre-hearing questions. It has never happened before. Our standard practice is for all members to have the opportunity to meet with the nominee privately prior to the hearing and to ask formal questions during the hearing and written questions after the hearing.

I know that Senator Lieberman was offered this meeting and he rejected it. He wasn't able to work it into his schedule and I think it is a shame he is not here today. I certainly he would not have a hold for this purpose because he is in California at some fundraisers right now and I believe this is more important.

With that, we will move on to the opening statements. We are going to have a full house today and we will have to stop by noon. My intention would be for us to limit our opening statements. Senator Jeffords and I will limit ours to 5 minutes. We would ask the members to limit theirs to 3 minutes. Then we will have 5-minute rounds, as many rounds as you want to have. Senator Wyden, we talked about this and you will certainly get ample opportunity to do that. We will start with my opening statement.

The EPW committee convenes this morning to consider the nomination of Governor Michael Leavitt to be the next Administrator of the Environmental Protection Agency. It is my honor to welcome Governor Leavitt to the committee. I apologize for the fact that you were inconvenienced and your wife was inconvenienced even more last week when we had to change it at the last minute from Thursday to Tuesday. We had one of our members who objected to that time.

I also want to thank you for your commitment to address the Tar Creek situation. The members of this committee have heard me talk about this now since last January as the most devastating Superfund site in America. I know we will be able to work out a solution to that during your tenure.

Let me be clear from the outset, this may come as news to some of you but this hearing is about Governor Mike Leavitt, about his qualifications to serve as the Nation's top environmental official. It is not about the Administration, it is not about that environmental policy. Governor Leavitt is currently the longest serving Governor in the Nation, having ably served the people of Utah for 11 years. Five times during his administration, independent public policy analysts have ranked Utah the Nation's best managed State.

He is a former chairman of the National Governors' Association where he served as Governor with two of our members, Senator Voinovich and Senator Carper, who I understand will be here very shortly. He has also chaired the Western Governors' Association as well as the Council of States.

Consider the Governor's accomplishments on air quality, the State of Utah meets all Federal air quality requirements. His State under his leadership meets all Federal air quality requirements. During 11 years as Governor, Mike Leavitt has made great strides in improving Utah's water. The facts speak for themselves as the State's watersheds are among the cleanest in the Nation.

Governor Leavitt has also implemented initiatives similar to legislation sponsored by Senator Chafee which this committee and the full Senate passed unanimously. In Utah, nearly 5,000 underground storage tanks have been cleaned up and upgraded preventing toxic substances from entering the State's water supply. Also, the EPA has adopted Utah's concentrated animal feeding operations which reduced the impact of farming and ranching on water quality as a national model. Governor Leavitt, I congratulate you.

As I noted earlier, much of this hearing will be focused on something else, President Bush's environmental record. I am confident we will hear the drum beat of denunciations that begin with the day President Bush took office. The litany goes something like this. The air is dirtier; kids are suffering from asthma attacks and respiratory diseases; precious lakes, rivers, streams and forests are more polluted and big oil's campaign contributions are corrupting national environmental policy. None of this has a basis in fact.

What are the facts? Last Monday the EPA released its 2003 Air Quality Report. The findings might shock some in this room. Today the air is cleaner than the day President Bush took office. Under SO2 emissions from powerplants, we are 9 percent lower than we were in 2000. NOX emissions from powerplants also show a 13 per-

cent reduction from the year 2000. There is certainly more work to be done and that is why the President has initiated his Clear Skies Initiative which is the most far-reaching and aggressive reduction in emissions of any President in history, some 70 percent reductions in emissions of SOX, NOX and mercury.

Even environmental groups couldn't ignore it when in April of this year President Bush announced a 90 percent reduction in off road diesel fuel emissions. The EPA estimated by 2030, new regulations will prevent 9,600 premature deaths a year, along with 8,300 hospitalizations, 16,000 heart attacks and 5,700 children's asthma related emergency room visits. Even the NRDC called it a bold proposal that will be the biggest public health step since lead was removed from gasoline more than two decades ago. Just after he took office, President Bush proposed landmark brownfields legislation. It passed unanimously in this committee, sailed through both Houses of Congress and will help cleanup 500,000 brownfield sites all across the Nation.

We are going to hear a lot today about President Bush's proposal on New Source Review, Superfund and healthy forests. You are going to hear that New Source Review reform amounts to the biggest clean air rollback in history. It is absolutely false. New source review reform does not permit any pollution increase but merely allows companies to modernize their facilities to make them more efficient and more pollution free.

You are going to hear that under Superfund, President Bush is letting polluters off the hook. That is absolutely false. He has a polluters pay policy which is in effect today and polluters are in fact paying.

You are going to hear that the President's healthy forest imitative is a gift to the timber industry to destroy forests. You just ask anyone in New Mexico or Arizona and nothing could be further from the truth.

I guarantee you this. President Bush and Mike Leavitt will further the progress we have made in the last 30 years and President Bush and Mike Leavitt will lead us into a new era of environmental protection.

[The prepared statement of Senator Inhofe follows:]

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

Good morning. The Committee on Environment and Public Works convenes this morning to consider the nomination of Governor Michael Leavitt to be the next Administrator of the Environmental Protection Agency. It is my honor to welcome Governor Leavitt to the committee and I look forward to his testimony. Governor, I apologize to you and your wife for the last-minute cancellation. I hope you weren't too inconvenienced. It's good to have you here.

I also want to thank you for your commitment to addressing the Tar Creek Superfund site in Oklahoma. As you know, this is a top priority for me and I appreciate discussions we have already had on this subject. I look forward to working with you and to our upcoming tour of the area after you are confirmed.

Let me be very clear from the outset: this may be news to some, but this hearing is about Governor Mike Leavitt, about his qualifications to serve as the nation's top environmental official. Some environmental groups view this hearing as a proxy fight over President Bush's environmental record. These attacks cannot go unanswered, but for now I want to talk about a nominee with an impeccable record of service to our country.

Where to begin? There is a lot to talk about. Governor Leavitt's resume is marked by extensive experience in government and the private sector, and a long list of stellar accomplishments.

I don't think anyone has any doubt—on either side of the aisle—that Mike Leavitt is supremely qualified to be the next Administrator of the Environmental Protection Agency. And I would also say that no member disagrees that Mike Leavitt has the proper moderation, balance and temperament to handle the challenges that come with the job.

Governor Leavitt is currently the longest serving Governor in the Nation, having ably served the people of Utah for 11 years. Five times during his administration, independent public policy analysts have ranked Utah the nation's best-managed State.

He is a former chairman of the National Governors' Association, where he worked closely with two former Governors on this committee: Sen. Voinovich and Sen. Carper. He also chaired the Western Governors' Association, the Republican Governors' Association, and the Council of the States. Before being elected Governor of Utah in 1992, he served as an outside director of two large public corporations and was a member of the Utah State Board of Regents, overseeing the State's nine colleges and universities.

Some environmental groups have airily dismissed these accomplishments. True to form, they have maligned the Governor's record. The Sierra Club, for example, called Governor Leavitt a "disappointing choice," but never offered compelling proof to justify its opinion. The reason is simple: the facts show that Governor Leavitt's environmental record is one of the best in the Nation.

Just consider the Governor's accomplishments on air quality: the State of Utah meets all Federal air quality requirements. Let me repeat that: the State of Utah meets all Federal air quality requirements. This was not the case before Governor Leavitt took office.

Visibility in the West has improved dramatically, largely as a result of Governor Leavitt's service as co-chair of the Western Regional Air Partnership and vice-chair of the Grand Canyon Visibility Transport Commission. The commission made over 70 recommendations improving visibility in 16 national parks and wilderness areas on the Colorado Plateau.

Along with air quality, the American people view water quality as one of their top environmental priorities. So does Governor Leavitt. During his 11-year tenure, Governor Leavitt made great strides in improving Utah's water. The facts speak for themselves: the State's watersheds are now among the cleanest in the Nation. Seventy-three percent of Utah's streams currently meet Federal water quality standards, compared to 59 percent 10 years ago, a 24 percent improvement since Governor Leavitt took office. Currently, 60 percent of the nation's streams meet this standard.

Governor Leavitt also implemented initiatives similar to legislation sponsored by Sen. Chafee, and which this committee, and the full Senate, approved unanimously. In Utah, nearly 5,000 underground gas storage tanks have been cleaned up and upgraded, preventing toxic substances from entering the State's water supply. Also, the Environmental Protection Agency has adopted Utah's Concentrated Animal Feeding Operations, which reduce the impact of farming and ranching on water quality, as a national model.

As his record attests, Governor Mike Leavitt is an excellent nominee and highly qualified to head EPA. Unfortunately, as I noted earlier, much of this hearing will be focused on something else: President Bush's environmental record.

I'm confident we'll hear the drumbeat of denunciations that began the day President Bush took office. The litany goes something like this: the air is dirtier, more kids are suffering from asthma attacks and respiratory disease, precious lakes, rivers, streams, and forests are more polluted, and Big Oil's campaign contributions are corrupting national environmental policy.

This kind of apocalyptic environmental rhetoric isn't new. We heard it during the presidency of George H.W. Bush. In 1992, the Sierra Club said, "We've learned the hard way that President Bush cannot be trusted." President Bush, of course, signed the 1990 Clean Air Act, including the highly successfully Acid Rain program, into law. And today air quality by any measure has improved dramatically.

This kind of invective is an effective fundraising tool for some groups-and one, I might add, that brings in a lot of money. But none of this has any basis in fact.

So what are the facts? On Monday, EPA released its 2003 air quality report. The findings might shock some in this room. Today the air is cleaner than the day President Bush took office. SO2 emissions from power plants were 10.2 million tons in 2002, 9 percent lower than in 2000. NOx emissions from power plants also contin-

ued a downward trend, measuring 4.5 million tons in 2002, a 13 percent reduction from 2000.

There's certainly more work to be done, and that's why President Bush proposed his Clear Skies Initiative. Clear Skies is the most aggressive Presidential initiative in American history to reduce power plant emissions. It will reduce emissions quicker and at lower cost than existing law and it is based on the 1990 Acid Rain Program, which has reduced SO2 emissions 50 percent, and achieved nearly 99 percent compliance.

In April of this year, President Bush announced a 90 percent reduction in off-road diesel fuel emissions. EPA estimated that by 2030 the new regulations will prevent 9,600 premature deaths a year, along with 8,300 hospitalizations, 16,000 heart attacks, and 5,700 children's asthma-related emergency room visits.

Even environmental groups-who can't stand to offer the President a hint of praise-couldn't ignore it. NRDC called it a "bold proposal" that will be "the biggest public health step since lead was removed from gasoline more than two decades ago."

Just after he took office, President Bush proposed landmark Brownfields legislation. It passed unanimously in this committee, sailed through both houses of Congress by overwhelming margins, and will help cleanup 500,000 brownfield sites all across the Nation. In July, EPA provided $73.1 million in grants to 37 States for this purpose. I say without hyperbole that this legislation was one of the most significant and successful bipartisan environmental accomplishments in a generation.

President Bush also took a stand on an important international environmental issue: the Treaty on Persistent Organic Pollutants, or POPS Treaty. President Bush signed the treaty during a Rose Garden ceremony, and then urged this committee to pass implementing legislation sponsored by Sen. Chafee and Sen. Jeffords.

Now we're going to hear a lot today about President Bush's proposals on New Source Review, Superfund, and Healthy Forests. I want to comment briefly on each of them.

- You're going to hear that New Source Review reform amounts to the biggest clean air rollback in history. Absolutely false. NSR reform does not permit ANY pollution increases but merely allows companies to modernize their facilities and make them more efficient.
- You're going to hear that under Superfund President Bush is letting polluters off the hook. Absolutely false. Whenever there is an identifiable, viable party responsible for a Superfund site, they pay. And they are paying now.
- You're going to hear that the President's Healthy Forests Initiative is a gift to the timber industry to destroy our forests. Absolutely false. This initiative is designed to PREVENT forest fires that have so ravaged the livelihoods of families and businesses in the West.

I will say this: if our economy continues to grow and prosper-something President Bush is actively encouraging-our environment will continue to improve well into the future. And President Bush's policies will have a lot to do with it.

I guarantee you this: President Bush and Governor Mike Leavitt will further the progress we've made over the last 30 years. History will show that key environmental indicators will improve faster, more aggressively, and at lower cost to the public. As with the last 2 years, there will be no rollbacks, no setbacks, no pollution increases, and no deterioration from our present condition. President Bush and Mike Leavitt will lead us into a new era of environmental protection.

Senator INHOFE. Before we go on with further opening statements, I would like to recognize Senator Bennett or Senator Hatch, whoever wishes to go first. Senator Hatch, you have seniority. Do you have any comments you want to make about our nominee today?

STATEMENT OF HON. ORRIN G. HATCH, A UNITED STATES SENATOR FROM THE STATE OF UTAH

Senator HATCH. Thank you, Mr. Chairman, Senator Jeffords and members of this distinguished committee.

I thank you for holding today's hearing for Governor Leavitt's nomination to head the Environmental Protection Agency. I can personally think of no better candidate for the job. Let me tell you about Mike Leavitt. I think this is important.

I have known Mike Leavitt for almost 30 years. He is bright, he is imminently capable and nobody works harder. Mike Leavitt listens before he acts, he consults before he commits, and above all, he is fair and honest and everybody knows it. In short, he is the perfect candidate for one of the toughest jobs in government today, perhaps the toughest job in government today.

So Mr. Chairman, it is with particular pleasure that I introduce Mike and Jackie Leavitt to you this morning. I look forward to welcoming my friends to Washington for their more permanent stay after the Senate confirms Michael Leavitt as the Administrator of the EPA.

Let me state for the record that Michael Leavitt is one of our Nation's most able public figures. Is it any wonder that after serving longer than any other sitting Governor, he has maintained one of the strongest approval ratings ever enjoyed by a public official at his level. The Governor has worked tirelessly for the good of Utah, yet he has found time to serve as the chair of the Council of State Governors, the Republican Governors' Association, the Western Governors' Association and the National Governors' Association.

The committee will hear many critics of the President's environmental policies who I hope will be fair and will not use the nomination of Governor Leavitt as a soapbox to castigate our Chief Executive.

I don't think Governor Leavitt's stellar legacy and his careful stewardship of Utah's natural resources should be sacrificed at the ardor of Presidential politics. With confidence, I would hold up Utah's environmental record to that of any other State in the Union. While it is appropriate that Senators engage in a reasonable debate about the current Administration's environmental policies, I would caution my colleagues to consider the environmental challenges faced by their own States before anybody slings any unfair comments at a State which under Governor Leavitt has become a model for beauty and good management.

Mr. Chairman, I have also seen news articles and press releases highlighting some of the environmental challenges faced by Utahans. None of these challenges began during Governor Leavitt's Administration and a number of them have no relationship at all to the responsibilities of running the EPA. All States have environmental challenges, so rather than create a laundry list of Utah's problems, we should focus on how Governor Leavitt has responded to Utah's challenges.

It is a simple matter for a policymaker to give lip service to the environmental protection. Governor Leavitt has been a consistent and public supporter for protecting Utah's environment, but actions speak louder than words. No actions speaks louder than the willingness to allocate resources to an area of concern.

In his 10 years as Governor, Michael Leavitt has brought about a 41 percent increase in spending on environmental protection and that is after adjusting for inflation. According to the Environmental Council of States, the average per capita spending on the environment is $51.80. Under Michael Leavitt, however, Utah has surpassed that average spending $62.31 per capita on the environment. This is all the more impressive considering Utah has fewer

taxpayers per capita because our families are larger than average throughout the country.

When it comes to putting his money where his mouth is, Governor Leavitt also has shown his priorities on the total budget spent on the environment. The average State spends about 1.4 percent of its budget on the environment. Utah shines under Governor Leavitt's leadership by spending 2 percent of its spending on the environment.

Mr. Chairman, the greatest indicator of an Administration's priorities is reflected in how money is spent. However, the next question should be how effectively that money was spent. I recall that before Governor Leavitt's first term of office, Utah routinely failed to meet national clean air standards. This was due in large part to the fact that the vast majority of Utahans live in a valley floor surrounded on all sides with mountains. These mountains are beautiful, as we all know, but under certain weather conditions, they can serve to trap emissions in the Salt Lake Valley.

Governor Leavitt has helped our State overcome this obstacle to bring our State into constant and consistent compliance with the EPA's air quality standards. He has also lead initiatives in our State to preserve open space, improve our fisheries and upgrade our municipal companies and systems. Governor Leavitt has also been a leader in finding solutions to regional air problems by helping to promote the Grand Canyon Visibility Transport Commission and the Western Regional Air Partnership.

When Governor Leavitt took office about 60 percent of Utah's streams met Federal water quality standards which is the current national average for States. Under Mike Leavitt's leadership, 73 percent of Utah's streams now meet the Federal standards, a very significant improvement well above the national average.

Mr. Chairman, I hope we can keep in mind that these were not the actions of a man who sought the nomination to head the EPA. These were actions of a man who loves the environment and who loves his State, my State, Senator Bennett's State and 2.2 million people's State.

Governor Leavitt is a man who recognizes that a healthy environment is as important as a healthy economy. However else his detractors may try to spin it, the numbers prove this to be the case. The numbers also show Governor Leavitt is one heck of a manager. In five of his 10 years as Utah's chief executive, Utah has been ranked the best managed State, five of the 10 years Utah has been ranked the best managed State.

USA Today recently concurred calling Utah the best fiscally managed State in the country. Even after the extremely tough financial times faced by our States in recent years, under Governor Leavitt, Utah has maintained its AAA bond rating.

Mr. Chairman, President Bush has done the Nation a real service with this nomination and I look forward to the positive impact that Governor Leavitt will have on this important agency. Utahans know that Governor Leavitt took a clean, beautiful and strong State and made it cleaner, more beautiful and stronger. What more could we ask for in the nominee to head the Environmental Protection Agency.

I know Mike Leavitt. He is an honorable, decent, good human being with exceptional qualities and exceptional intelligence who knows how to get along with everybody and who can make the tough decisions that have to be made. He is precisely what is needed at EPA and I think everybody on this committee will be proud of him when he concludes his service at the EPA.

I am talking to my fellow colleagues. I hope that you will treat him fairly. He deserves it. I think all of his leadership of the Governors throughout this country is more than ample evidence that he deserves it and I hope you will approve his appointment as quickly as possible.

Again, I thank you, Mr. Chairman, for holding this hearing. I know that you and the rest of our colleagues will be impressed with Michael Leavitt as a person and as a proven administrator. I just want you to know that I strongly support him and I hope all of you will also.

[The prepared statement of Senator Hatch follows:]

STATEMENT OF HON. ORRIN HATCH, U.S. SENATOR FROM THE STATE OF UTAH

Mr. Chairman and members of the committee, thank you for today's hearing on Governor Mike Leavitt's nomination to head the Environmental Protection Agency. I can think of no better candidate for this important job.

Let me tell you about the Mike Leavitt I have known for almost 30 years. He is bright. He is eminently capable. And nobody works harder. Mike Leavitt listens before he acts. He consults before he commits. And above all, he is fair and honest.

In short, he is the perfect candidate for one of the toughest jobs in government. (And perhaps, the toughest job in government.)

And so, Mr. Chairman, it is with particular pleasure that I introduce Mike and Jackie Leavitt to you this morning, and I look forward to welcoming my friends to Washington for their more permanent stay after the Senate confirms Michael Leavitt as the Administrator of the EPA.

Mr. Chairman, let me state for the record that Michael Leavitt is one of our nation's most able public figures. Is it any wonder that after serving longer than any other sitting Governor, he has maintained one of the strongest approval ratings ever by enjoyed a public official at his level? The Governor has worked tirelessly tirelessly for the good of Utah. Yet, has found the time to serve as the chair of the Council of State Governors, the Republican Governors' Association, the Western Governor's Association, and the National Governor's Association.

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I don't think Governor Leavitt's stellar legacy and his careful stewardship of Utah's natural resources should be sacrificed on the altar of Presidential politics.

With confidence, I would hold up Utah's environmental record to that of any other state in the Union.

While it is appropriate that senators engage in a reasonable debate about the current Administration's environmental policies, I would caution my colleagues to consider the environmental challenges faced by their own States before slinging mud at a State which under Governor Leavitt has become a model for beauty and for good management.

Mr. Chairman, I have already seen news articles and press releases highlighting some of the environmental challenges faced by Utahns. None of these challenges began during Governor Leavitt's administration and a number of them have no relationship at all to the responsibilities of running the EPA. All States have environmental challenges, so rather than create a laundry list of Utah's problems, we should focus on how Governor Leavitt has responded to Utah's challenges.

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spending on the environment is $51.80. Under Michael Leavitt, however, Utah has surpassed that average, spending $62.31 per capita on the environment. This is all the more impressive considering Utah has fewer taxpayers per capita because our families are larger than average.

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spent. However the next question should be how effectively that money was spent.

I recall that before Governor Leavitt's first term of office, Utah routinely failed to meet national clean air standards. This was due in large part to the fact that the vast of Utahns live on a valley floor surrounded on all sides with mountains. These mountains are beautiful, but under certain weather conditions they can serve to trap emissions in the Salt Lake Valley. Governor Leavitt has helped our State overcome this obstacle to bring our State into consistent compliance with the EPA's air quality standards. He has also led initiatives in our State to preserve open space, improve our fisheries, and upgrade our municipal sewer systems.

Governor Leavitt also has been a leader in finding solutions to regional air problems by helping to promote the Grand Canyon Visibility Transport Commission and the Western Regional Air Partnership. When Governor Leavitt took office, about 60 percent of Utah's streams met Federal water quality standards, which is the current national average for States. Under his leadership, though, 73 percent of Utah's streams now meet the Federal standards—a very significant improvement and well above the national average.

Mr. Chairman, I hope we can keep in mind that these were not the actions of a man who sought a nomination to head the EPA.

These were the actions of a man who loves the environment and who loves his State.

Governor Leavitt is a man who recognizes that a healthy environment is as important as a healthy economy. However else his detractors may try to spin, the numbers prove this to be the case.

The numbers also show Governor Leavitt is one heck of a manager. In five of his 10 years as Utah's chief executive, Utah has been ranked the best-managed State. USA Today recently concurred, calling Utah the best fiscally managed State in the country. Even after the extremely tough financial times faced by our States in recent years, under Governor Leavitt, Utah has maintained its Triple A bond rating.

Mr. Chairman, President Bush has done the Nation a real service with this nomination, and I look forward to the positive impact that Governor Leavitt will have on this important Agency.

Utahns know that Governor Leavitt took a clean, beautiful, and strong State and made it cleaner, more beautiful, and stronger. What more could we ask for in a nominee to head the Environmental Protection Agency?

Again, I thank you, Mr. Chairman, for holding this hearing. I know that you and the rest of my colleagues will be impressed with Michael Leavitt as a person and as a proven Administrator. Thank you.

Senator INHOFE. Senator Hatch, thank you for that very good statement. We appreciate that.

We will now recognize Senator Bennett.

STATEMENT OF HON. ROBERT F. BENNETT, A UNITED STATES SENATOR FROM THE STATE OF UTAH

Senator BENNETT. Thank you very much, Mr. Chairman.

I enjoyed my time as a member of this committee and if I were a member still, I would vote enthusiastically to confirm Mike Leavitt for this assignment.

Senator Hatch has laid out the public record. You, Mr. Chairman, have laid out many aspects of the public record of Mike Leavitt, so if I might, without being redundant, I would like to talk just a bit about the personal man that I know and share that with the committee in the hope that it will provide you some insight to this gentleman.

I first met Mike Leavitt when we were serving together on a planning commission to deal with Utah's schools. I had been appointed chairman of a strategic planning group for the Utah State School Board and he was a member of the Board of Regents of the university system and we were gathered together in a ski resort, that is what we do in Utah during the summertime because there is nobody else at the ski resorts, we were gathered there for a retreat to discuss Utah's schools.

We spent a very intensive weekend. I first wanted to know who was this very good looking young guy who seemed to have such deep thoughts about education and the challenges facing it. Someone said, well, that is Dixie Leavitt's son, Mike. Dixie Leavitt was a well know and very successful State Senator in our State.

On that occasion, I discovered the first attribute of Mike Leavitt that impressed me and that is he is a visionary. He is willing to take the long view, he is willing to look at the big picture, he doesn't get bogged down in the leaves and the trees. He can step back and look at the forest as a whole and have a visionary view.

Impressed with that, I thought this is a young man with a future but I went on about my business, he went on about his and the next time I met him, he had called for an appointment and came to see me in my office. As he sat down, he told me he was planning to run for Governor and he wanted my support. I told him I wasn't going to be able to give him my support because I was planning to run for Senator and it isn't a good idea to get involved in any campaigns other than your own. We talked on that occasion about our political careers and how they might go forward together in 1992.

Utah has a convention and primary system. We share the honor of both finishing second in the convention. We happen to share that with Senator Hatch who finished second in his convention as well but second is good enough to get into the primary in Utah. The primary is limited to only two and in that fight, I discovered the second thing about Mike Leavitt to go along with his being a visionary. I discovered how tenacious he was. He finished second in the convention but he finished first in the primary. He simply outworked his opponent in every way and came out on top in the primary. I happened to do the same thing in my primary. We shared the ticket together and won election in 1992. So I found out how tenacious this visionary young man was.

We have worked together since our common elections in 1992, he as Governor and I as Senator, and I found a third characteristic of his. He is innovative. He is willing to try new things. He is willing to think new thoughts. He is not tied down to the way things have been done in the past. I have been impressed with that and found it refreshing to be able to pick up the phone and call the Governor and say, let us have one of our breakfasts at Marie Callander's, which is a restaurant that happens to be between his home and mine, and we would gather there for breakfast and sit there and he would tell me the new things he was thinking of and we would talk about innovative ways to deal with the problems of our State.

So I offer you a man who is a visionary, who is tremendously tenacious and who is innovative but who has a fourth attribute I

would like to share with you that I think is perhaps the most important one in this assignment the President has given him.

Throughout these 11 years we have worked together, I have come to know that Mike Leavitt is one who seeks solutions rather than exploitation of issues. There are always in the political arena those on both sides of the aisle of the ideological spectrum if you will who are more interested in preserving an issue, keeping it alive and gaining some political advantage from it than in finding a solution to the problem.

In Utah, the temptation to do that can be very, very high, particularly for a Governor of the party that seems to be at the moment the predominant party. I am old enough to remember when the Democrats were the predominant party in Utah and I know there are some who are hoping those times will come again but they are not here at the moment and the temptation to demagogue an issue on behalf of the majority can be very, very strong when you are the Governor in that kind of a situation.

Mike Leavitt has offended some of the members of his political base by reaching out to those who are not part of that base and saying to them, let us see if we can't find a solution. One of the first persons I called when I found the President had convinced Mike to take this position, and it was not the first time the President asked and Mike said yes, it was about the seventh or eighth, I think, one of the first people I called when I found the President had made this decision was Bruce Babbitt. Secretary Babbitt was a man who was booed, picketed, attacked very often when he appeared in the West. I hope we were a little more polite than that when he came to Utah but I know many times when he came to Utah there were plenty of people just ready to get out the magic markers, create the placards and hit the streets.

Mike Leavitt could have taken advantage of that politically and turned Bruce Babbitt into something of a political cartoon character in Utah's atmosphere. He did not. I remember being at the signing ceremonies with Bruce Babbitt and Mike Leavitt as problems that could be solved were solved and I remember listening to the grumbling on the part of some of Mike Leavitt's political base who said, what is he doing dealing with that guy. What he was doing is what he will do as Administrator of EPA. He was reaching out to find a solution to a problem rather than an exploitation of an issue.

There will be some who will appear before you who come from Utah to whom he reached out but never quite connected. That is always the case. You can never satisfy everyone. While I respect the right of those Utahans to come before you and make their case against Mike Leavitt, I remind you that overwhelmingly the people of Utah, both parties and independents, have given this man not only two overwhelming reelections, one initial election, but a consistently high approval rating which Orrin and I can only envy.

He comes to you as a visionary, a man who is very tenacious, very innovative and most importantly, one who will reach out and establish his record as a seeker of solutions. I can think of no better set of attributes for any Federal appointee to have. I urge the committee to report him to the Senate with full enthusiasm and I

look forward to the opportunity to vote for his confirmation on the floor.

Senator INHOFE. Thank you for that excellent statement, Senator Bennett.

At this time, we would ask if you would like to be excused, you may.

At this point in the record, I would like to enter four documents of a similar nature to these introductions. One would be a letter supporting the Governor from a dozen organizations. I would also like to enter in the record an editorial written by the former Democratic Governor of Maryland, Parris Glendening, praising Governor Leavitt. I also expect to have a letter in support of Governor Leavitt entered in the record written by the NBA superstar Carl Malone on behalf of the African American Environmentalist Association and last that of your former colleague, former Governor Ben Nelson from Nebraska. Without objection, they will be entered in the record at this time.

September 19, 2003.

Hon. JAMES INHOFE,
Senate Russell Building,
Washington, DC. 20510.

Hon. JAMES M. JEFFORDS
Senate Dirksen Building
Washington, DC. 20510

DEAR SENATOR INHOFE AND SENATOR JEFFORDS: The Senate Environment and Public Works Committee will soon be considering Utah Governor Mike Leavitt for appointment to the Environmental Protection Agency. The 12 organizations listed below represent over 250,000 dedicated wildlife conservationists. We commend your efforts to protect the future of America's natural resources and we support the confirmation of Mike Leavitt as Administrator of the Environmental Protection Agency.

Mike Leavitt has shown a strong commitment to wildlife conservation in Utah, increasing funding by nearly $100 million during his tenure as Utah's Governor. He has appointed wildlife commissioners with a strong commitment to wildlife and quality wildlife programs. He has shown leadership in the development of conservation easements and land acquisitions for critical deer and elk winter ranges. He has supported major efforts on wetlands restoration.

Under Governor Leavitts' administration, Utah was recognized as a national leader for wild turkey transplants and restoration. Mike Leavitt was awarded the 2000 Outstanding Statesman Award by the Foundation for North American Wild Sheep for Utah's wild sheep restoration effort. He also instituted a Blue Ribbon Fishery program to enhance Utah's already famous trout fisheries.

Mike Leavitt supports America's wildlife and we support Mike Leavitt.

Respectfully,

ARCHERY TRADE ASSOCIATION, BOONE AND CROCKETT CLUB,
BOWHUNTING PRESERVATION ALLIANCE,
BUCKMASTERS AMERICAN DEER FOUNDATION,
DALLAS SAFARI CLUB,
FOUNDATION FOR NORTH AMERICAN WILD SHEEP,
ROCKY MOUNTAIN ELK FOUNDATION,
SHIKAR-SAFARI CLUB,
SPORTSMEN FOR FISH AND WILDLIFE,
SPORTSMEN FOR HABITAT,
TEXAS WILDLIFE ASSOCIATION,
U.S. SPORTSMAN'S ALLIANCE

[From the Washington Post, September 20, 2003]

THE RIGHT CHOICE FOR THE EPA

(By Parris Glendening)

Think of a key environmental issue—global warming, air pollution, storm water runoff, habitat destruction—and chances are its causes can be traced to haphazard urban growth.

When cities and States fail to plan well for their development, roads and sewers become overburdened and send emissions and effluent into our air and water. Ecologically critical lands disappear before we can protect them. Our people's health and quality of life degrade.

For these reasons, it is essential that the next administrator of the Environmental Protection Agency understand the connections between urban sprawl and the environment. Fortunately, Utah Gov. Mike Leavitt, the president's nominee for the post, is one who does.

I learned this firsthand in working with the Governor at the National Governors Association (NGA) over the past few years. In our respective stints as NGA chairman, Leavitt and I collaborated on an effort to raise the profile of growth issues while developing tools States can use to tame sprawl and build healthy cities and towns. In Governors-only sessions, he lobbied hard, and successfully, for NGA to produce its first-ever land use principles.

Leavitt's passion in this arena grew out of his experience in Utah. While his home State is largely rural, the vast majority of its population—and most of the projected future growth—is concentrated in an environmentally sensitive corridor along the Wasatch Mountains, stretching 100 miles to the north and south of Salt Lake City. The population of this sliver of Utah is expected to swell from 1.6 million in 2000 to 5 million by 2050.

Leavitt recognized that it was the State's responsibility to make sure that this growth didn't become an unlivable mess. At the same time, he believed that citizens and local governments should have a strong say in developing a vision for their future.

With those principles in mind, he created a commission to administer a special fund for protecting open space in developing areas. He secured funding to preserve 175 miles of railroad right-of-way for commuter rail. And, most impressively, he served as honorary co-chairman of Envision Utah, lending unequivocal support to a public-private planning effort that has become a national model. Led by a coalition of business, civic and government leaders, Envision Utah began by listening to people, thousands of them. Citizens were invited to more than 150 public workshops, where, through use of innovative planning tools, they were able show how they wanted to shape future land use, transportation and open space preservation.

Mike Leavitt participated in the workshops just like any other citizen, sitting for hours with fellow Utahns at one of the many workshop tables. When Envision Utah asked every household in the region to complete a survey on the region's future, he sat down with his family to do just that. And he recorded a television ad urging his constituents to do the same.

In the end, citizens said they wanted more investment in public transit and affordable housing, more reliance on cycling and walking, more preservation of open spaces and more town-like development along key transportation spines. The chosen Quality Growth Strategy departs dramatically from current trends, conserving 171 square miles of land; offering expanded choices in housing and neighborhood types; reducing vehicle emissions and traffic congestion; and saving $4.5 billion in transportation, water, sewer and utility infrastructure, which would have subsidized sprawl.

I'll leave it to environmentalist colleagues to scrutinize other aspects of the Governor's record. No doubt they will press him to explain how his support of the controversial Legacy Highway squares with his quality-growth principles, as they should.

As Leavitt well knows, the EPA has become an important partner in developing citizen-friendly, market-oriented approaches to managing urban growth along the lines of Envision Utah, which the EPA helped to fund. Far from dictating how places should grow, the agency has supported innovation, served as a clearinghouse for best practices and showed admirable flexibility on redeveloping industrial brownfields and managing urban runoff.

Grappling with sprawl and creating great communities have nothing to do with partisanship. Governors from both parties have been leaders in these arenas.

As Senators debate Leavitt's confirmation as EPA chief they would do well to recognize his bipartisan leadership in bringing issues of growth and quality of life to the fore.

E. BENJAMIN NELSON
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United States Senate
WASHINGTON, DC 20510-2706

September 23, 2003

The Honorable James M. Inhofe, Chairman
Committee on Environment and Public Works
United States Senate
410 Dirksen Senate Office Building
Washington, DC 20510-6175

The Honorable James M. Jeffords, Ranking Member
Committee on Environment and Public Works
United States Senate
410 Dirksen Senate Office Building
Washington, DC 20510-6175

Dear Chairman Inhofe and Ranking Member Jeffords:

I offer the following remarks in support of the nomination of Utah Governor Mike Leavitt to serve as Administrator of the Environmental Protection Agency (EPA) and do hereby ask that these remarks be entered into the record of this hearing.

In 1993, Mike Leavitt was elected governor of Utah. Since then, he has been re-elected twice and is now the longest-serving governor in that state's history. During his tenure, Utah has been ranked five times as the "best-managed" state by independent public policy analysts.

It was in Mike's first term that we became acquainted as members of the National Governors' Association (NGA). In our capacity in that association, we worked together on several water and natural resource issues. We also held a series of summits on the relationship between states and the federal government – particularly the effect of both unfunded and underfunded federal mandates upon the budgets of state and local governments.

But beyond his record of achievement for the citizens of Utah, I have also found Governor Leavitt to be easy to work with, open to new ideas, and willing to make sensible compromises to reach shared goals. I believe nearly everyone – if not everyone – with whom Governor Leavitt worked in the NGA would state they had a favorable impression of him. As we know all too well, such a record is important for any federal position, but particularly one such as this, where there needs to be much coordination with our state governments.

An example of Governor Leavitt's record in this area is his work with another former colleague of ours, Governor John Kitzhaber of Oregon. Together, they crafted an environmental philosophy known as "Enlibra," which is derived from the Latin root and means "moving towards balance." This philosophy has since been adopted by the NGA and is used by many federal, state, local and private entities to accelerate environmental progress. As co-creator of the NGA "Enlibra" philosophy, Governor Leavitt is well placed to work with governors in advancing its goals.

In closing then, let me say I wholeheartedly support Mike Leavitt's nomination to serve as EPA Administrator. He is eminently qualified for the position; but even more than that, he has both the personality and the desire to be successful at the job; and I urge the Committee to advance his name to the full Senate.

Sincerely,

E. Benjamin Nelson
United States Senator

EBN:act

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Lincoln, NE 68508
(402) 441-4600
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Field Representative
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State of New Mexico
Office of the Governor

Bill Richardson
Governor

The Honorable James Inhofe
Chairman
U.S. Senate Environment and Public Works Committee
410 Dirksen Office Building
Washington, DC 20510

The Honorable Max Baucus
Ranking Member
U.S. Senate Environment and Public Works Committee
456 Dirksen Office Building
Washington, DC 20510

October 10, 2003

Dear Senator Inhofe and Senator Baucus:

I am writing to provide my support for Governor Mike Leavitt's nomination to head the US Environmental Protection Agency.

I have worked well with Governor Leavitt both as US Energy Secretary and as a fellow western Governor. In particular, when I was Energy Secretary we worked together to develop a solution toward removal and remediation of a leaching tailings pile near Canyonlands and Arches National Parks in Moab. It was critical for the State of Utah and the Department of Energy to find a solution to this issue, and I was pleased with our ability to move in that direction.

I am also impressed with some of Governor Leavitt's work at the Western Governors Association, of which I was recently elected chairman. Governor Leavitt helped establish and maintain a bipartisan atmosphere at the WGA. He has worked effectively with other Governors regardless of party. Obviously the same willingness and ability to work collaboratively with other elected and appointed environmental officials is crucial to the effectiveness of any USEPA Administrator. His collaboration with business people, conservationists, and local officials in the process of developing new urban growth policies in Utah – recently remarked on in an opinion piece by Parris Glendening – was successful and trendsetting. Mike Leavitt is a consensus builder and can bring people together.

Although I have a number of differences with the Administration regarding its environmental policies, I am in fact hopeful that the Governor will be able to prevail on

the Administration to improve some of its environmental policies. These would include giving EPA real policy authority on major national and international issues from wetlands protection to global warming to air quality protection in national park and Wilderness areas. It is time for the Administration, for instance, to recognize the potential threat of global warming and implement real policy – not just more study.

I am endorsing Governor Leavitt's nomination even though I do not agree with all of his policies in Utah. However, I am optimistic that Governor Leavitt will move the Bush Administration toward an environmentally sensitive policy.

Sincerely,



Governor Bill Richardson

Senator INHOFE. I have already had my 5-minute opening statement and I would recognize Senator Jeffords. I would admonish all the members of the committee after Senator Jeffords, to confine your statements to 3 minutes. We are going to have many, many opportunities for you to participate in 5-minute rounds. We want to have some discipline here so everyone will have an equal chance.

Senator Jeffords?

OPENING STATEMENT OF HON. JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF OKLAHOMA

Senator JEFFORDS. Thank you, Mr. Chairman and Governor, it is a pleasure to be with you. I have enjoyed working with you over the years, especially in education. I admire what you have done in your State and in that area. I would like to talk with you a little bit about where we are going here.

I also shared the same enthusiasm with your predecessor, Governor Whitman, who I had worked with over the years and felt very strongly about her capacity and her abilities. Then I anguished with her as she struggled with the problems in the environmental area and with this Administration.

I would like to say as I anguished with her and she finally left, I start with the same optimism for you, that hopefully we will be able to find consensus on many of these environmental issues which are so troublesome.

As a background to that, I would like to give you some idea where we feel things are at this time. Last week, we were troubled by Hurricane Isabel's approach on Washington but we escaped much of the natural disaster. Governor Leavitt, I am troubled by the other disaster that has hit Washington. It is the environmental policies of this Administration. It is hitting the entire country and will harm generations to come.

Today, we are literally in the eye of that storm. Governor, the record of the Environmental Protection Agency under the President is abysmal. We have watched the Administration roll back environmental laws and regulations day after day, week after week, month after month. They have been dismantling our environmental laws and the protections that our citizens have come to expect and I believe deserve by their government.

Allowing the sale of properties contaminated with PCBs and exposing our citizens to highly toxic chemicals troubles me. Limiting State decisions for allowing offshore oil drilling on their own coastlines troubles me. Allowing the fund that pays for cleaning up abandoned toxic Superfund sites across the country to go bankrupt troubles me. Omitting an entire section on climate change with a White House report of the State of the Nation's environment despite convincing science on the contrary troubles me.

Deciding not to classify carbon dioxide as a pollutant troubles me. Forcing EPA to assume reassuring statements and delete cautionary ones related to the air quality standards surrounding the ground zero site following the September 11 attacks troubles me. Proposing rules that would narrow the waters protected over the last 30 years under the Clean Water Act troubles me. Allowing the major polluters to avoid installing modern, controlled equipment of the New Source Review rule devastates the years of progress under the Clean Air Act and deeply troubles me.

Governor, many of these decisions have been made with little input from the people who will be most affected by them and must implement them. This troubles me. As head of the agency charged with upholding the laws that protect our people and their environment, you will be responsible but we, the members of this committee, the Senate and the Congress, are responsible for overseeing your agency and the decisions made. Yet, I do not believe we can

carry out that responsibility without the cooperation of the Administration in the ones on which we would like to receive cooperation.

I have made repeated requests of the EPA to provide information and have not received it. For example, I have asked for the analysis of the effects the New Source Review rule would have on the environment and public health. I have not received it. The lack of transparency in this Administration's decisionmaking and the lack of cooperation with the Congress troubles me. Governor, this Administration's disregard for environmental law is bigger than one agency and one Administration.

I don't know if you as the head of EPA can bring the needed responsible environmental leadership to this Administration. This is a difficult but necessary process. I commend you for your willingness to serve. I understand the difficulties that you will have trying to reconcile what I have said about the policies and hopefully we can work closely together because I want to work closely with you to see if we can make some progress.

Thank you very much.

[The prepared statement of Senator Jeffords follows:]

STATEMENT OF HON. JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Thank you Senator Inhofe, and I'd like to join you in welcoming Governor Leavitt and thank him for adjusting his schedule so he could be here today.

Last week we were troubled by Hurricane Isabel's approach on Washington, but we escaped much of that natural disaster. But, Governor Leavitt, I am troubled by the other disaster that has hit Washington. It is the environmental policies of this Bush Administration, and it is hitting the entire country and will harm generations to come. Today, we are literally in the eye of the storm.

Governor, the record of the Environmental Protection Agency under this President is abysmal. We have watched this Administration roll back environmental laws and regulations day after day, week after week, month after month. They have been dismantling our environmental laws and the protections that our citizens have come to expect, and I believe, deserve from their government.

Allowing the sale of properties contaminated with PCBs and exposing our citizens to highly toxic chemicals troubles me;

Limiting a State's decisions for allowing offshore oil drilling on their own coastline troubles me;

Allowing the Fund that pays for cleaning up abandoned toxic Superfund sites across the country to go bankrupt troubles me;

Omitting an entire section on climate change from a White House report on the State of the nation's environment, despite convincing science to the contrary, troubles me;

Deciding not to classify carbon dioxide as a pollutant troubles me;

Forcing EPA to "add reassuring statements and delete cautionary ones" relating to the air quality standards surrounding the ground zero site following the September 11th attacks troubles me;

Proposing rules that would narrow the waters protected over the last 30 years under the Clean Water Act troubles me;

And allowing major polluters to avoid installing modern control equipment in the New Source Review Rule devastates the years of progress under the Clean Air Act—and deeply troubles me.

Governor, many of these decisions have been made with little input from the people who will be most affected by them and must implement them, and this troubles me.

As head of the Agency charged with upholding the laws that protect our people and their environment, you will be responsible.

But we, the members of this committee, the Senate, and the Congress, are responsible for overseeing your Agency and the decisions made. Yet I do not believe we can carry out that responsibility without the cooperation of the Administration, and I, for one, have not received that cooperation.

I have made repeated requests of the EPA to provide information, and have not received it. For example, I have asked for the analysis of the effects that the New Source Review Rule would have on the environment and public health. I have not received it.

The lack of transparency in this Administration's decisionmaking, and the lack of cooperation with the Congress troubles me.

Governor, this Administration's disregard for environmental laws is bigger than one Agency and one Administrator. I don't know if you, as head of EPA, can bring the needed responsible environmental leadership to this Administration. This is a difficult but necessary process, but I commend you for your willingness to serve.

Senator INHOFE. Thank you, Senator Jeffords.

I would like to ask unanimous consent that Senator Warner be recognized for one minute. He has to chair the nomination hearing of the Secretary of the Navy. Is there objection? Hearing none.

OPENING STATEMENT OF HON. JOHN W. WARNER, U.S. SENATOR FROM THE COMMONWEALTH OF VIRGINIA

Senator WARNER. Thank you, colleagues.

Contrary to my friend and colleague, Senator Jeffords, I am confident, having met you and studied your impressive career, that you can bring that leadership to this department. I intend to give you the strongest possible support all along the way.

Thank you, Mr. Chairman. I just wanted to make that very clear. I congratulate him on the manner in which you did your consultative process with the members of this committee prior to this hearing certainly on my part and other colleagues said it was very thorough.

Mr. Chairman, I would also say I am ready to go to work with my staff on the highway bill tomorrow. We can't wait 4 or 5 months, so let us pitch in and get that done.

Senator INHOFE. Thank you, Senator Warner.

Senator Voinovich?

OPENING STATEMENT OF HON. GEORGE V. VOINOVICH, U.S. SENATOR FROM THE STATE OF OHIO

Senator VOINOVICH. Mr. Chairman, thank you for holding this hearing.

As my colleagues on this committee know, I have a strong interest in the Federal work force and fitting the right people with the right knowledge and skills at the right place and at the right time. I think Governor Leavitt is the right person with the right knowledge and skills at the right place at the right time.

For a Republican, probably the most difficult job in the Federal Government is the Administrator of the EPA. No matter what you do it is not good enough and it is always attacked by some environmental groups. Christine Todd Whitman, our fellow Governor, did the very best she could but I am sure she was relieved and glad to leave the battle.

I am grateful the President has asked Mike to serve and that he is willing to accept and use his extraordinary management and interpersonal skills to serve his country. I think Senator Hatch did an outstanding job of enunciating his outstanding leadership in the environment and his record.

I appreciate his willingness to serve and I thank his wife, Jacalyn, and her five children for their sacrifice and being willing

to allow him to serve in this very, very difficult position in the Federal Government.

I first met Mike when we were both Governors. I was chairman of the Republican Governors' Association. I needed a good vice chairman and he was the young man who came along and I asked him to do that job. He did an outstanding job. I watched him move through the National Governors' Association to being vice chairman and then chairman of that association.

He has established a very strong reputation as a straight shooting consensus builder with proven ability to work on a bipartisan basis. On many issues, Mike was willing to take on tough issues and work with both Republican and Democratic Governors to form consensus and move the ball down the field. I am glad there is a statement from Senator Nelson and from Governor Glendening and I know that Senator Carper is also a strong advocate of your being here.

When the States were confronted with losing revenue from interstate sales, he took up the cause. No one thought the States could come together and come up with a system and because of this man's leadership, 25 States are participating in a streamlined sales tax system that provides States with a road map to create simplified sales tax collection programs.

During his three terms as Governor, Mike as demonstrated an outstanding ability to efficiently and effectively manage the State of Utah's provision of public goods and services. It has already been mentioned that he has been named outstanding manager. He is the public official of the year. He has the gear to take on the management responsibilities of an agency that has 18,000 people, 10 regional offices and a half dozen research labs throughout the country.

Being head of the EPA is a management job and this man has proven he is a darned good manager.

I would like to say, Mr. Chairman, we are fortunate that this man is interested to take this job at this time. I can assure my colleagues on the other side of the aisle, if you want a straight shooter, if you want someone that is honest and willing to work and willing to listen, you will find it in Mike Leavitt.

[The prepared statement of Senator Voinovich follows:]

STATEMENT OF HON. GEORGE V. VOINOVICH, U.S. SENATOR FROM THE STATE OF OHIO

Mr. Chairman, I want to thank you for holding this hearing on Governor Leavitt's nomination.

As my colleagues here on the committee know, I have more than a passing interest in the people who run our Government. It seems like we can never find the right people to manage all of the Departments and Agencies in the Federal Government, which inevitably leads to problems down the road. The process is even more difficult when trying to find people to nominate for controversial appointments like Federal judgeships or high-profile cabinet officers.

For a Republican, probably the most difficult job in the Federal Government is the Administrator of EPA. No matter what you do—it is not good enough and is always attacked by environmental groups. Christy Todd Whitman did the best she could, but I am sure she was glad to leave the battle.

I am grateful that President Bush has asked Mike to serve and that he is willing to accept and use his extraordinary management and interpersonal skills to serve his country. I appreciate his willingness to serve and want to thank his wife Jacalyn and five children for the sacrifice they are willing to make for him to serve.

I first met Mike while we were both Governors and were active together in the Republican Governors' Association and National Governors' Association. Mike served as NGA vice-chairman under then-Governor Tom Carper, NGA chairman, RGA vice-chairman while I was chairman and as RGA chairman.

He has established a very strong reputation as a straight-shooting consensus builder with the proven ability to work on a bipartisan basis. On many issues, Mike was willing to take on tough issues and worked with both Republican and Democrat Governors to form consensus and move the ball down the field. When the States were confronted with losing revenue from internet sales, he took up the cause. No one thought that we could do it, but under Mike's leadership, we now have over 25 States participating in a streamlined sales tax system that provides States with a roadmap to create simplified State sales tax collection programs.

During his three terms as Governor, Mike has demonstrated an outstanding ability to efficiently and effectively manage the State of Utah's provision of public goods and services. Time after time, Governor Leavitt has set an agenda in Utah, and each time he has rolled up his sleeves, pulled together broad coalitions, reached consensus and gotten results.

Under Mike's watch, Utah has hosted the Winter Olympics, reduced crime, decreased reliance on welfare, reduced unemployment, and improved education funding and performance—all while the State's sales, income, and property taxes have been reduced. In fact, During Mike's tenure as Governor, Utah has been named the best-managed State five times. No wonder he was recently named "Public Official of the Year" by Governing magazine.

I cannot think of anyone who is better suited to lead the EPA. Governor Leavitt has continuously demonstrated the tremendous interpersonal skills and management experience necessary to run an agency with 18,000 people, 10 Regional Offices and half-a-dozen labs. He cares deeply about the environment and will pull people together to get things done.

Mike's proven ability to facilitate the creation of positive solutions to multiple problems and interests is exactly what is needed at the EPA's top post. He has established an impressive track record of producing results; one that I believe will continue should he be confirmed as Administrator of the Environmental Protection Agency.

Senator INHOFE. Thank you, Senator.

Senator Wyden?

OPENING STATEMENT OF HON. RON WYDEN, U.S. SENATOR FROM THE STATE OF OREGON

Senator WYDEN. Thank you, Mr. Chairman.

Mr. Chairman and colleagues, I believe it is extraordinarily important that our country have an independent, tough voice to guide environmental policy at the Environmental Protection Agency. The reason I feel that way is that I believe now too many of our country's environmental policies are being cooked by political chefs in the White House kitchen. It seems to me that they brew the science, they season the regulations and then serve up policies that cater to a lot of the powerful anti-environmental interests.

What we have today is a situation where into this political cauldron comes a good man, somebody that I have known to be straightforward and decent and bipartisan. I have been thinking about this hearing a lot and went back in particular to look at your work and the work of the Western Governors' Association. What I am concerned about today and what I will be asking about is the very large gap that exists between the bipartisan policies the Western Governors' Association has supported and what we see at the Administration. I want to be specific.

The Western Governors' Association has stressed enforcement of the environmental laws. Just a few days ago, the EPA Office of Enforcement said that during the past 24 years, only 24 percent of the facilities that were in major noncompliance with respect to the

Clean Water Act faced enforcement actions. So the EPA's own office says on major water violations, there hasn't been enforcement.

Gap No. 2, the Western Governors' Association has always stressed consultation with all the parties and involving the States. Two examples where the Administration isn't doing that are on the question of these closed door negotiations with industrial livestock firms, behind closed doors they are talking about amnesty from the Clean Air Act and the Superfund sites.

With respect to consulting the States on the proposed rule to limit the scope of the Clean Water Act, 39 States objected and said they weren't party to that discussion. So no the question of consultation involving States, there is a big gap between the Western Governors and this Administration.

Finally, throughout the Western Governors' Association material on the environment is a commitment to following the law and certainly that hasn't been done with the Clean Air Act. I was on the conference committee in 1990 and I can tell you there was absolutely no question that it was the intent of Congress that powerplants, oil refineries and industrial facilities be required to install pollution controls. So we see again not the commitment to follow the law.

My time is up but I would wrap up this way. I would note, Mr. Chairman, that Senator Hatch had close to 20 minutes in terms of his opening statement.

Senator INHOFE. Sir, that was not an opening statement. That was an introduction of our witness.

Senator WYDEN. You have always been so fair and I want to take note of that but I am not convinced we are going to get done here by noon. I would just like to say that I think given the import of this nomination for the country, we have a good man here but I have outlined a number of examples where the bipartisan work he has been part of in the past hasn't been followed. I would like us to take the time today to be thorough, stick to the record as I have, but make sure we examine these issues.

Senator INHOFE. Thank you, Senator Wyden.

Senator Thomas?

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

Senator THOMAS. Thank you, Mr. Chairman.

Welcome, Governor. We are delighted to have you here. Certainly a westerner is welcome for me. You clearly understand the unique differences that do occur in the areas and I am sure recognize those.

Your background, significant experience and dedication speak well and make you a well qualified candidate. Your record, I think, speaks for itself. Your work as co-chair of the Western Regional Air Partnership and vice chair of the Grand Canyon Visibility Transport Commission should be highlighted.

Though several members I understand have holds on this nominee, we are just now holding a hearing. That doesn't seem to be quite right.

At any rate, I think we can move forward. I am surprised a little to hear some of the criticism of the Administration that has gone

on. I think they have moved in an environmental direction of trying to include States, trying to include and cooperate with people on the ground rather than doing all the pronouncements and announcements from here. The fact is, as the chairman pointed out, the progress has continued under President Bush's leadership. The facts are unequivocal.

Today's environment is cleaner and healthier than it was when the President took office. According to the most recent report, SO2 emissions from powerplants were 10.2 million tons in 2002, 9 percent lower than 2000, 41 percent lower than in 1980. NOX emissions from powerplants also continued a downward trend. So we are making some progress and I hope we don't try to make a political issue out of this and stick a little bit to the facts as to where we are. The facts are quite different than some of the things we have heard.

We are delighted to have you here, Governor, and I hope we can move forward quickly and work together to continue the progress that is being made.

Senator INHOFE. Thank you, Senator Thomas.

Senator Reid?

OPENING STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

Senator REID. Thank you very much, Mr. Chairman.

I have a longstanding relationship with the Leavitt family. Myron Leavitt, who is a member of the Supreme Court, is a first cousin of Dixie Leavitt, the Governor's father. I would like to tell a brief story here.

When I thought I was an athlete, I went to school at a college in southern Utah, that is where his father was an insurance salesman. When my wife and I decided we were going to get married between my sophomore and junior year in college, I went to Mr. Leavitt and I said I would like to buy an insurance policy and I want to make sure it covers maternity in case we have a baby. A couple of years later we had a baby and the insurance policy didn't cover maternity. By then I had moved to a different school hundreds of miles away, so I called his father and said, do you remember selling this insurance policy to me and he said yes. I am not sure he remembered, but I said I bought it because I wanted maternity and it doesn't have any. He said, did I do that? I said, yes. He said, well send me the bill. I sent him the bill and he paid them. I don't think that happens very often, so I have always had a great affection for the Leavitt family as a result of that.

Let me say I have talked with the Governor, as I indicated here we have had a relationship over the years and I have great respect for him. I said to him, why in the world would you want this job. I said, I will do anything that I can to help you personally but I think the record of this Administration environmentally is awful.

I go into detail as to the awfulness of the environmental record of this Administration.

I would also say it is so unfair what the Administration has done to me personally and the State of Nevada. Senator Daschle put forward a person by the name of Greg Jasko to be a member of the Nuclear Regulatory Commission and they have rejected this. Sen-

ator Daschle has not withdrawn it. Dr. Jasko has a Ph.D. in Physics, he has worked as a policy advisor in my office, he has been a professor at Georgetown, a man eminently qualified to be a member of the Commission, but because he works for me and I assume because he gave me advice on the nuclear waste issue, they have rejected him.

I want everyone here to know as much as I care about this man and as much as I think of his family, before I back off this, they will have to make some decision on Dr. Jasko or give me some reason why he is morally unfit to be a member of the Nuclear Regulatory Commission.

Again, Governor, you have a lot of guts taking this job because you are in a big hole to start. I am not sure you have the ability or anyone has the ability to override the anti-environmental policy this Administration has set. I hope I am wrong but I personally wish you the best of luck. The fact you have decided to take this job in no way is impugning your intelligence.

[Laughter.]

Senator INHOFE. Thank you, Senator Reid.

Senator Murkowski?

OPENING STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR FROM THE STATE OF ALASKA

Senator MURKOWSKI. Thank you, Mr. Chairman.

Governor Leavitt, again, welcome. It is nice to see you this morning.

It is quite apparent from the comments this morning that there are many questioning why you would want to take on what appears to be a thankless task but I appreciate your willingness to do so and your public service, your continuation of public service.

My State, like many in the West, has often struggled with the environmental restrictions sought by, imposed by and maintained with interest, often with very little knowledge of the conditions with which we live. I would argue with some of my colleagues about the environmental record under this Administration. I believe as a country we have made great strides toward improving our environment and every day we learn better ways to care for our environment, we have better technology, better research and I think we are doing a better job.

If we honestly look at where we need to make improvements, we have to conclude that regulatory reform is badly needed. I commend the Administration for its willingness to look at new approaches to building a better environment rather than just pounding the same tired nails.

Your record on the environmental issues has been stated earlier and what you have done in Utah is exemplary. There are those who will find areas to complain about but I think it is important that we look to the record and what you have demonstrated through your administration.

I am confident that there will be areas where should you be confirmed as the Administrator of EPA, which I hope you will, that you will have issues. My State of Alaska has issues with the EPA now and I am hopeful that what we will get from you is a fair

hearing and a recognition and understanding of those issues and a willingness to work with us on those. That is what I ask of you.

I do intend to offer you my strong support. I think you have demonstrated your abilities and I have confidence you will be able to continue with those at this level for the country. I again wish you the best through this process.

Mr. Chairman, I do have additional comments that I would ask unanimous consent be included for the record.

Senator INHOFE. Without objection.

[The prepared statement of Senator Murkowski follows:]

STATEMENT OF HON. LISA A. MURKOWSKI, U.S. SENATOR FROM THE STATE OF ALASKA

Thank you Mr. Chairman—and thank you, Governor Leavitt, for being willing to continue your public service by taking on this difficult and often thankless task. I'm sure you know that no matter how well you do, you will seldom make anyone completely happy, and will never make everyone happy at once.

Mr. Chairman, my State, like many others in the West, has often struggled with environmental restrictions sought by, imposed by, and maintained by interests with very little knowledge of the conditions we live with.

We take our environmental responsibilities very seriously. We care about our environment, and we try very hard to address serious issues with clarity and common sense. All too often, common sense is lacking when one-size-fits-all solutions are imposed from outside, and based more on fanciful gloom-and doom predictions than on facts.

The truth is this country has made mammoth strides in improving our environment, and every day we learn new ways to apply research and technology toward doing an even better job.

This Administration is providing a breath of fresh air—and I mean that both literally and figuratively—when it comes to environmental issues. While improvements can certainly be forced—at great cost—by the threat of heavy-handed government enforcement, they come far more rapidly when they are to the participants' economic advantage. There is all the difference in the world between making money and not losing money.

If we look honestly at what works and what doesn't, we have to conclude that reform of the regulatory process is badly needed. I commend the Administration for being willing to look at new approaches to building a better environment, rather than continuing to hammer at the same old nails.

Governor Leavitt's record on the environmental issues faced by the State of Utah is exemplary, despite the inevitable complaints by those who have not gotten everything they wanted. His approach to negotiating complex issues has demonstrated that it is possible to achieve balance—and a reasonable outcome for those involved.

In many respects, we in the West are not alone in seeking that same balance between our nation's laws and our regional needs—between our responsibility for our own choices and those who wish to make choices for us.

I am confident that I will not always agree with the positions that Governor Leavitt may take if he becomes the EPA Administrator. Alaska has a number of outstanding issues with the EPA.

We have long wished for administrative action to establish Alaska as a separate EPA region; attempting to administer such a vast area with so few people who have even seen the issues first-hand is an impossible task.

We would like to move forward on a determination that better defines the extent of Clean Water Act authority over Alaska's wetlands. We have over 174 million acres of land classified as wetlands, more than all the other States combined. Much of it is neither used for navigation nor connected in any substantive way with other water bodies, or exists solely because it is underlain by permafrost.

We would like to receive active assistance from the EPA in evaluating the long-term health effects of our reliance on small, diesel-powered utilities.

We would like to receive recognition that temperature inversions due to our climate are the primary reason some of our cities have difficulty attaining compliance with carbon monoxide rules.

We would like the Agency to work with us on developing a mechanism that will more effectively deliver grants to Alaska's many rural Native communities.

There are many other issues between us—far too many to list them all.

What I ask for, and what I believe Governor Leavitt will offer, is comprehensive, impartial and thoughtful consideration.

I plan to offer Governor Leavitt my strong support in this committee, and look forward to hearing from him on specific issues.

Thank you Mr. Chairman.

Senator INHOFE. Senator Clinton?

OPENING STATEMENT OF HON. HILLARY RODHAM CLINTON, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator CLINTON. Thank you, Mr. Chairman.

I want to welcome the Governor and Jackie Leavitt. I am delighted that they are here. I think as the Governor has already determined from his consultative process and certainly the comments already made today, many of us are a little concerned about the Administration you are attempting to join and the policies that it has taken toward the environment. Of course you would be responsible for carrying out those policies.

It is not just the policy choices, it is also the way the Administration has gone about them. The litany of requests for information, some of which Senator Jeffords referred to that were basically ignored and rejected, are lengthy and troubling. So there are a lot of topics to cover about specific issues but I want to focus in my brief remarks on the recent EPA Inspector General report about EPA's response to the World Trade Center attacks. It is an issue that illustrates how much Americans rely on the EPA for information about the air they breathe and how this Administration has undermined EPA's credibility.

In the last 12 days we marked the 2 year anniversary of the attacks on the World Trade Center and the Pentagon. It brought back a lot of memories for many of us. It certainly did for me and I remember very well being there the day after those attacks and seeing the firefighters and the police officers and others emerging from that hellish site covered with dust and debris.

I also know how concerned I was starting at that moment about the health of the people who were working and living in the area and we turned to our Government for advice and guidance. I was asked, I asked the EPA, I asked other Government officials, is the air safe. The EPA told us it was. In successive press releases, Governor Whitman, then Administrator, sought to reassure the people of New York and America that their air was safe to breathe.

Based on the EPA's statements, parents sent their children to school, elderly residents returned to their apartments and unfortunately now we learn from the EPA Inspector General that the statements were "not supported by the data available at the time."

I recognize and I have said this to Governor Leavitt and I have said it publicly, that the EPA and everyone else involved was operating under extraordinarily difficult and unprecedented circumstances but I just cannot accept that there seems to have been a deliberate effort at the direction of the White House to provide unwarranted reassurances to New Yorkers about whether their air was safe to breathe.

According to the Inspector General, "EPA's early statement that the air was safe to breathe was incomplete in that it lacked necessary qualifications and thus was not supported by the data available at the time. CEQ, the Council on Environmental Quality, and

the White House influenced the final message in the EPA's air quality statements."

Mr. Chairman, I will ask unanimous consent for two more minutes.

Senator INHOFE. It would be deducted from your next 5-minute round if that is acceptable.

Senator CLINTON. That is acceptable.

The Inspector General went on to say, "Based on the documentation we reviewed and our discussions with numerous environmental experts both within and outside of EPA, we do not agree that the agency's statement on September 18, 2001 that the air was safe to breathe reflected the agency's best professional advice. In contrast, based on the circumstances, it appeared that EPA's best professional advice was overruled when relaying information to the public in the weeks immediately following the disaster. The White House Council on Environmental Quality influenced through the collaboration process the information that EPA communicated to the public through its early press releases when it convinced EPA to add reassuring statements and to delete cautionary ones."

Mr. Chairman, these revelations are outrageous but they are part of a pattern. If this were the only example, it could perhaps be looked at as unfortunate but understandable but it cannot be isolated. Time and time again, when we ask for information and we do not get it or when we get information which experts clearly say and even lay people understand is not accurate, that undermines the credibility that we should be able to have in our Government, particularly about such important matters.

I would ask that my full statement be submitted to the record. I would also ask that a statement by EPA workers who perform health and environmental protection duties in expressing their anger and dismay over the White House's improper actions also be included in the record.

Senator INHOFE. Without objection, so ordered.

[The prepared statement of Senator Clinton follows:]

STATEMENT OF HON. HILLARY RODHAM CLINTON, U.S. SENATOR FROM THE STATE OF NEW YORK

Thank you, Mr. Chairman. I want to join my colleagues in welcoming Governor Leavitt, his wife and his family to the committee.

I also want to welcome a New York constituent who is especially concerned about the environment and air quality issues. Catherine McVay Hughes is a NYC downtown resident, who lives with her two young boys and husband one block east of the World Trade Center. I thank her for her work on these issues, and for being here today.

This is an extremely important hearing on the President's nominee to head the Environmental Protection Agency. In that capacity, Governor Leavitt would be responsible for carrying out the EPA's mission to protect human health and safeguard the natural environment air, water and land-upon which life depends.

There are many issues I am concerned about, and that I would like to discuss this morning. I am dismayed by the environmental policy choices that this Administration has made, and their impacts on the health of New Yorkers and its special places, from the Great Lakes to the Adirondacks to the Long Island Sound. Just to give one example, the Administration's recent decision to eviscerate the Clean Air Act New Source Review provisions will mean more acid rain in the Adirondacks and more asthma in New York City.

And it's not just the decisions the Administration has made, it's the way that they have made them. The Administration has not played it straight in pursuing its environmental policies. I won't repeat the litany of outstanding information requests from members of this committee, as Senator Jeffords has already discussed this

matter in detail. But the fact is that the Administration has stonewalled Congress and the public time and time again by refusing to provide full and complete information.

So there are a lot of topics to cover, Mr. Chairman. And I regret the fact that I cannot cover them here today with Governor Leavitt. But questions raised by a recent EPA Inspector General report about EPA's response to the World Trade Center attacks compel me to focus on that issue. It's an issue that illustrates how much Americans rely on the EPA for information about the air they breathe and how this Administration has undermined EPA's credibility in that regard.

Just 12 days ago, we marked the 2 year anniversary of the horrific terrorist attacks on the World Trade Center and the Pentagon. It brought back memories and emotions for the victim's families, for New Yorkers, and I think for all Americans. I know it did for me.

I remember so well being there the day after the attacks, and seeing the firefighters emerging from the haze that hung over the site, covered in dust and debris; the rescue workers, whom all of us saw, and many of whom I have met, who guided people to safety without a mask or a bit of concern about their own long-term health. I am sure that Americans remember—and New Yorkers have lived with—the apartment buildings, the business buildings that were covered in gray dust.

When we turned to our Government in Washington for guidance in the hours, days, and weeks after that tragedy, one of the questions I was asked and the EPA was asked, the White House was asked, and the city and the State were asked was: Is the air safe?

What did the EPA tell us? The EPA said: Yes, it is safe. Go back to work, get back to your daily lives. Based on the EPA's statements, parents sent their children to school in the area and elderly residents returned to their apartments. But, unfortunately, the EPA Inspector General now tells us that EPA's statements were, quote, "not supported by the data available at the time."

Now, I recognize that EPA and everyone else involved were operating under unprecedented and extremely difficult circumstances. But I simply cannot accept what appears to have been a deliberate effort to provide unwarranted reassurances-apparently at the direction of the White House-to New Yorkers about whether their air was safe to breathe. And that's precisely what is stated in the August 26 Inspector General Report entitled "EPA's Response to the World Trade Center Collapse."

According to the EPA Inspector General, quote:

"EPA's early statement that the air was safe to breathe was incomplete in that it lacked necessary qualifications and thus was not supported by the data available at the time. CEQ influenced the final message in EPA's air quality statements. "

The IG went on to say that,

> "Based on the documentation we reviewed and our discussions with numerous environmental experts, both within and outside of EPA, we do not agree that the Agency's statement on September 18, 2001 that the air was safe to breathe reflected the Agency's best professional advice. In contrast, based on the circumstances outlined in Chapter 2 of the report, it appeared that EPA's best professional advice was overruled when relaying information to the public in the weeks immediately following the disaster."

Mr. Chairman these revelations are outrageous. After reviewing the report carefully, I immediately wrote to President Bush, along with Senator Lieberman. In our letter, we asked for an explanation of White House interference in EPA's public statements about air quality in lower Manhattan. In addition, we asked the President to implement several of the IG's recommendations for ensuring that indoor air quality concerns have been properly addressed.

I would have thought that the White House would be outraged by these findings as well, and would want to get to the bottom of this and respond quickly. But that hasn't happened. We received a written response, not from the White House, but from Marianne Horinko, the Acting Administrator of the EPA. Unfortunately, Ms. Horinko's letter did not address our concerns. So Senator Lieberman and I sent a letter to the President reiterating our requests. We are still waiting for a reply.

The only response from the White House so far has been to suggest that national security interests justified their interference in EPA's statements. This is a canard. To say that national security somehow justifies telling people the air is safe when it is not is to essentially will engender distrust such that when people need their government most, they will trust them least.

This issue clouds the EPA's integrity. My constituents want and deserve a straight answer as to how and why they were misinformed, and until they get an answer, they and others will distrust the EPA's announcements. And with the

White House's lack of an interest in simply providing answers, who can blame them?

That is why I decided to delay full Senate action on Governor Leavitt's nomination until the White House adequately responds to my concerns.

Mr. Chairman, I want to be clear that this does not reflect any judgment about Governor Leavitt's fitness to be EPA Administrator, as I expressed to him in our private meeting. I will evaluate Governor Leavitt's nomination based on his record and the responses that he provides to the questions that I ask him today and submit for his written response. But given the importance of this issue to my constituents, and the Administration's reluctance to be forthcoming to date, I feel that I have no choice but to hold Governor Leavitt's nomination until this issue is resolved.

Senator INHOFE. Senator Crapo?

OPENING STATEMENT OF HON. MICHAEL D. CRAPO, U.S. SENATOR FROM THE STATE OF IDAHO

Senator CRAPO. Thank you, Mr. Chairman.

Governor Leavitt, we welcome you here today.

I want to join with my colleagues who thank you for having the courage to step forward and take on this important responsibility. When it was first announced that you would be the President's nominee, one of the reporters in the country asked me if I thought your nomination or your confirmation hearings would be contentious. I said, well there is certainly nothing in Governor Leavitt's background or record that would lead to any justification for a contentious nomination hearing but I suspect that there may be some effort to try to use these hearings as a forum in which to attack the President and his environmental policies. I think we are seeing that come forward today.

You are to be thanked for your courage in stepping into this arena. Although there will be differences between us about how the President has done on the environment and those differences will be aired in this hearing and in other forums, the fact is that the one bottom line we all share is we all seek to advance the best interests of the environment and we seek to make certain that we do what America leads this world in, that is facing up to environmental issues and dealing with them.

There are differences of opinion about how we should deal with the environment. One of the strengths I believe you bring to this office is the fact that you are so committed to the collaborative process. You not only have shown the leadership but you have shown the creativity to come forward and bring people with competing ideas together. One of the great strengths of our society is the fact that our system of government allows for the conflict of ideas. As those ideas come into conflict and as people debate them, true leaders help resolve good public policy through a collaborative process that helps bring forward the kind of decisionmaking that everyone can buy into, that we can get out of the partisanship with and get on with good public policy. That is what I believe is the strongest thing you bring to this Administration and to this issue.

Because of that, again I want to thank you for your courage in stepping forward at a time when you knew we were moving into a Presidential election cycle, you knew the issues into which you were stepping were issues with which you had no part in creating but with which you were going to have to deal. You are seeing the beginning of that today.

Again, I thank you for stepping forward to take part in this process and to use your leadership and your skills to help us address these issues for our Nation. I thank you for the courage you have shown in helping us to find another great leader who will step forward and help bring people together at a time when there is so much that would tend to divide us.

Thank you.

Senator INHOFE. Thank you, Senator Crapo.

Senator Baucus?

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

Senator BAUCUS. Thank you, Mr. Chairman.

Welcome, Governor. Good luck.

It is interesting to hear how many members of this committee asked you the same question I asked, namely why in the world do you want this job which must say something. You have a real tough job ahead of you.

I very much appreciate your willingness to take this on. I appreciate you as a westerner and that you understand western issues which is so important to so many of us but, again, you have a tough job. You will be I think the ninth Administrator since 1970. William Ruckleshaus began in December 1970, Russell Train, Doug Cousel, Ann Gorsuch, Bill Ruckleshaus came back again, Lee Thomas, Bill Riley, Carol Browner, Christine Whitman and you. On that list are some great people who when you think of them know that they stood up for good, solid and proper balanced protection of the environment. I can't say the same for everyone on that list but I certainly can for some.

One of the challenges you face is to be one of the great ones and that is going to be so difficult as I know you know because working in Washington, DC. as an EPA Administrator is not the same as being Governor of Utah. I have seen many Governors come to Washington, DC. and think they can "run this town the same way they ran their States." You can't do it. It is a whole different ball game. The dynamics are so totally different. There are so many longer knives in Washington, DC. compared with your capital city in your home State. It is just different and not in the best sense of the term in a lot of cases.

It is also different because you are no longer in charge, you are working for somebody. You are no longer the top person, you are kind of someplace else in the pecking order in the Administration. That is a huge challenge because I agree with all the statements made about you, your collaborative nature, you work together, your salt and so forth but that works for somebody who is in charge. It is a little harder for somebody who is not in charge. You may be in charge of managing the EPA but you are not in charge of policy, somebody else is. You have influence but you are not going to be in charge.

That means you have to fight like the dickens internally within the Administration to get what you think is right for the environment. Then you can be working with people, environmental side and the business side to try to iron out the cracked implementation of that policy.

There is a reason why Christine Todd Whitman left. She was not in charge, she was told what to do, she very graciously left but we all know why she left.

Senator INHOFE. Senator, I am going to ask you if you would please dispense with your remarks at this time.

Senator BAUCUS. Mr. Chairman, I have one more minute and I think it is only fair.

Senator INHOFE. To be deducted from your time.

Senator BAUCUS. You can deduct it. I think it is only fair.

Senator INHOFE. You are recognized.

Senator BAUCUS. Thank you.

Another issue I want to talk about as we did privately is Libby, Montana. I have a long statement here about Libby, I talked with you privately about Libby. Only 10 percent of the cleanup has been accomplished so far in Libby. Carol Browner and Christine Whitman both were great about coming to Libby. We had a wonderful person there named Paul Peranaud, EPA's man on the spot who had the utmost confidence of the people in Libby.

There is a great sense now in Libby, Montana, the community is infected with asbestos related diseases on account of W.R. Grace's asbestos contamination, that the momentum of the cleanup is losing steam. So I ask you to dedicate your efforts if you could please and focus on Libby because those people in Libby need it so much.

I also mentioned in your conversation that Milltown, Montana needs a lot of help.

Thank you.

[The prepared statement of Senator Baucus follows:]

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

Mr. Chairman, Senator Jeffords, thank-you for calling this hearing today to consider the nomination of Michael Leavitt to be Administrator of the Environmental Protection Agency.

This is an important nomination, to an Agency that should set the gold standard for protecting the public's health and their environment. Lately, the EPA has struggled to set that standard, reaching a low point when former Administrator Christie Whitman stepped down early this summer. I believe Ms. Whitman tried hard to be faithful to the mission of the EPA; she certainly always responded well to requests I made of her for my constituents in Montana.

But, I don't think that Ms. Whitman received the support she needed and deserved from the Administration. I admire and respect her decision to step down.

Which is why I've told Mr. Leavitt that I'm not quite sure why he wants this job. But, I take him at his word that he will stand firm and honor the commitments he makes on behalf of the EPA, to me, to this committee or to the American people. The EPA needs someone to restore trust and accountability to the Agency.

The Chairman has asked us to keep our remarks brief, so I will turn to the issue that means the most to me, and that is protecting the people of Libby, Montana.

Mr. Chairman, Governor Leavitt—people are dying in Libby. Hundreds have already died. In fact, more than 300 people are buried in Libby alone, their deaths all related to asbestos exposure that resulted from the vermiculite mining activities of WR Grace.

The EPA finally came to Libby about 3 years ago. Since that time, a tremendous amount of Federal resources have poured into Libby, to start cleaning up WR Grace's mess and to screen residents for asbestos-related disease.

The results of these efforts have been staggering—asbestos was and still is everywhere in Libby, in homes, gardens, driveways, even in the high school track. Additionally, the Agency for Toxic Substances and Disease Registry has found that people from Libby suffer from asbestos related disease at a rate that is 40–60 times the national average. They suffer from a rare asbestos-caused cancer, mesothelioma (MEE-SO-THEE-LEE-OMA), at a rate 100 times the national average.

Even though we are 3 years into EPA's clean-up of Libby, only 10 percent of the total amount of clean-up work has been completed.

Last year, Marianne Horinko testified before this committee and promised me EPA would clean-up the town of Libby in 2 years, in 2004. Now, EPA tells me it will be closer to 5 years, maybe by 2008.

This greatly concerns me. This town is sitting on a pile of asbestos. The residents of this town were exposed to high levels of asbestos for years. Many of them, as I have already pointed out, are dead. Libby must remain a top, top priority for EPA, for funding, for staff, for resources.

The Libby project should be a prime example that EPA can point to on how Superfund protects Americans.

The investment of millions of Federal dollars in Libby, Montana—nearly $90 million to date—merits careful follow-up and focus. This project was started well; it deserves to be finished well. We can't lose focus now.

Ever since Whitman stepped down, and the onsite coordinator, Paul Peronard, was transferred out of Libby, folks in Libby tell my staff that EPA's attitude has shifted. EPA staff appear over-worked, and tired, lacking adequate support from Region 8 and headquarters. We have heard of dozens of examples of EPA staff acting in a less than professional manner with Libby residents. Libby, and the EPA, deserve better.

Mr. Leavitt—I ask for your commitment today to make a Libby a top priority for EPA and for you personally if you are confirmed as Administrator. That means maintaining momentum and focus on the clean-up work until the town has a clean bill of health sooner rather than later.

I also ask you to come to Montana, and to commit to meeting with EPA folks on the ground and with members of the Libby community to better understand what is needed in Libby to get the job done.

The people of Libby have suffered enough. It's our responsibility to take that town off the National Priorities List as soon as possible.

Thank you, Mr. Chairman.

Senator INHOFE. Thank you, Senator Baucus.

May I just remind my fellow Senators the reason we are having time restrictions is to respect the time of the other members and we are trying to do that. You will have ample time to make any remarks you want as this hearing progresses.

Senator Allard?

OPENING STATEMENT OF HON. WAYNE ALLARD, U.S. SENATOR FROM THE STATE OF COLORADO

Senator ALLARD. Mr. Chairman, thank you, and I appreciate your recognizing that some of us have rights too as far as free speech is concerned.

I just want to compliment you, Governor, because you are stepping forward at a time that is going to be very difficult. Obviously the issues before the EPA are difficult but this is an election year. There are obviously members on this committee and members in the Congress who will try and say that the environment is a partisan issue. In reality, the environment is not a partisan issue. I can point to sites in the State of Colorado where their cleanup was opposed by a Democratic Administration, right in the middle of Denver. I can also point to sites in Colorado that are being cleaned up ahead of schedule and under budget because of this Administration. So I don't think that the environment should be a partisan issue. We can point to instances on both sides with both Administrations.

I think you are the kind of leader that we need in this position and I admire you for your courage and willingness to step forward. I think you recognize that local interests can also have the best solution for the environment and that all the decisions shouldn't be driven out of Washington.

I think you also recognize that there is a balance between private property rights and that is not a radical idea. Private property is protected in the Constitution. There are some issues that are specific to the western part of the United States and they have to be dealt with in a different way in order to protect the environment than on the East Coast. I think you understand that delicate balance from our conversation. No two ecosystems are the same. Ecosystems have to be managed differently in order to protect the environment within those ecosystems. I also think you understand how important it is that we apply good science as we are dealing with the environment.

Again, I want to thank you for being willing to take on this job and it is going to be difficult but I hope we can avoid some of the partisan efforts that seem to be happening to make this a Republican versus Democrat issue. We are all concerned about the environment.

Mr. Chairman, I ask unanimous consent that my full statement be made a part of the record.

Senator INHOFE. Without objection, so ordered.

[The prepared statement of Senator Allard follows:]

STATEMENT OF HON. WAYNE ALLARD, U.S. SENATOR FROM THE STATE OF COLORADO

Thank you, Mr. Chairman, for convening this hearing in a timely manner. The confirmation of the President's nomination must be a top priority for this committee and the Senate. As we begin this hearing, I challenge my colleagues to focus on the results and achievements of our national environmental policy and not on penalties and politics. Our national environmental regulatory structure, abundant environmental mandates and administrative and judicial rulings, work together to protect our most precious resources, and have helped spur environmental recovery in many areas. But these same layers of laws have also created tremendous burdens for municipalities, businesses and the ongoing development and maintenance of our public infrastructure. We cannot simply wipe the slate clean and sweep away basic environmental rules; but we can—we must—develop an environmental agenda that protects private property rights while balancing environmental achievement with the need for continued economic progress.

Governor Leavitt hails from the western United States. No other geographic region in the country has felt the heavy hand of regulation more than the public land States of the west—be it in the form of forthcoming EPA mercury standards or the Department of the Interior's Endangered Species Act. Governor Leavitt understands the complicated web of environmental rules and the impact that they have on health and property. As a Governor, he has worked hard to increase the well-being of the people in his State, and he has worked diligently to improve the State of the environment. Governor Leavitt understands the fundamental need to protect the environment from irresponsible actors. Just as important, though, he understands the need to protect the environment through policies and programs that generate results and that create incentives to improve land, water and air quality. He also knows that heavy handed action is not nearly as important as the results that can be achieved through cooperation and collaboration. The development of such Enlibra principles have received a bipartisan endorsement from the National Governor's Association and deserve a great deal of attention.

As we begin deliberations on the nomination today, we do so in an environment that has improved greatly over the past several decades. In the last 30 years water quality has improved and emissions of the six principle air pollutants have been cut 48 percent. This progress comes even as the country has experienced a 164 percent increase in gross domestic product, a 42 percent increase in energy consumption and a 155 percent increase in vehicle miles traveled. This improvement has occurred over the course of thirty-four years, 22 of which came under the leadership of Republican Administrations. Echoing the other members of the committee, our nation lives today in a cleaner, healthier environment, far more clean than it was when President Bush first took office. As mentioned, the most recent EPA data shows that, SO2 emissions from power plants were 10.2 million tons in 2002, 9 percent lower than in 2000 and 41 percent lower than 1980. NOx emissions from power

plants are also lower, measuring 4.5 million tons in 2002. This is a 13 percent reduction from 2000 and a 33 percent decline from 1990 emissions levels. The Bush Administration's environmental success will continue under Leavitt. Under his leadership, Utah now meets all Federal air quality standards. Seventy-three percent of Utah's streams currently meet Federal water quality standards, compared to 59 percent 10 years ago. This is a remarkable improvement since Governor Leavitt took office. In Colorado, the Bush Administration's efforts to clean-up the Shattuck and Vasquez Boulevard sites deserve many thanks. The Administration continues to prove its commitment to the people of Colorado through responsible stewardship and active protection.

The evolution of environmental rules and regulations that control so many aspects of life must be realistic goals that are established through a course of open deliberation and sound science. The impact EPA has on individual lives is real, not fictitious. New laws and enforcement decisions cannot be taken lightly. I am pleased that President Bush's approach has been one of reform—changing command-and-control mandates to innovative, market-based approaches that utilize cutting edge technology to bolster environmental benefits. I hope this type of strong, principled leadership will continue into the future, and challenge the new nominee to further these efforts.

Governor Leavitt carries all the necessary credentials to oversee our nation's environment. He has not backed away from major issues and has been a proactive leader on many issues. Not only is he the nation's longest serving Governor, he has experience as chair of the National Governor's Association, the Western Governor's Association—where he oversaw the Western Regional Air Partnership—and the Republican Governor's Association.

Yet despite all these accomplishments, there is still room for progress. Senator Crapo and I have introduced legislation that would establish an independent office of the EPA ombudsman. This important position was critical to the successful removal of waste from the Shattuck Superfund site in Colorado. The legislation has already passed the Senate and I look forward to working with members of the House and the Administration on its enactment into law. I also believe that the President's Clear Skies Initiative sets a strong tone for positive results. According to EPA figures, the proposal will reduce SO2 emissions by an additional 70 percent by 2018. I want to caution, though, that the Clear Skies proposal must be formulated in a way that does not bring about arbitrary change at the expense of western States' interests.

The commitment President Bush has made to improving the environment is strong, clear and unquestionable. I look forward to working with members of this committee and the Administration as we work toward confirmation of this nominee.

Senator INHOFE. Senator Boxer?

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

Senator BOXER. Thank you very much, Mr. Chairman.

I want the record to show that I think taking time away from colleagues if they go over for a minute, colleagues who have served here for many years, I don't think it serves the public interest. It is just my opinion and obviously you are the chair and you can choose to do that.

I just want to say I had a very good meeting with the Governor. We spoke for about 45 minutes and he knows how concerned I am about the direction of this Administration. We didn't pull any punches with each other and I so appreciated his candor at that meeting.

Clearly objective voices will decide if this Administration is moving forward on the environment or is taking us back. Clearly today we have two distinct views. Republicans feel we are moving forward, we are doing great and the Democrats don't seem to share that.

As for me, I am not going to make a statement full of hyperbole, I am going to go in my questions with the exact rollbacks. I have 50 rollbacks, Governor, that this Administration has undertaken

and their relatively short time. Overall, there have been 300 rollbacks of environmental protection. I guess you are fortunate it is only 50 in your EPA, but it is very, very serious.

For me, it is critical that the EPA Administrator, whether she or he is sitting in a Republican Administration or a Democratic Administration and I mentioned this to you, will go to that Cabinet meeting and will sit in that chair and as Senator Baucus says, will fight for the environment. We are not going to go over those now but will wait for the questions.

When you sit around that table, I would hope you would see your role not as a Governor or a Senator. We have to balance a lot of different issues. You are there to fight for the environment. It is the Environmental Protection Agency. It is not the Environmental Pollution Agency, it is the Environmental Protection Agency. So to me that is the most important thing I want to hear from you today, is that sitting around that table you will be an environmental advocate, because I believe that is exactly what your job is. The President, he is going to take everybody's views. You are going to have OMB objecting, you are going to have other people objecting, you might have Commerce objecting, but I want to know how you view your role, and I will ask you about that. I am also going to, as I told you when I met, in addition to those things, ask you about your own record in Utah, which I see as being pluses and minuses.

But there were three things that concerned me, and I want to explore them with you when I get a chance. One is there are newspapers articles that staff was retaliated against after they made recommended changes in endangered species protection. So I want to get your side of that. I will tell you the reason. I am very concerned in this EPA. I have a lot of whistle-blowers calling my office. They are told not to talk to anybody, not to talk to the press. I don't think that is good for the Country. So I want to ask you about that. Also, lacks clean water enforcement. A recent EPA report on clean water enforcement you were tied for last place with Ohio and Tennessee. I want to ask you about that. And, last, allowing Utah's power plants to increase their emissions of nitrogen oxide. Between 1995 and 2002, the rest of the Country reduced by 21 percent, and your emissions went up. So I will ask you about the rollbacks, the record there, and, in general, your feeling about the job.

Thank you, Mr. Chairman.

Senator INHOFE. Thank you, Senator Boxer.

Well, Governor Leavitt, at this time we will recognize you for your opening statement. We would like to have you know that we will submit your entire statement for the record, but ask you to try to confine your remarks to 5 minutes.

STATEMENT OF HON. MICHAEL O. LEAVITT, NOMINATED BY THE PRESIDENT TO BE ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY

Governor LEAVITT. Senator, thank you, and thank you all for the graciousness with which I have been received over the course of the last weeks. In keeping with the spirit and letter of the chairman's request, I will ask that my full statement be submitted, and I will simply make five points.

First, I have in fact answered the President's call, and he has asked that I be the Administrator of the Environmental Protection Agency, and today I begin a road of seeking the confirmation of this Senate. Many of you have asked why. The answer to that is simple. I do so because I passionately believe that this Nation deserves to have a clean and safe and a healthy environment. And I also believe that the United States can increase the velocity of our environmental progress, and that we can do it without compromising our competitive position economically in the world.

The second point I would make, Mr. Chairman, is that for 11 years I have served as Governor of Utah. I have not had the luxury of being able to do so in isolation. As Senator Jeffords pointed out, one of my responsibilities has been to ensure a proper education for the children of our state. Another has been to nurture those who have been in need. Still another has been to provide economic leadership, helping to ensure that there is quality jobs for state residents. And, while I recognize that if I am confirmed as the Administrator, I will have the luxury of working full-time to protect the environment, I also recognize that I still won't be able to do it in isolation.

The third point is that I view myself as a problem-solver by nature. That is where I find satisfaction, and over time I have had substantial experience in dealing with large, complex environmental issues, and I have found with experience that the solutions to those problems are found in the productive middle; rarely are they found at the extremes. That experience of working through those problems has caused me to form and have nurtured in me, or at least crystallized in me a very clear environmental philosophy. Former Governor Kitzhaber, a Democratic colleague from the State of Oregon, and I shared many thoughts about this. We ultimately concluded that we needed to give that philosophy a name. We coined the phrase "en libra." It is a Latin word, two syllables: "en," to move toward; and "libra," balance; to move toward balance. You will see that reflected today in our interactions.

Last, while this committee hearing is about my fitness to serve as the Administrator of the Environmental Protection Agency, it is clear to me that there are disagreements that will play out in our conversation, and I want to be as forthcoming as I can, and want to contribute in every way I can to that conversation. Obviously, there will be limits when we start reflecting on things that have happened in the past and things that could happen in the future. But I do believe one thing that would be most helpful would be for me to give you a clear view how I see my relationship with the President. Perhaps I can best do it by reflecting on my own experience as Governor.

For the last 11 years I have served with an able cabinet, and with each one of those members of the cabinet I have had a conversation. I want you to know that the President of the United States has my full respect, and he has my complete loyalty. None of you would expect less of me than that. When I met with my cabinet members, I told them that this is the way I defined loyalty. First, I expect them to run the department over which they have been appointed. Ninety-nine percent of the things that come through that department I, as Governor, will never see. And I ex-

pect them to keep the law, and I expect them to do all they can to manage the department according to the policies that I have laid out. Second, I expect them to be wise enough to know when a matter needs to be elevated, when it begins to reflect on other parts of society other than the jurisdiction that they immediately have. Third, when those are elevated, I expect them to tell me exactly the way they feel; sometimes publicly, other times privately. And, last, I expect them to understand that I am the one who was elected as Governor, and there are times when those decisions have to be made by me. And I expect that is precisely the same relationship I will have with the President of the United States; I will run the Department, he will know where I stand, and I will give this all I have.

Senator INHOFE. Thank you, Governor Leavitt.

We will start our series of 5-minutes questions. I apologize to some who have arrived late. We are trying to stay on schedule and you will have time to make your statement during question time.

There are two required questions I would like to ask you at this time. Are you willing to appear at the request of any duly constituted committee of Congress as a witness?

Governor LEAVITT. Mr. Chairman, I am.

Senator INHOFE. Do you know of any matters which you may or may not have thus far disclosed that might place you in any conflict of interest if you are confirmed to this position?

Governor LEAVITT. I know of none.

Senator INHOFE. Thank you very much.

I would like, since I cut you off there, you can use any of my 5 minutes to conclude your opening statement, if you weren't quite through.

Governor LEAVITT. Well, Senator, I would only add this. I recognize that the first obligation I would have, if confirmed by the Senate, would be to gain the trust and the confidence of the nearly 18,000 people who work at the Environmental Protection Agency. By my experience, these are dedicated, able people. And I would tell this committee, the full Senate, the American people, and those at the Environmental Protection Agency that I would give this my full energy.

Senator INHOFE. I have no doubt to that.

Governor Leavitt, I would just ask one question, then we will go on to the other Senators. When I became chairman of this committee, I said that we wanted to do three things. The first one was to use good, sound, objective science. Quite often, Governor, there are competing sciences, and there are certainly some that are recognized higher above others, National Academy of Sciences and so forth. I would like to know how you are going to address the science, as these decisions come along, in carrying out the duties to this office.

Governor LEAVITT. Senator, I reflected earlier that many years of dealing with complex, large-scale environmental problems has crystallized in me a philosophy. One of the tenets of that philosophy is science for facts, process for priorities. What I mean by that is that very early in my time working with environmental problems people would say to me, but the science says this, and I realized over time that there are, at moments, competing science. And as

I began to dig deeper in the science, I became knowledgeable that many times there were human assumptions made in the creation of science, and that it was my obligation as a policymaker to understand what was behind the science and to understand the human judgments that had been made. I absolutely believe that the best science, the best science ought to be utilized. But we have to have disciplined process, then, to understand what is behind the science and what the policy implications are so we know which science is best and what the implications are.

Senator INHOFE. Thank you, Governor.

I will recognize the Senators in the order using the same early bird order. I would observe, however, in my opening statement I mentioned that most of the discussion in opening statements really had nothing to do with Governor Leavitt. And if we will confine our questions to Governor Leavitt and his positions, and things that you want to inquire about him, I am sure that we will have ample time to do it. I would second say that we are going to have a vote at 10:45. It is the decision of this chair to go ahead and continue the questions throughout that vote. I will start out by voting, coming back; perhaps, Senator Voinovich, you can chair when I am gone. We will vote in shifts, if that is all right.

Senator Jeffords, you are recognized for your 5 minutes.

Senator JEFFORDS. Thank you, Mr. Chairman. These are most important matters, and members on both side deserve ample time to make their remarks and ask questions, and I laid the whole afternoon before me for that purpose, so I would hope that we do give that opportunity to the members. Also, some members couldn't be here. Senator Lieberman also would have submitted questions to be answered, and I assume those will be answered.

Senator INHOFE. I am sure they will. We announce at the very first, questions for the record from those who were not able to attend would be fine.

Senator JEFFORDS. Chairman, I ask unanimous consent the prehearing questions that are received and provided, rather, to Governor Leavitt on September 5th, 2003, be inserted into hearing record and that the record be held open, as is our usual course of business, until these questions are answered.

Senator INHOFE. Is there objection? Hearing none, so ordered.

Senator JEFFORDS. I would like my colleagues to understand the importance of these questions, as well as the importance of the full exchange of information with Governor Leavitt. I intend to obtain and review these answers prior to the markup of Governor Leavitt's nomination in the committee.

Governor, the Bush Administration does not have a good record of sharing information with this committee, not during my chairmanship and not while I have been Ranking Minority Member. Last week I provided you with a substantial list of outstanding unanswered or inadequately answered requests that I and members of the committee have made over the last 2 years. It is a long list, and that is a long time. Do I have your commitment to endeavor to provide this information to me prior to your confirmation? And if you could give me some guidance on how much time that might take, if you know, I would appreciate it. And I would look more favorably on your confirmation if these questions are answered.

Governor LEAVITT. Senator, as you can appreciate, I don't have access to any of the information that you talked about in the past. I would like to reflect that it would be my desire to have a very straightforward, candid, and open relationship with you, as we talked during our private meeting. I fully also acknowledge that there are historic tensions that exist between administrations and the Congress, and I don't fully understand all of the dynamics of this, but I want you to know that I will do all I can to make certain that I am responsive to you. With respect to your questions, I am anxious to answer those and make certain that they are responded to in a way that will provide you with what information you need to know what goes inside my head and also my heart.

Senator JEFFORDS. I appreciate that answer. Governor, the White House recently rushed to issue a second final rule to eliminate the New Source Review program. Taken together, these new rules will allow at least 7,000, if not all, major sources of pollution to increase harmful emissions above today's levels without requiring modern controls. This last rule, done just before Labor Day, allows 120 or so of the oldest, least efficient, and dirtiest power plants to avoid modern controls forever. According to EPA and Abbott Associates, that means at least 20,000 people will continue dying prematurely each year. Your State and your director in Utah and the Bipartisan Group of Northeastern Governors had said these rules make NSR worse, and EPA hasn't shown the benefits for polluters justify the cost to public health, as they must under the major rules.

No. 1, Acting Administrator Renko has said that the latest NSR rule will increase reliability without affecting emissions, and Assistant Holmes has stated that emissions at some facilities will increase. If you become Administrator, will you agree to collect information on these rules to find out who is telling the truth and share it with the committee?

Governor LEAVITT. Mr. Chairman, my objective, if I am confirmed, is to have the air cleaner when I am finished than when I start. I have watched this New Source Review issue unfold, and I have done my best to understand the dynamics of it. I have spoken extensively with State regulators who use the phrase the puzzle book; it is the five three-ring binders that contain the regulations necessary to decide if a plant is subject to New Source Review. On the other hand, I have heard others speak of the problem with these legacy plants and the need to find the way to do it. Now, my own air director, as you indicated, was asked for input and provided them with input, which I am happy to say, for the most part, in fact, entirely was adopted as part of those conclusions. My objective is to make certain that we are upgrading wherever possible. We will administer the rule, I will do everything I can to clean the air, and look forward to cooperating with you in whatever way I can to make that happen.

Senator JEFFORDS. I appreciate that answer, because I can't tell you how frustrated I am. We continuously ask for answers and we get nothing.

Senator INHOFE. We will have several other rounds, but your time has expired.

Senator Voinovich?

Senator VOINOVICH. I have often stated that we need to harmonize our environmental policy and our energy policy. In fact, I believe these two issues are merely two sides of the same coin. We cannot have a healthy sustained economy without a healthy environment, and we cannot afford to invest in new environmentally friendly technologies in an unhealthy economy. And I was interested that you believe that you can move forward and clean the air and do a much better to our environment, but at the same time take into consideration the impact that it has on our competitive position in the global marketplace.

President Bush has set out an aggressive plan to reduce emissions of harmful pollutants into the atmosphere in a way that will not put American jobs in jeopardy. The agenda calls for reduced emissions from diesel vehicles through new emission limits on diesel truck engines and new roles that will require reduced emissions from off-road vehicles like heavy construction equipment; passage of the Clear Skies Act to reduce power plant emissions by 70 percent, of which I am a co-sponsor with Senator Inhofe; and reform the New Source Review program to allow electric generators to put new modern equipment into their power plants, and Senator Jeffords has referenced that.

If you are confirmed by the Senate, you will be a person who has to implement President Bush's plan. As I mentioned in my opening remarks, I believe you are perfectly qualified for this position because of your ability to bring everyone to the table and find consensus. But I don't know that you have ever faced a situation like we have here. Senator Jeffords and I have been dealing with this now for about 2 years. The two sides of this debate seem so polarized that finding any sort of compromise or consensus will be a huge undertaking. How do you plan to accomplish this and implement the President's clean air agenda?

Governor LEAVITT. Senator, during the western electricity crisis, we in the west had to reassess our position with respect to energy, but at the same time wanting very much to do nothing that would compromise the environment. In my own State we wrote a new energy policy that called for us to move forward with the development of a nearly 5,000 megawatt each year, actually, and also to continue to reduce air pollution, and we have been able to do that in the last 2 years. We have done so by following a balanced policy. Now, I will tell you that I believe fundamental to being able to increase the Nation's supply of energy, and to do it without sacrificing our environment or our competitive position, the President's Clear Skies initiative is a prerequisite to being able to accomplish that. And I look forward to working with the committee and the President to be able to find a way in which that can be implemented so that we can move forward with both.

Senator VOINOVICH. New science. The National Science Foundation, a couple of years ago, said that there should be an assistant over there in the Department that elevates the scientific capacity of the Environmental Protection Agency. Initially Senator Carper and I introduced legislation, and the reaction from the Administrator was that we don't need a new position in the Environmental Protection Agency. I intend to reintroduce that legislation with Senator Carper. And you mentioned that you would take all of the

information that you have, and I would like a commitment from you that you would reevaluate the position of the Environmental Protection Agency in regard to this. And, once done, I would hope that if you find that the National Science Foundation was correct, that you could become an advocate in the Administration, and perhaps even get them to support this legislation, which we feel is crucial to your agency.

Governor LEAVITT. Senator, if I am confirmed, you have my commitment to learn more about that, and I look forward to working with you on this matter, as we have on so many in years past.

Senator INHOFE. Senator Wyden?

Senator WYDEN. Thank you.

Governor, welcome, and appreciate all your candor. I would like to begin by having your reaction as to whether you would ramp up enforcement of the Country's environmental laws. I think there is a widespread feeling in the Country that this is something of a polluter's holiday; that you look at the clean water record, for example, the clean water record found that only 24 percent of the facilities in significant noncompliance, major violations, faced enforcement actions. The amount of penalties recovered from polluters dropped 50 percent in 2002 compared to prior years.

My first question is are you prepared to ramp up enforcement of the environmental laws? And particularly after the collaborative approach that you have advocated, that I support, after it fails, are you willing to bring in strong enforcement stick and fight for the Country's environmental statutes?

Governor LEAVITT. Senator, I would like to give you a straightforward understanding of my enforcement philosophy. First, the goal is compliance, to find ways to move people to compliance; and there are times when strong enforcement is the only tool available to have that happen. If there are those who avoid or those who evade the law, the full weight of the Environmental Protection Agency and the law will be brought to assure their compliance.

Senator WYDEN. Well, that is not being done today, and so my question, we will be back to it today, is something needs to be done to ramp up enforcement. When you look at those numbers coming out of EPA, they are sending a very strong message that polluters can pretty much enjoy this holiday, and it needs to be changed.

My second question involves what you would do to restore the independence of the Environmental Protection Agency. You have got people like Russell Train. We are talking about being bipartisan here. He served both in the Nixon and Ford administrations. He is talking about unprecedented intrusion by the White House into environmental policy. What would you do to restore the independence? And perhaps you might want to tell us what did the White House tell you about how you do your job? You talked, and I know it to be the case, about how you treated your people fairly, but you didn't talk about what the White House said to you about how you would be able to carry out your duties. What can you tell us today about how you would restore the independence and the credibility of this agency that it has enjoyed in the past?

Governor LEAVITT. In my conversations with the President, I made clear to him and he made clear to me that our mutual goal was cleaner air, purer water, better cared for land, and a healthy

environment, and I agreed, Senator, to offer myself for this position with that in mind. It was his commitment that attracted me to this role. Now, I recognize there are disagreements with respect to the policy, but I would like you to know this: the President will always know where I stand. He will hear it many times publicly and sometimes privately. I recognize in the role that he has and the role that I have, that what he needs from me is loyalty expressed in the context of he will know what I believe to be the facts, and he will also know what the best science is and what the people of the Environmental Protection Agency believe.

Senator WYDEN. How would you have handled the situation such as the Cheney task force? Christine Todd Whitman was part of it, which was put in place in secret, continues to be secret despite the fact that three Federal courts have ordered the information released? What would be your reaction if someone asked you, as EPA Administrator, to participate in something with that level of secrecy?

Governor LEAVITT. Senator, I know very little, really, about the incident you are referring to. I will tell you that I intend to be a straightforward voice that will lay out the facts and call them as I see them, and I will be a passionate advocate for my view and what I believe to be the view of the Environmental Protection Agency.

Senator WYDEN. Would you open up, for example, the discussions that are now going on with industrial livestock farms? There are discussions going on behind closed doors. People want to know what is going on with respect to the Clean Air Act and the Superfund laws there. They are being done in secret. Would you open those up?

Governor LEAVITT. Again, I know nothing about those discussions. I would like to tell you about the way we handled those discussions in my State. We anticipated the need for these combined animal feeding operations to find some means of improvement. We began working in a very collaboratively way, bringing together the agricultural organizations with those who would ultimately have to make decisions. We brought the EPA from the region over and told them we wanted to find a way in which we could work together to inspect these organizations quickly and bring them into a sense of compliance. Over the course of a very short period of time we were able to develop a program where all 3,000 potential combined feeding operations in our State were inspected, and that all of the larger ones, 387 of them, have now been permitted. We have done so because we wanted the water to be cleaner, and it has worked. That is the way I would intend to work, and those are the kinds of conversations that I want to participate in.

Senator WYDEN. I think what troubles me, and I touched on it, is the way you have conducted some of these discussions and the Western Governors' Association have conducted a number of these bipartisan policies indicates there is a big gap between that approach and what we have seen, and I will be discussing that some more in the next round.

Senator INHOFE. Thank you, Senator Wyden.

Senator CORNYN.

OPENING STATEMENT OF HON. JOHN CORNYN, U.S. SENATOR FROM THE STATE OF TEXAS

Senator CORNYN. Thank you, Mr. Chairman.

Thank you, Governor Leavitt, for being here today.

Senator INHOFE. Let me interrupt for just a moment. The scheduled vote that was going to be at 10:45 looks like it will be at 11:15 now.

Go ahead.

Senator CORNYN. As we have heard, this hearing is really not so much about your qualifications, unfortunately, from my standpoint, but an opportunity for people to make and repeat, in many instances, unfounded and outlandish claims against the current Administration in terms of its environmental record. I am not asking you to comment on that, that is my opinion, and I think shared by many.

Obviously, delay in your confirmation as head of the EPA is hardly a pro environment move, and so I hope this committee will expeditiously vote out your nomination and we will confirm you by the vote of the entire Senate quickly. There is no reason not to, and the only reason for delay is for scoring political points, which I hope we would avoid and show some restraint attempting to do that.

Just listening here so far to this hearing, you would think that pollution is continuing and running rampant in our Country, when in fact the EPA, just last week, in its latest findings on national air quality, reflects that at thousands of monitoring stations across the Country we have seen tremendous improvement over the past 20 years for all six principal pollutants. Since 1970, aggregate emissions for the six principal pollutants have been cut by 48 percent. Now, to be entirely bipartisan about that, that has occurred both during Democratic administration and Republican administrations. But in the face of those facts, I find it very hard to swallow some of what I hear when I hear unfounded criticism of this President's commitment to environmental protection. Indeed, under his administration, we have seen the reduction of pollutants, we have seen cleaner air and safer water for all of us, which is our collective goal, be we Republican, Democrat, Independent, or whatever.

I share Senator Voinovich's concerns about the polarization of the debate, because it seems like, for some, environmental protection is a zero sum game; you are either for the environment or you are for people, and there could be no sort of middle ground. And I delighted to hear you express your desire to try to achieve some middle ground in what seems like a zero sum game in the eyes of some.

Now, I just would have really one question in this round, and it relates to New Source Review, and let me just tell you my concerns. New Source Review has been a lawyer's best friend. Because of the unpredictability of this regulation, because of lack of clarity, lack of predictability on how it would be applied, rather than a cleaner environment, we have seen protracted litigation; and that is why I say the New Source Review has been the lawyer's best friend.

Do you view that, whatever the rules may be, that clarity, common sense, and balance ought to be our goal, rather than rules that

are perhaps vague, ambiguous, those that will basically invite litigation and thus delay an implementation of those rules? Could you respond?

Governor LEAVITT. Senator, I acknowledge that there has been some disagreement on the prudence of that rule, but I will tell you this. I find no disagreement on the fact that the rule needed to be clarified. When I speak with State regulators in particular, I referred to this earlier, they called them the puzzle book, and not only because there is a picture of a puzzle on the binders, but there are five three-ring binders that contain regulations through which a State regulator has to filter every decision to determine if in fact it applies or it does not apply; and there was unanimity, from what I knew, that there was a need to simplify it. Now, there was disagreement as to how it should be done, but the decisions has now been made, and it would be my objective, if confirmed, to do that in the most efficient way possible to make certain that we are moving toward cleaner air, fundamentally cleaner air.

Senator CORNYN. And would you view clarity and eliminating ambiguity in what the rules are so that there can be, where necessary, strict enforcement of a clear rule, the goal?

Governor LEAVITT. Senator, I have always found that in rulemaking clarity and straightforwardness is the first step of compliance. Generally speaking, most people want to keep the rule, most people are willing, but they have to know what the rules are and how to apply them.

Senator CORNYN. Thank you, Governor.

Mr. Chairman, I would like to ask that the latest EPA trends report released last week, entitled "Latest Findings on National Air Quality" be made a part of the record.

Senator INHOFE. Without objection, so ordered. Thank you, Senator Cornyn.

[The referenced document appears in the appendix to this hearing record:]

Senator Clinton?

Senator CLINTON. Thank you, Mr. Chairman.

Governor, I have a number of questions on a range of issues that I will most likely not get to during this hearing unless the chairman has a change of mind and we are able to lengthen it so that we can get all of our questions in. So I will be submitting a number of questions to you in writing. There are lots of issues that are of concern to New Yorkers, and I would like to get your answers as we move through this process.

But I want to ask you about the continuing concerns that I have expressed about the Inspector General's report, and I want to speak about indoor air quality. And before I ask a specific question, I want to thank a representative of the Downtown Residents from Lower Manhattan, Katherine McVeigh Hughes, who has just arrived, because I think Mrs. Hughes demonstrates clearly why I am so concerned about this. She is the mother of two young boys. Along with her husband, she lives one block east of the World Trade Center, on Broadway, between John and Maiden Lane, and she has lived through the confusion, the disinformation, the unsubstantiated reassurance. And I know that in addition to your many other attributes, you and your wife have a lovely family, and I

think that putting yourself into the position of someone like Mrs. Hughes perhaps can clarify the concerns that we have and why this is not just a question about the past, it is a question about what you will do as the Administrator.

Because when we began the process of cleanup, it took quite some time, but the EPA finally announced a testing and cleanup program in May of 2002, and they tested and cleaned thousands of residences; and I applauded that effort at the time, but I continued to raise questions about its adequacy. Since reading the Inspector General's report carefully, I have even greater concerns, because the Inspector General makes a compelling case that further testing and cleanup are required. Specifically, the IG recommended three additional testing and cleanup actions. I wrote to the President, asking that these be implemented. It seems to me that given the problems in the cleanup and the testing, given the IG's findings, that when we went back and retested some of the cleaned up areas, we found residue of contaminants that were troubling.

I want to ask you a simple yes or no question at the outset. If you are confirmed, would you seek to implement the recommendations about indoor air testing and cleanup referred to in the Inspector General's report and in my letter to the President?

Governor LEAVITT. Senator, I understand that there are conversations going on currently between your office and the White House with respect to this and the EPA. I have not been party to those, and therefore I am not able to give you a simple yes or no. I would like to reflect, if I could, however, thoughts I have had since our conversation about this matter. I listened carefully to your concerns, and while I have no new insight to add to what has occurred, because I have no firsthand information about it, I have tried to ascertain what I could learn from this, and it is my clear sense that there is an importance for people to have information, and that when people have information, they are able to act. And I would like you to know that in a circumstance where I found myself, I would do my best to assure that information was available and that we could serve the best interest of the people in crisis.

Senator CLINTON. I thank you, Governor, and I know that this is not yet your responsibility, but as we move forward in this process, I will continue to ask about an EPA commitment. You know, as part of whatever resolution, and I hope there is a resolution to this matter, you would be responsible, of course, for implementing it. Because if one looks carefully at the IG's assessment of the cleanup and the retesting, the scope of that program has not been adequate. You know, we just didn't get enough places cleaned and, unfortunately, as the IG report found, 82 percent of the residential units were recleaned, and they had to be recleaned because the sampling filters were too clogged with dust to be analyzed. And even after that second recleaning the units were still too dusty to pass the clearance tests over 80 percent of the time. So that is evidence that even though there was a cleaning process, the cleaning process was often not successful.

And, again, I am really trying to get to this en libra point, Governor, because it does seem to me that, first, when you say you are going to have a cleaning process, then the cleaning process should be adequate with the results that people can point to and say we

are successful. And I think that is the EPA's responsibility, so it will be my continuing point that we should do whatever it takes to reassure people that they have been given both accurate information and that the cleaning of their residences and workplaces have removed the contaminants that could possibly endanger the health of themselves and their children.

This IG report I think is very instructive.

Senator INHOFE. Senator, your time has expired. You have gone 3 minutes over, and I am awfully sorry, we have to get to the other Senators.

Senator CLINTON. Thank you, Mr. Chairman. Mr. Chairman, will we do another round?

Senator INHOFE. Of course.

Senator CLINTON. Good. Thank you, Mr. Chairman.

Senator INHOFE. Let us go ahead and go to Senator Chafee now, since he didn't have an opportunity for opening statements, if that is all right.

Senator CHAFEE. Thank you, Mr. Chairman.

Senator INHOFE. Senator Chafee, 5 minutes.

Senator CHAFEE. Thank you, Mr. Chairman.

Welcome, Governor. It was a pleasure to meet with you in the office and hear about your past growing up in the southwest corner of Utah, and your town grew, I think you said, fivefold in the last number of years, and so you are familiar with rapid growth and some of the issues associated with that, and I am sure that you will bring that experience to your new position, should you be confirmed. And now you are going to be working for President Bush, as everybody has talked about, and during the campaign he talked about brownfields legislation and was successful at implementing that legislation and funding it, very importantly. On the other hand, he talked about regulating carbon dioxide, and I would like to see more of the same emphasis put into that campaign pledge as put into the brownfields, which has been enormously successful.

I would like to ask a separate question, though. You are going to be overseeing 10 regional administrators. What kind of flexibility and autonomy will you give to these 10 different regional administrators? Each of these regions are going to be so different, so what kind of flexibility do you foresee giving these administrators?

Governor LEAVITT. Senator, having served as Governor for nearly 11 years, I have dealt with the regional administrators of the Environmental Protection Agency on many, many occasions, and recognize that much of the great work that happens, and many of the decisions that are reached happen at the regions. I would be happy to meet, pre-confirmation, with the regional administrators to begin to delve into the organizational structure, where changes might be made or where the strengths of the organization would be found. If I am confirmed by the Senate, I would most certainly begin that discussion and do what I can at that point to make any improvements necessary.

Senator CHAFEE. Thank you. On a lighter note, since your relationship with the President is so important, people have talked about it, and you are both former Governors, what has been your relationship in the previous years, in meeting at conferences or the like?

Governor LEAVITT. Well, since T is very close to U in the alphabet, we have spent a considerable amount of time sitting with one another. He is a person who, as I indicated earlier, has my full trust, and he has my full loyalty. He knows, I believe, based on the nature of our relationship, that he will have my best efforts and that he will also have my full and complete opinion; that I won't pull punches with him; that I will tell him directly, sometimes in private how I feel; and I like to believe that that may be one of the reasons that he has called on me for what is clearly a challenging assignment.

Senator CHAFEE. Thank you, Governor. Good luck.

Senator INHOFE. Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

Governor, I would like to switch over to some Alaska-related issues.

Senator BOXER. Can we go back and forth?

Senator INHOFE. No, not until each one has had a second round. That has always been the custom of this committee, and all committees that I am aware of.

Senator CLINTON. She hasn't had a round.

Senator BOXER. I haven't had a second round.

Senator MURKOWSKI. I have not had a second round either.

Senator INHOFE. Oh, that is correct. I do apologize to you, Senator Boxer, you didn't have that first round. I apologize.

Senator BOXER. Thank you so very much.

Senator INHOFE. You are recognized.

Senator BOXER. Thank you so very much.

Senator INHOFE. In fact, take 6 minutes, just because of my mistake.

Senator BOXER. Oh. You have won my heart.

I just wanted to say to Senator Cornyn, who has kind of said that many of us were putting forward unfounded claims regarding this Administration's environmental record. I couldn't disagree with you more. I have full respect for your opinion, but I think that, again, history will show us. I mean, try to tell that to the people of New York, who can't get straight answers on their equality. Try to tell that to my people, who are sitting there with perchlorate, you know, not even having a standard at this point, with Superfund sites who are yet to be cleaned. So I just think, again, I don't think any of us should impugn each other, and let history judge where we are.

Governor, the EPA has, to date, been defending against the hard rock industry's attempt to weaken the public's right to know. This has to do with toxic releases. As you know, Federal law requires that facilities that emit toxics to tell the community what toxics are being released. Now, you sponsored a Western Governors' Association policy resolution, siding with the industry, to push for the weakening of the TRI program. That is the toxic release inventory program that I talk about. As EPA Administrator, would you support giving the hard rock mining industry a special break, or continue to assure that the public's right to know about toxic releases is upheld?

Governor LEAVITT. Senator, the report I think you are referring to is the toxic release inventory that is regularly offered, and there

was a resolution put forward by the Western Governors' Association that made a very simple point, and that was that the public does have a right to know, but we should also make certain that there is context given to that report. Those that are regularly listed at the top of the report are generally from western interior States, for the reason that you pointed out, and that is because of mining.

Senator BOXER. Governor, I just have so little time. I really think this is a yes or no deal. If you emit, you report it, period.

Governor LEAVITT. I don't disagree with that, Senator.

Senator BOXER. So do you support the public's right to know if a polluter, be it a hard rock mining or any other industry, emits toxics, that they have to tell the community what is being emitted, yes or no?

Governor LEAVITT. That is important information. The answer is yes. But I also think it is important that we give context to those reports.

Senator BOXER. OK. Well, I am going to watch this carefully, because I don't know what you mean give context. This is what we are trying to get at here, it is either facts or it is not. If you emit it, you tell it. Now, if you say now you have to give context, I worry. So if you could maybe amplify.

Governor LEAVITT. I would be happy to.

Senator BOXER. Because I am concerned, because right now this is one thing the EPA is doing right, so I don't want to see us go back on that.

Now, according to an investigative report by the Sacramento Bee, several EPA enforcement officials say they have been pressured by management to pad their enforcement statistics and make it look like they are pursuing more violations of environmental laws than they really are. The statements by EPA officials and the information they provide appear to suggest an orchestrated effort to disguise the fact that EPA is actually pursuing fewer investigations than in the past. For instance, this investigative report in the Bee said that EPA has lumped 190 counter-terrorism-related investigations into its annual performance report to Congress, identifying them as EPA-initiated "criminal investigations." One senior EPA agent said, "I called the FBI and said if you need us, call us." That warranted a criminal case number. There was no investigation.

Now, you have nothing to do with what this report talks about. What I want to know is will you commit to us to investigate this matter and assure us that EPA will be completely forthcoming and transparent when reporting to Congress and the public on its investigations?

Governor LEAVITT. Senator, no question that enforcement is a very important part of a compliance program, and I would like to just repeat that compliance, in my judgment, needs to be the objective. And there are times when people evade and when they avoid, and when they do, the full force of the agency's responsibilities should be brought to bear.

Senator BOXER. No, no, no, that is not my question. My question is within the EPA, that they said they were investigating when in fact the Bee said they were making these numbers up. Will you investigate this matter?

Governor LEAVITT. It is not currently. I will assure that there is some reference or some responsibility if I am concerned.

Senator BOXER. Some reference?

Governor LEAVITT. I would be pleased to follow your suggestion if I am confirmed.

Senator BOXER. Thank you.

Governor LEAVITT. And there is not something currently there.

Senator BOXER. Thank you very much.

There are so many things and so little time. Do you believe the EPA should inform the public and its representatives of a decision to dramatically ease land reuse of parcels contaminated with PCBs, one of the most dangerous and persistent chemicals known to man, and a decision which overturns a 25-year understanding of statutory language, or should the EPA have made such a decision with no public participation, no announcement, and no data? It was only the press that revealed this.

Governor LEAVITT. Senator, obviously the problem of PCBs is a significant one. I am not able to respond to the specifics of that situation, but I would tell you I am aware of the general area and the need for clarity.

Senator BOXER. OK. So will you look into this and report back to us, should you be confirmed, on how this was handled within the agency and why it took the U.S. Today to have a front-page headline "Government Changes The Laws Regarding The Transfer of Land With PCBs" without one hearing about it or anything else? Would you also look into that and let us know what you find?

Governor LEAVITT. If confirmed, I will, Senator.

Senator BOXER. If confirmed. Thank you.

On perchlorate, do you believe it is EPA's responsibility to regulate contaminants in drinking water that threaten the public health and the environment?

Governor LEAVITT. Obviously, that is one of EPA's most important positions, and on perchlorate in specific. I am aware of the growing number of States where that has become of concern. My State is among them. We have a particular site where rocket emissions were used, and we are in the process of working to clean that up on a voluntary basis.

Senator INHOFE. Senator Boxer, your time has expired.

Senator BOXER. OK, thank you.

Just to conclude, could you please let us know your opinion on when we should have a Federal standard for perchlorate?

Governor LEAVITT. I would be happy to respond to that in questions.

Senator BOXER. If confirmed. Thank you.

Senator INHOFE. Thank you, Senator Boxer.

Senator MURKOWSKI.

And, by the way, the vote now is not until 11:25, so who knows what is going to happen.

Senator MURKOWSKI. Thank you, Mr. Chairman.

I would like to turn briefly to some Alaska-related issues. First is regional haze. Your record indicates that you have been quite involved with this, particularly as it pertains to the Grand Canyon and other important sites in Utah. In Alaska, the EPA has failed to commit funding to a regional haze monitoring program, and we

have some reason to believe that there are overseas sources which are the major contributors, but we don't know. Without this positive data, it is difficult to make a determination as to what we need to do; are we unnecessarily imposing restrictions without any resulting benefit. Can you comment on the process that you feel should be adopted to ensure that the proscribed treatments really treat the problem?

Governor LEAVITT. Senator, this is at the heart of one of my most fundamental beliefs, that we ought to be managing for results and not simply process, and that while we absolutely have to have broad and very specific national standards, we need to have the ability for neighborhood solutions; and Alaska's circumstance would clearly be unique. You referenced the fact that I have done some work with regional haze and with regional issues. One of the lessons that I learned in doing so is that oftentimes the source of pollution may be across a border. In the Grand Canyon Visibility Transport Commission, for example, it became clear that there were many contributors to the brown haze that went across the Grand Canyon; one of them was pollution that came from Mexico across our border.

It is clear to me that the Environmental Protection Agency ought to use its reach as a convener, to be a leader among nations, to find those areas where there are agreements necessary between nations to be able to solve regional problems. Problems of this sort clearly go across boundaries; they clearly go across political boundaries.

Senator MURKOWSKI. I would like to work with you to find some of the solutions there.

Now, when we spoke in my office, I mentioned the issues of wetlands in Alaska. Forty percent of the State is wetlands, and yet they are not wetlands as most people back here on the east coast would define them; they are very isolated, they are not navigable. And we really have not seen any resolve in terms of how we define the jurisdictional status of these wetlands, and this is despite this Northern Cook County case. Can you give me your views on the appropriate role of EPA in resolving this issue?

Governor LEAVITT. Senator, it will be of no surprise to you. as a Governor over the course of the last 11 years, I have worked on many different occasions on issues related to wetlands; and wetlands are a very important part of a natural heritage that we want to protect. I am also aware that the Illinois Supreme Court case that you reference has caused some question on this matter, and that it is a matter that is currently before the EPA and that a likely comment on my part would not be particularly productive at this moment. But I would like to tell you I am fully conscious, fully conscious of the difficulty, fully conscious of how important it is to a State like Alaska.

Senator MURKOWSKI. We do want to work with you on that.

Another area that I would specifically ask for some assistance, we have health respiratory issues in the State as they relate to dust. It is uncontrolled out in our rural areas. But we also have a very unique problem in that so much of rural Alaska is still powered by diesel generators. We are not on a power grid, so when you have a blackout out here, it doesn't affect us; the only thing that affects us is the price of the diesel. But we have questions and con-

cerns as to the health effects, the long-term health effects of diesel use in these smaller communities. We are looking for assistance, we want some sound scientific information to help us resolve this issue. Can you give me some comment as far as how EPA could take some kind of a leadership role with Alaska in resolving or at least assessing the long-term health risks that are posed by diesel use in our rural communities?

Governor LEAVITT. Senator, the goal we all share is cleaner air, whether it is in Alaska or Delaware, and my philosophy is we have to have national standards, we need neighborhood solutions, we need the capacity to work within the unique circumstances in every State to achieve that national standard. And if I am confirmed by the Senate, you can be certain that I will be willing to work with you and the citizens of Alaska to find the neighborhood solution.

Governor Murkowski. Thank you, Mr. Chairman.

Senator INHOFE. Thank you, Senator.

We have been joined by Senator Carper.

And in my opening remarks I shared with them some of the complimentary things you said about your fellow Governor during the years you were Governor.

Senator CARPER. Is it my turn?

Senator INHOFE. Yes, sir.

OPENING STATEMENT OF HON. THOMAS R. CARPER, U.S. SENATOR FROM THE STATE OF DELAWARE

Senator CARPER. Well, let me clear the record up, then.

It is great to see Jackie Leavitt, and we thank you for coming and for your willingness to share your husband; not just with the people of Utah, but with the people of our Country.

To my colleagues, Governor Voinovich and I have had the pleasure of serving with Governor Leavitt for a number of years in our old jobs, and I think it is safe to say that of all the people that I have had a chance to serve with when I was Governor, I respected none of them more than I did Governor Leavitt. He is thoughtful; he is just a decent, good person. I think his environmental record is probably mixed to good. People in Delaware probably describe mine the same. He is very good at getting people to gather around consensus and create consensus where it is sometimes difficult to find. In fact, of all the people I have served with, there is probably no one that I liked any more than Mike Leavitt when I was Governor, except maybe Christine Whitman. And Christine Whitman went on to become head of EPA; she sat right there where you sit, my friend. And I said almost as nice things about her as the time, and she went on to lead EPA during a tough time, and for an Administration that I think, being charitable, has not compiled an enviable environmental record. And she can speak for herself as to how difficult or easy that job was, but it is a tough job.

One of the issues that Governor Bush campaigned on was the issue of global warming, greenhouse gases, and he indicated as a candidate in the 2000 campaign that it was something he wanted to address, and so did Governor Whitman. But as Governor Bush becomes President Bush and decides that he wants to take a different course, and so did Governor Whitman.

In the meeting that you and I had, we talked about good science; we talked about our need to be able to rely on EPA for thoughtful analysis, and when they have good scientific analysis, to share it with all of us. Senator Jeffords here and myself, along with Senator Lamar Alexander, Lincoln Chafee, Judd Gregg have joined me in sponsoring clean air legislation that seeks to reduce CO2 emissions. We have been trying for months to get EPA to share with us the analysis that they did on our bill, comparative analysis of our bill, the health effects of our legislation, that it indeed provided better protection for Americans than President's initiative, and frankly not at a whole lot more cost, and we never got the disclosure, that kind of analysis.

And I just want to ask you to say for the record what can we expect from an EPA with your leadership that might be different, less frustrating for us and, frankly, less unfair to the people of this Country? It is one thing to deny us the information that EPA has, but we rely on that information; we need good scientific data to be able to make the right kind of decisions. How will it be different once you are confirmed, and I believe you will be?

Governor LEAVITT. Senator, may I say that it would be my pleasure again to work with my friend from the State of Delaware in whatever way, whatever capacity. It would be my intention to work with you in the same open spirit of transparency that we always have. I am also aware that there are dynamics that historically have always existed between administrations and Congress as to data and when it is provided and when it is not. I don't know much about that. What I do know is that it would be my purpose to work with you directly, straightforwardly, and in a way that would supply us both with the information to meet our common goal, which is clean air.

Senator CARPER. There is an interesting piece you have to read in today's Wall Street Journal. It is a comparative analysis of Senator Jeffords' bill, the President's Clear Skies initiative, and what we believe, the four of us that I mentioned earlier, to be a good compromise between sort of bridging the differences between the two legislations, and it is pretty much described as such, and I would invite your attention to it in the kind of spirit where we for years worked to develop compromises and consensus among Governors from all over the Country, different political parties, and I would invite us to try to do the same thing here. It may be the time for man's hope over experience, but I think we ought to give it a shot.

The other thing I want to mention just briefly relates to the Motiva Refinery on the Delaware River, one of the largest, maybe the largest producer of sulfur dioxide of any refinery on the east coast, maybe in the Country. In the 2001 EPA, along with Delaware, along with Motiva entered into a consent order to reduce dramatically, beginning in 2004, sulfur emissions from that plant. Since that time we have entered into a new consent agreement, effective in 2006, to reduce dramatically sulfur dioxide emissions from the plant; not to put them into the air, not to put them into the Delaware River. And when Governor Whitman left her post, she had assured me that she would use her good offices to make sure that whatever was agreed to was abided by, and I wanted to

discuss this issue privately, and I just wanted to raise it again here and ask for your comments and really for a similar commitment today.

Governor LEAVITT. Senator, you were very straightforward with me when we had our private meeting, indicating the priority that it was to the people of Delaware. I indicated to you, as I will now, that it is not a circumstance that I am fully aware of or knowledgeable of. I look forward and commit to you that I will learn more and that, as we do, that commitments that have been made can be kept.

Senator CARPER. Fair enough.

Senator INHOFE. Thank you, Senator Carper.

Senator CARPER. Thank you, Mr. Chairman.

[The prepared statement of Senator Carper follows:]

STATEMENT OF HON. THOMAS R. CARPER, U.S. SENATOR FROM THE STATE OF DELAWARE

Mr. Chairman, Senator Jeffords, and Governor Leavitt. Good morning.

I am pleased to have Governor Leavitt with us this morning and to consider his appointment as Administrator of the Environmental Protection Agency.

As a Governor of Delaware for 8 years, I had a chance to work closely with Governor Leavitt when I served as chair and vice-chair of the National Governors' Association. Although we are from different political parties, we nevertheless were able to find consensus on many issues important to the States and the Nation. Governor Leavitt consistently demonstrated a willingness to work closely with Governors from both parties to solve a problem, and I am hopeful he will continue to do so once he is confirmed to his new position. I look forward to continuing our friendship during his tenure as EPA Administrator.

I had similarly positive things to say about Governor Whitman two and a half years ago during her confirmation hearings. She did an admirable job of leading the Agency, but I often wondered if others in the Administration influenced decisions made by the EPA in ways that were not helpful. I hope we can work with you, Governor Leavitt, to address these concerns in the future.

From my own perspective, the EPA was less than forthcoming earlier this year about its own analysis of clean air legislation I have introduced, the Clean Air Planning Act. This analysis showed that the bill would produce substantially greater health benefits than the Administration's competing air pollutant bill but would cost virtually the same to implement. I specifically requested that the EPA release this analysis to me and the bill's cosponsors. But the EPA refused to do so, presumably for political reasons.

Refusing to cooperate, however, damages the EPA's reputation as a credible, scientific body, and it hurts the EPA's relationship with Congress. This committee, for instance, is currently considering several complex environmental proposals—ranging from water quality standards, ozone standards, chemical plant security, and of course clean air and climate change. These are complicated, scientifically rigorous matters. We look to the EPA for help understanding the impact of legislative proposals on these topics. Regardless of how a particular member may ultimately vote on an issue, members of this committee are entitled to make their own assessments of complex legislation based on the most accurate and unbiased information available. Given the crucial nature of the issues at stake, I hope that EPA, under your leadership, has a change of heart and decides to be more forthcoming with analyses and information on the matters before this committee.

In a letter to the New York Times on June 21st of this year, Russell Train, who served as EPA Administrator under both Presidents Nixon and Ford, expressed his concern that the independent status of the EPA is being eroded. When you are confirmed, Governor Leavitt, I hope you will make it a goal to stop that erosion and return a sense of independence to the Agency. As we look forward to working with you at the EPA, I join my colleagues in asking you to focus on improving the flow of information from the EPA to the Senate, and I urge you to do all that you can to see that the EPA continues to fulfill its primary mission of protecting the nation's environment.

I also want to take a minute today and ask you to focus on two important questions, one local and one global.

In Delaware, on the Delaware River, in the town of Delaware City is the Motiva oil refinery. While this refinery has been an important contributor to the State's economy and the nation's supply of gasoline and petroleum products for decades, it has also been a significant source of air pollution. In 2001, 1.5 million tons of pollutants were released, much of that to the air. In March of 2001, the EPA, the Delaware Department of Natural Resources and Environmental Control and Motiva signed a consent decree wherein Motiva agreed to substantially reduce emissions of sulfur dioxide by installing modern controls on the two major sources of air pollution by the end next year, 2004.

Earlier this year, we learned that parties to the agreement were considering changes to the decree which would have allowed some of the sulfur removed from the air to be discharged into the Delaware River, along with additional toxic byproducts. I was very concerned with this news and asked your predecessor, Governor Whitman, to become involved. She did and was working with me and the people of Delaware before her departure to help achieve a workable solution. Since then, the parties have developed a revised consent decree which seems to protect the water but also delays compliance until 2006. Delawareans, myself included, expect the EPA to uphold the Clean Air Act and not allow diversion of pollutants from one source to another. I urge you to be proactive in seeing that whatever agreement is ultimately reached is fair to the environment and that any delay in installing the proper equipment occurs only if absolutely necessary.

I am also particularly interested in your views on the issue of global warming and humanity's role in altering the earth's climate. When you visited with me earlier this month, you mentioned that you were reading a National Academy of Sciences report on climate change. I am interested in your latest views on the topic. In my view, the evidence and the science point to the conclusion that global warming is occurring, and I am also convinced that human-caused emissions of greenhouse gases are increasing the rate at which the earth is warming. As a result, I think we in Congress should be talking about how we might best start to address such changes. Instead, we are still debating whether the changes are even occurring or if they are linked to human activity. People of Utah may not be too concerned with beach erosion as sea level rises, but the people of Delaware are. People of Utah may not be too concerned with the loss of sugar maple trees as New England warms, but the people of New Hampshire and Vermont are. People of Utah may not be too concerned with the melting of glaciers and the warming of the permafrost, but the people of Alaska are.

As Administrator of the United States EPA, I expect you to be open to examining the issue and working with us to develop the best strategy moving forward. As I mentioned earlier, I have introduced legislation that takes a significant step forward in addressing CO2 emissions from one contributor—the electricity producers. I suggest you take a look at its provisions, particularly regarding CO2 controls. It represents a sensible proposal for how to get started on this problem.

I would also like to point out an article from this morning's Wall Street Journal, written by Tom Hamburger, entitled "Clear Skies Hits Storm Front, Polarized Political Climate Threatens Bush Environmental Plan". Mr. Chairman, if there is no objection I would like to have a copy of this article included in the hearing record after my statement, and I would urge Governor Leavitt, as well as the members of this committee, to read it. I am interested in your thoughts, in light of the points raised in this article, of how we should best proceed on a clean air agenda.

In closing, I look forward to joining with you, Mr. Chairman, my colleagues on this committee, and the Administration to strengthen our nation's commitment to clean air, clean water, and to preserving a rich environmental legacy for our children. While we have made important strides in the past three decades, we have an obligation to try harder, to do better. Whatever the challenge, whether it is global warming, nuclear waste, polluted coastal waters or urban sprawl, we should work together to do what is right.

I know members of the committee have questions for Governor Leavitt and I don't know if we will have time to ask all of them in person today. If we have to submit questions for response after the hearing, I hope that you will allow sufficient time for the nominee to respond and for members to review his answers before scheduling a vote on his nomination.

Mr. Chairman, I look forward to hearing from Governor Leavitt today, and to the opportunity to work with him during the coming years.

Senator INHOFE. We are going to Senator Allard, and then as soon as you are through, Senator Allard, I would take my first round of questions and then go vote; we can do it kind of in shifts,

and perhaps if you can stay and preside until I get back, that would work out. Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman.

Governor, you come from a beautiful State; it is a bountiful State and also pretty diverse. And I am your neighbor to the east, and I think I come from a State that has many of the same attributes. I would like to have you talk a little bit about why or why not, at the Federal level, we should have an appropriate administration of the programs, yet enough flexibility there where the States can respond to the need within the State, and I wonder if you would respond, please.

Governor LEAVITT. Senator, I believe I can best answer that question by reflecting on my experience with the Grand Canyon Visibility Transport Commission. This was a Commission established under the clean air amendments in 1991 and it, in essence, empaneled a group, of which I was a co-chairman, to bring all of the States together in a region, all of the Indian tribal nations, all of the Federal agencies, all of the environmental groups of interest, the industries, ranging from timber to tourism, to come up with a plan to clean up the view over that national treasure. There was and continues to be in the Clean Air Act a national standard that needed to be met, but it was clear, as we began to work through this, that there were individual circumstances in every State that made their need for a neighborhood solution unique and important; and we were able to, in essence, invent a way in which, collaboratively, each State could meet the individual demands of their State and then, by using a market trading mechanism as a backstop, assure that there was certainty to the solution. Now, that has grown since into the Western Regional Air Partnership, which is part of the President's Clear Skies initiative and one of the reasons that I so strongly believe that bill needs to pass if we are to meet the objective that I think we all have, which is more environmental progress in a way that will not compromise our competitive position.

Senator ALLARD. That is a good example, Governor, and I want to compliment you on your leadership in that. We all hear horror stories from State officials trying to work with Federal Government officials in the Environmental Protection Agency. Did you have any similar experience in your time serving in Utah? I don't know that you need to list specifically names or anything like that; questions you have with similar experience. And then to go a little bit further with that, please discuss how you will work to ensure that EPA does not fit the description perhaps of your experience and some of these other horror stories that we sometimes get and, under your leadership, how you will work with the individuals and not necessarily through press releases.

Governor LEAVITT. Senator, there are 18,000 people in the EPA. Ironically, that is about the number of employees in the State of Utah. We have held ourselves to a high standard in the State of Utah, wanting to respond to those who had need for services from government in an efficient and hopefully friendly way. To the extent we have met that, I am proud; to the extent we haven't, I wish we could do better. My guess is that there have been times, I know there have been times, when I have dealt with the EPA, like any

other large organization, when I have been dealt with in ways I wish I hadn't. But, there have been many times where I have observed dedicated people prepared to do what they can to clean up the air, to purify the water, and to better care for the land. I have a basic tenet of my own philosophy, and that is that if you change a heart, you change a Nation; and I think that is true of agencies, and it will be my objective to, first of all, set an example myself, if I am confirmed, to be as responsive to you and to the people of this Country as possible, hoping that others in the agency will follow suit.

Senator ALLARD. As you are aware, Governor, the Superfund program is one that is important to many States. It is imperative that problem sites be identified and cleaned up to minimize the risk to those who live around them. I would like to commend the EPA on a job that they have done in handling the Shadduck Superfund site here in Denver, Colorado, under a Republican administration, I might add. This site, right in the middle of a heavily populated neighborhood, is currently being cleaned and cleared so that the residents of the Shadduck neighborhood can breathe a little more easily. Would you care to share some of the experience you have had with the Superfund program during your term as Governor of Colorado? And I also hope that you will help us keep an eye on the Shadduck site to make sure we stay up on cleanup on that.

Governor LEAVITT. Senator, we currently have 22 Superfund sites in our State. Superfund is a very important part of our effort as a Nation to clean up the environment and to make right some of the things that have happened in the environment we wish hadn't. I will tell you that some of the most positive experiences I have had, however, have come when we as a State have stepped up and voluntarily found ways to solve problems. So I am very supportive of the Superfund project, but I am also supportive of the ability for States to be able to find ways to clean up sites. One of the sites that I am the most proud of was the Kennecott water reclamationsite. This is one of the largest copper mines in the world, an open pit copper mine, and I will tell you about it later.

Senator INHOFE. All right.

Senator ALLARD. I will give you an opportunity later.

Governor LEAVITT. Thank you.

Senator INHOFE. Thank you very much. We will now start our second round of questions. And while we are waiting for others to get back, Senator Jeffords and I will have our questions, and then Senator Voinovich will be back to chair the meeting.

Governor, I know there are two approaches as to measuring the performance of the EPA. Many people believe that it should be measured by the number of criminal prosecutions or fines, or this type of action taken by the EPA. I don't believe that, but, nonetheless, if anything, I could probably be a little critical of this Administration because they have a very impressive record, if you call it impressive, of enforcement actions. In 2002, the EPA reported a 40 percent increase over 2001 in the number of criminal cases initiated, more than 17,600 compliance inspections conducted across the Nation, and 144 million in administrative, criminal, and civil judicial penalties. I would like to know just what your feeling is in terms of how you can measure the performance of the EPA.

Governor LEAVITT. Senator, I believe fundamentally that we should manage for results. Results in the case of the EPA is compliance. Progress is measured when people come into compliance. When we measure only enforcement, we miss, I think, some of the best work done by the EPA or any State Environmental Protection Agency. When a representative of the Utah Department of Environmental Quality is able to meet with someone who is currently not in compliance and find a way to get them there, that is a success in my mind.

Now, there are times when people avoid or they evade, and that is the point at which we have to have strong laws and the capacity to enforce, and that is when we should. And one of the things that I am most optimistic about is that in 1996 the EPA began to negotiate agreements with States that allowed a partnership approach where we could measure not just enforcement, but actual improvement and results. And while I will commit to you and the members of this committee that we will be willing to move forward with the full enforcement authority of the agency, we will also work to achieve compliance, because progress is in compliance.

Senator INHOFE. Well, I appreciate that, Governor, and I only bring this up because there has been some criticism of this Administration not being as strong as they should be on enforcement, when in fact the record is probably stronger than any previous administration.

You have got a problem in Utah in this growth, you have a very heavy growth in population. I would like to have you tell us a little bit about the Envision Utah and how the State can deal with its growth issues. Would you do that?

Governor LEAVITT. I would be pleased to. That is a source of some satisfaction to many in my State. Utah is a State that is growing rapidly; it took 113 years for us to get our first million people, only 30 years to get the second million. The third million will come in about 17 years and the fourth million about 16 years after that. So it will double in size at a very rapid time, and we are, like any State with that kind of growth, facing pressure on our infrastructure, pressure on our open space, pressure on water, and we needed to take a long view, so we engaged in a process we called Envision Utah, where we literally laid out with broad community participation four selective scenarios and then asked the people of our State through broad outreach to tell us what they wanted the State to look like 50 years from now.

The four scenarios had responses from literally tens of thousands of people. We held town meetings in 150 or more areas. We had, at various times, full blackout of television while we had these environmental discussions with the broad communities. Over time we have settled on a vision of what we want the State to look like, and we are now training through Envision Utah all of the city councils and the county commissioners and the planning commissions, and all of those who will have some effect on what that vision will come. The foremost principle is that we use light, not heat. We are using the persuasion of what the broad vision is to allow many different coordinated organizations to come to that vision, and it is working. In the last few years we have been able to instigate light rail, for example, in our State; we have been able to rebuild our

highways; and we have been able to do it all in a way that is environmentally consistent with our objective of having a clean, safe, and healthy place to live.

Senator INHOFE. Well, I applaud you for that; it is a very difficult thing. I was mayor of a major city, and you have to respect property rights, but you can use your persuasion as you have done in Utah, and I think it is a great model for the Nation.

Senator Jeffords, let me comment that Senator Wyden and I talked, and we are going to go ahead and do this until 12:30, since this vote has kind of interrupted things, so if you will go ahead and take your time, we will go vote and then others will be coming back. Senator Jeffords.

Senator WYDEN. Mr. Chairman, just in the interest of time, I think I would be next. Would it be all right if I proceeded after Senator Jeffords?

Senator INHOFE. Yes, that would be fine.

Senator WYDEN. Thank you.

Senator INHOFE. Well, unless a Republican comes back, because you are supposed to go back and forth.

Senator WYDEN. Fine.

Senator INHOFE. Let us see what happens.

Senator JEFFORDS. If a National Academy of Sciences studies determines that emissions will or are likely to increase above today's levels due to the NSR rules, will you revoke them, or what would you do?

Governor LEAVITT. Senator, I am not sure how I would respond to that question. It is clear to me what the goal is, and that is cleaner air. It is also clear to me that the New Source Review rules, as they were previously constituted, were so complex that there wasn't a State regulator who knew how to apply them; and there is, I think, broad, at least substantial support that I have ascertained among State regulators in having the clarity that has come. I recognize the differences of opinion that exist here, but, from my own experience, having clarity is going to be quite valuable not just in the context of clean air, but in the very difficult and rather thorny issues involved in how we pay for the creation of not just production, but also transmission. These are thorny issues in terms of rate basis and public service commissions, and I have seen the complications, as I know you have, in various roles.

Senator JEFFORDS. Well, if emissions go up, would you consider revoking the NSR rules?

Governor LEAVITT. It would not be in our interest to have those go up. One of the reasons I support the President's Clear Skies initiative is that I believe that through a market-based trading, and the backstop and the certainty that that will bring, we will see all of the pollutants subject to regulation begin to reduce. I have seen this work, I have seen it in our Western Regional Air Partnership, and I have high confidence that we can make it work and that it can be part of the solution as to how we can increase the amount of progress we get while at the same time not compromising our competitive position as a Nation. So, Senator, I have optimism that we can find ways to achieve both of those.

Senator JEFFORDS. You may be surprised to learn that the Clear Skies proposal weakens current law substantially by immediately

eliminating or downgrading important standards and authorities in exchange for weak caps required in the future, which we don't know about. For instance, New Source performance standards are set well below standards now being required at new power plants in the west. Power plants could be sited 32 miles from a national park or other Class I areas without having to analyze the impact on air quality or visibility in those areas. And EPA would be permanently prevented from controlling mercury emissions from utilities, even if their unacceptable high risk remained after the Clean Skies were met. In 2010, even if Clean Skies were to pass, approximately 80 counties with about 45 million people will still be in the non-attainment or the free fine particle standard.

First, would these provisions be good for Utah? If Utah has performed an analysis of the costs and benefits of the Clean Skies proposal, could you share that with this committee?

Governor LEAVITT. Senator, you mentioned in the course of that question the beauty of our national parks and the difficulty of being able to balance the emissions that come from power plants. That is precisely at the point that we were pursuing very aggressively on the Grand Canyon Visibility Transport Commission, and doing it by focusing on action and results instead of the endless arguments that sometimes I think we get into as a result of the implementation of some of the statutes.

When President Bush announced my nomination, I described an experience I had at the Grand Canyon at age eight. My family arrived at the south rim at twilight, just in time to see a giant shadow creep across the canyon. I saw the Grand Canyon in all its splendor.

Thirty-six years later, I returned as Governor, with responsibility to co-lead a commission to clean up what was now a brown haze across the sky in the Grand Canyon, and much of it was coming from various sources that ranged from pollution from cars, from forest fire burns, to pollution coming from Mexico. Everyone was contributing to that problem.

We had to find a way in which we could craft a solution that would meet the individual needs in every State, and we did so using a market trading device with each State being able to come with their own plan.

Senator it is working, and it is not just working. We now have a plan on sulfur. We are moving on one on NOX. We have been able to work with one on diesel, and I feel some optimism that Clear Skies, in fact, can deploy that kind of tool, and that we, in fact, can achieve the level of air progress that the President envisions.

Senator VOINOVICH. I have the list. I am next, and then I think Senator Wyden, you are next.

Senator WYDEN. Fine.

Senator VOINOVICH. Governor Leavitt, I have been concerned about the Great Lakes. I want to get a little provincial right now.

The Senator from Ohio, someone said, had a lot to do with Lake Erie. When I came to the legislature, Lake Erie was the poster child for a dying lake. At that time, I made a commitment as a State legislator to do everything I possibly could to stop the deterioration of the lake, and I referred to it as waging the second bat-

tle of Lake Erie. You remember Lake Erie won the War of 1812 with Admiral Perry. I think we started the second battle of Lake Erie.

At the time, I worked very closely with the first head of the Environmental Protection Agency, Bill Ruckleshaus. The world was focusing on the Great Lakes. The United States was focusing on the Great Lakes.

The ecology has come a long way since the 1960's. But the fact is, there still needs to be a great deal done. I was very much involved in the comprehensive restoration plan for the Everglades. In fact, I was the chief Republican sponsor of that bill that came out of the WRDA bill.

I said to myself, we are doing this for the Florida Everglades. Why are we not doing this for the Great Lakes? I think that I do not need to remind you of this, but it is the water for 40 million people. It contributes about $4 billion in terms of a fishery. One-fifth of the total manufacturing activity takes place in that region.

The GAO recently came out and said that where there were many State and local programs, restoration of the Great Lakes is being hindered because there is little coordination and no unified strategy for these activities; and the Environmental Protection Agency, Region 5, is responsible for the coordination.

I have held two hearings on the matter, and I wrote to the Governors of the various States, and we have put together a restoration bill for the Great Lakes.

I would like to know, are you aware of how important the Great Lakes are? I am interesting in knowing what kind of leadership you possibly could give to working with us to go forward with a comprehensive plan, and also to engage our friends from Canada in that effort?

Governor LEAVITT. Senator, I must confess that some of the lessors of the War of 1812 that you alluded to, I had missed. But I did not miss your great enthusiasm for the Great Lakes initiative, and I must confess that your enthusiasm has affected me with some interest and you have caught my imagination, as well.

I look forward to learning more about this. It seems to me that this is the kind of regional collaboration that, in fact, has great promise. I have had some experience in regional collaborations, and I am hopeful that I can bring some of that to add to your enthusiasm and that great progress could be made there.

Senator VOINOVICH. Well, as you recall, when I was chairman of the Governors, we created that task force with the Governors to work with Canada. It seems to me that we are going to have a new Prime Minister of Canada taking Gratien's place. It would be wonderful, I think, if our President and the new Prime Minister could make the comprehensive restoration of the Great Lakes something that both of our countries devote themselves to. I think I have a couple more minutes.

Governor LEAVITT. Could I just mention one thing; not to impose on your 2 minutes? But in my role as a Governor, at least once and often twice a year, we meet with the Premiers of the Provinces of Canada that border the United States and discuss these kinds of issues.

I think this is the kind of regional issue that not only could use the participation of the National Government of Canada and the United States in the form of the Environmental Protection Agency and others, but also the provincial governments there.

Senator VOINOVICH. Thank you; I would just like to say that you are going to have a real problem in this committee and in this Senate with the whole issue of burning of coal. I would like to make very clear to you, as the Governor of the State of Ohio, that I was very concerned about it. There, in my opinion, have been environmental groups and other well-meaning people that want to shut down the burning of coal.

I want you to understand that from my perspective, if you shut down burning of coal and force our utilities to go to natural gas, you have killed manufacturing in this country.

We are in dire, dire shape today, as a result of the fact that we have not harmonized our environmental and our energy needs in this country. We are having businesses leave the State and go out of business, and we have lost about 2,300,000 manufacturing jobs in this country.

I would hope that you will have the courage to raise the issue of many of these environmental policies and how they impact on the economy of the United States of America, because we are in trouble right now.

Governor LEAVITT. I acknowledge your comments, Senator. I mentioned earlier that in my State we have an energy policy that calls for the balanced use of various fuels, recognizing precisely what you have suggested.

Senator VOINOVICH. Senator Wyden?

Senator WYDEN. Thank you, Mr. Chairman; let me go back to the New Source Review rules, Governor. Because I am struck by the fact that your man in Utah, your head of the department, he creamed these rules. I mean, he said, and I will just quote here, "The proposal makes it worse. It creates more bureaucracy, cost, and uncertainty, with no proven environmental benefit."

Now this is not some stark raving, wild-eyed environmentalist. This is your man saying that these proposals are a turkey.

Why not just freeze those rules so as to address the concerns that went out on your letterhead, and the kind of concerns that other States are giving around the country? Why not freeze those rules, and I would like to know, if you would this morning, say you are willing to consider freezing these hugely important environmental protection rules so as to address the concerns that your State, my State, and others have made?

Governor LEAVITT. Senator, Mr. Sprott, who is the head of air quality in Utah, made thoughtful comments in a very colorful way.

Senator WYDEN. That is for sure.

Governor LEAVITT. I will tell you that they were made in March, as a request of the Administration, I understand. In going back to look, all of his recommendations were incorporated.

Senator WYDEN. You are saying that he now supports the Administration's proposal?

Governor LEAVITT. Yes.

Senator WYDEN. And other States do? Because that is certainly not my understanding.

Governor LEAVITT. Senator, I did have a chance to do two things, obviously recognizing that we might have a chance to talk about this.

Senator WYDEN. The majority of States are opposed.

Governor LEAVITT. Well, I cannot speak for the States. I am just telling you about my experience with Mr. Sprott, who I have high regard for. He was asked for recommendations and made them. In going back and looking at the rule, after the comment period, I am told that they were incorporated.

Senator WYDEN. Well, a majority of States remain opposed to the Administration's position. I think the other aspect of this is the General Accounting Office said that the judgments were made essentially on the basis of anecdotes. I am curious whether you think that is a way to bring about the best science approach that you have been talking about this morning.

That is, again, not the judgment of wild-eyed environmentalists. That is the General Accounting Office. It issued a report that said that the New Source rules came about through anecdotes. Is that your notion of best science?

Governor LEAVITT. Senator, best science is clearly our objective. I am not familiar with that report, other than to say this. My objective is to bring about clean air and I know that is yours.

In my observation and conversations with many State regulators I mentioned, and I think you may have been out, that they refer to the manuals as the puzzle book, because they have been so complicated.

The first and foremost thing that Mr. Sprott indicated in his letter was how much the rule needed to be remodeled in a fashion that was more ascertainable as to what should apply and what should not. Not only was the rule put into place, but it was my understanding that his recommendations were incorporated.

Senator WYDEN. The States are very unhappy with respect to the consultative process with the Environmental Protection Agency. You look, for example, at the Wetlands Rule. Something like 39 States said that they oppose the Administration's approach with respect to rulemaking on wetlands. What would you do differently to give the States a bigger role in making sure they are heard on environmental policy?

Governor LEAVITT. Senator, I, of course, come to this, having led a State for 11 years. I recognize that my perspective will have to be somewhat different, now that I would have a National role. But my roots will not change in the sense that I believe that we need National standards, but you have to have neighborhood solutions.

The whole idea of managing for results, taking each jurisdiction one at a time, I think that kind of sensitivity will clearly appeal to States, because they want clean water. They want clean air. They want to protect the land. They want to do it in a way that makes sense and meets the standards.

It is my firm belief that by negotiating partnerships, by clearly stating our objectives, by working together in a collaborative way, we will be able to achieve that.

I have worked enough collaborations to know that collaboration does not eliminate disagreement. It does not eliminate litigation. It mitigates it, but it does not take away the hard decisions. It some-

times makes them better accepted, but we will still have to work together in a collaborative way, recognizing and realizing the respective roles that we have in this system of government.

Senator WYDEN. Well, what we are seeing in terms of the collaborative process again is not what the Western Governors have done in the past, and it is certainly not my understanding of the Leavitt record.

As you know, I am very concerned about what is happening in Portland. We are concerned about the sewer overflow situation, where they are doing somersaults to try to work an enforcement agreement with the State and with all of you. It is being honored more in the breach than in the observance.

Are you willing to take a fresh look at that, so I can tell my constituents that perhaps the collaborative process, as you and Governor Kitsobera talked about over the years. might actually take place on your watch?

Governor LEAVITT. Well, Senator, you were almost as colorful as Mr. Sprott in your admonitions to deal with the Portland matter. I hear you loud and clear, and look forward to an opportunity where I can be better acquainted with it.

I realize that it is currently an enforcement matter, and not something I should comment on; and frankly, not something I have had much briefing on.

Senator WYDEN. How about making clean water a higher priority in the Bush Administration? The Administration, if I could just finish this question, Mr. Chairman, has requested $3.7 billion for water and sewer funding for Iraq. That is $1.5 billion more than is in EPA's budget for all of the water and sewer projects in the country.

Do you think this would be a priority on your watch, to elevate the importance of Clean Water; and particularly make it possible for those of us who face folks in town hall meetings to say it is at least as important as those projects are in Iraq?

Governor LEAVITT. Every American deserves to have clean water, Senator. Particularly in some States, the water infrastructure may be old and needing re-engineering because they have combined them. I recognize the importance of the revolving loan funds. As Governor, I have not only seen that demand, but know the competition for it and know how valuable those funds have been.

Senator INHOFE. Thank you, Senator.

Senator Allard?

Senator ALLARD. Mr. Chairman, I would like to follow-up a little bit on my colleague from Oregon's comments on clean air and what you have been doing in Utah in your administration.

I have a letter here from Mark Sherbut. He is Attorney General there. I assume that the Attorney General in Utah is an elected official in Utah. He is not necessarily a part of your administration. He has his own separate constituency out here. Is that correct?

Governor LEAVITT. Well, we have spent a lot of time talking about that.

Senator ALLARD. Well, I do have a letter here where he encourages the New Source Air Program reform because of some uncertainty and lack of specificity, and it creates confusion to States. Mr.

Chairman, I would like to make this letter a part of the record, if I might.

In this letter, he encourages EPA to expeditiously move ahead with a substantive administrative reform to the Clean Air Act New Source Review Program.

Senator INHOFE. Without objection.

[The referenced document follows:]

STATE OF UTAH
OFFICE OF THE ATTORNEY GENERAL

MARK L. SHURTLEFF
ATTORNEY GENERAL

RAYMOND A. HINTZE
Chief Deputy

KIRK TORGENSEN
Chief Deputy

November 15, 2001

The Honorable Christine T. Whitman
Administrator
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue NW
Washington, DC 20460

Dear Administrator Whitman:

I am writing this letter to encourage your agency to expeditiously move ahead with substantive administrative reforms to the Clean Air Act's New Source Review (NSR) program. Dianne Nielson, Executive Director of the Utah Department of Environmental Quality, also recommended this course during the 90-day NSR review.

The State of Utah administers the NSR program under the oversight of EPA. I recently met with the Director of the Utah Division of Air Quality who is responsible for Utah's administration of the program and who works with this office in enforcement of the NSR rules. I am advised by both the state agency and my staff that the current set of rules governing the NSR program is in immediate need of review and revision. Over the years, both EPA and the State of Utah have issued guidance documents and have taken enforcement actions that raise issues with respect to consistent application and enforcement of the NSR rules. The volumes of materials issued by EPA and historical uncertainties and inconsistencies have made application of the program at times confusing and unnecessarily complicated.

Much of the confusion and uncertainty in the NSR program comes from the lack of specificity and unanswered questions in language of the federal rules, policy and guidance. It has been a long held belief in Utah that the law should not be developed through the issuance of guidance documents or through taking enforcement actions which result in a legal contest over the meaning of the language of rules when a proper rule revision process with allowed public comment can more efficiently resolve uncertainties.

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Specific issues that regularly surface and are in need of clarification in the NSR rules surround the definitions of "modification" and "routine maintenance". In Utah, these issues have affected decisions with respect to a cross section of major industrial groups, to include the petroleum, steel, mining, and utility industries. We have attempted to work with these industries to achieve fairness and consistency in application of the NSR requirements, but the current state of the NSR rules and uncertainty of what position EPA may take continues to cloud the process.

We encourage you to quickly move forward with much needed reforms in the NSR program. We expect that EPA will give Utah a meaningful opportunity to participate and comment upon the important issues that affect our administration and enforcement of the NSR program and our goal of protecting and improving air quality.

We look forward to working with you on these important matters.

Sincerely,

Mark L. Shurtleff
Attorney General
State of Utah

Senator ALLARD. Also, Governor, I would like to give you an opportunity to finish my question. Remember, we were talking about the Superfund sites and your experiences in Utah.

You were talking the Kennecott mine, and then our time ran out. I wondered, you said that there is more that you wanted to say about that. I want to give you an opportunity to talk more about this.

Governor LEAVITT. Well, Senator, this is one of the largest open pit copper minds in the world. They have been mining it for over 100 years. As a result of mining practices at the turn of the century, there were two very dangerous plumes of pollution that were moving toward the water supply in the largest population center in our State.

The Department of Environmental Quality, in partnership with the EPA, the current owner of the mine, and the water conservancy district in that area were beginning to move toward a very serious set of litigation and, in fact, we are in litigation. In 1995, we concluded we should move toward finding a solution.

The owner stepped up and wanted to come up with a plan. We not only found ways in which to block that plume of pollution from going toward the water, but began to clear it up, to the point now that not only have we cleaned it up, but we have turned it to the point that there are now 8,000 acre feet of water a year that can be converted to the municipal systems of our State and meet all Clean Water standards.

Here is the point, Senator, we did it without a dime of Superfund money, and in a fraction of the time, because of a successful collaboration. There is a good example of how a collaborative circumstance did result in the best possible outcome, and we did it in a way that did not impede our economic competitiveness as a State.

Senator ALLARD. Thank you for that good story.

I would like to follow up on the ombudsman program. We found the ombudsman to be helpful, particularly in cleaning up the Shadduck waste site in Denver. There are other members on this committee, I know, that agree that we need to continue that ombudsman as an independent office in the EPA.

Because of its critical role in the clean-up there at the Shadduck Superfund site in Denver, I assume that you are familiar with the success of the clean-up effort. Do believe that there is a way that what we have done there could be a model for other clean-ups?

Governor LEAVITT. Senator, you have spoken with some passion and persuasion about that site. I have not known much about it until I had these conversations with you, but I look forward to learning more about it. It seems to me that must be a good example of how it can be done well.

Senator ALLARD. Well, it is a site that did not start out very well. Because of the ombudsman program, he helped us when we had a recalcitrant Regional Director there that did not want to do anything toward the removal of the site, and was able to help the residents move forward with this issue.

The bottom line today is that there is clean-up happening and material is beginning to move off the site. The Environmental Protection Agency has agreed that it is inappropriate to leave that kind of a waste site, Superfund site right next to the river, and that it should be cleaned out.

So that is happening. Right now, it is moving forward. If we run into glitches, we will be contacting your office for some help. We have not been bashful about that.

I see that my time is starting to run out. So before it does, it does not appear as though I am going to be able to get back to ask

you any further questions here on the committee, because I have another meeting that is coming up. But I wish you well, and wish you and your family both well.

Governor LEAVITT. Thanks for the graciousness that you have offered me.

Senator INHOFE. Thank you.

Senator Clinton?

Senator CLINTON. Thank you, Mr. Chairman.

Governor, on the continuing series of questions that I have about the clean-up of lower Manhattan, I will submit those in writing to you, as well, with the back-up data, because it is hard in the time we have to cover that much ground.

But I want to focus on the issue of the EPA's integrity that this set of circumstances raises. You know, when you look at the Inspector General's findings and, to me, they are conclusive; I know the EPA was concerned that it put the EPA in a bad light. I, frankly, think it put the White House in a bad light, unfortunately. I think the EPA tried to do what they thought was appropriate and were overruled, to some extent.

But when you look at the September 18th statement that the air was safe to breathe and realize it was not supported by the data available at the time; and that the White House directed changes in a number of September 2001 press releases, I think that is a concern. Because it does fit into this pattern that we have that we are not getting accurate information that not only we can rely on, but more importantly, the American people can rely on; especially when we need to trust our Government the most, as we do in these times of challenge.

So I had asked the White House for an explanation; and as I think I said to you in our meeting, I can fully understand why the White House might have over-reacted or worried about panic at the time. But enough time has now passed that I think it would be appropriate for the White House to try to rebuild that confidence that we should be able to have in the highest levels of our Government when it comes to health and safety.

But specifically with respect to your nomination, Governor, I am sure you are going to have conflicts with the White House and with other Administration officials about policy matters, and on every decision, you may not always prevail; although I certainly hope you prevail on more than less. But can I ask you, do you agree that regardless of the policy decisions, the EPA has a mandate to provide accurate data?

Governor LEAVITT. Senator, it seems clear to me that the Environmental Protection Agency has the role of being able to assure the air is clean and to be able to provide the best available data.

Senator CLINTON. Can you assure me that if you are confirmed, you will fulfill this mandate to provide the public with accurate data, regardless of what pressures you may face from the White House or the Administration?

Governor LEAVITT. As I mentioned in our private meeting, Senator, I have no first-hand knowledge of any of the things that happened with respect to 9/11 or in Manhattan.

I have watched closely to see what I can learn from the circumstance; and as I indicated earlier today, one of the things I

draw from this is, in my own mind, if I am faced with a circumstance, to make sure that people have the data, and that we do the best we can to inform people of risks that are there. I feel some confidence that those at the White House have every intention of being able to meet that mandate.

I recognize that there is a controversy going on over this right now, but I will do my best not to find myself in any kind of similar circumstance.

Senator CLINTON. Governor, I want to ask you also about the Clean Water Act. We have a lot of water in New York. The proposed rulemaking that is now underway concerning the Clean Water Act, do you support the proposed rulemaking to limit the types of streams and wetlands, ponds, and other waters that are covered by the Federal Clean Water Act at this time?

Governor LEAVITT. Senator, are you referencing specifically wetlands?

Senator CLINTON. Not only wetlands; it is the broader set of issues concerning the scope of the Clean Water Act, which would remove Federal protection; not just from millions of acres of wetlands, but also steams and lakes.

Governor LEAVITT. I am aware of these issues, but only in a most general fashion. One of the areas that our State has worked hard on is in doing the studies necessary to establish the total maximum daily load, for example.

There are certain indentations in the land where there is no water, but periodically there will be water. There is work to try to figure out how to treat those indentations that have no water. I know that is an issue, for example.

But fundamentally, our objective is to have clean water and to find ways in which to gain compliance. But in the final analysis, when all of the discussion has been held, if the water was cleaner, I will feel as though we have succeeded. My objective is not to do anything to weaken the law to do that. My objective is to find compliance and to find ways of collaborating to that end.

Senator CLINTON. Well, Governor, I have heard several of my colleagues refer to the fact that the latest trend report from the EPA demonstrates the increasing good news about the air and the water. I would only remind us that that is something that has happened over 20 to 30 years.

What we are seeing now, and part of the reason why we are pressing this so hard on some many fronts, is a reversal of those trends. No one argues that we have had some very good news over the last several years, and I think it is due to the hard work of Members of Congress, Administrations of both parties, that have remained committed to the underlying fundamental mission of enforcing both the Clean Air and the Clean Water Acts. What we see now are disturbing trends in the other direction. So I think that has to be put into a larger context.

Finally, I think that you have a tremendous opportunity, should you be confirmed. I am not lifting my hold, yet, but should you be confirmed——

Governor LEAVITT. There was some optimism.

Senator CLINTON. Yes, I know; I could see it.

[Laughter.]

Senator CLINTON. I hope to. I hope that we get the answers and the actions that I think the people I represent deserve to have, so that I could consider doing that.

But in any event, let me just quickly conclude, Mr. Chairman. You have a tremendous opportunity, Governor, because of this continuing debate about carbon debate, because of the continuing concern about the changes in the New Source Review, to try to get people at the table.

You know, I have spoken with a number of my colleagues on the other side of the aisle. I think there are opportunities for us to come to some resolution of these issues, but we have to have some real leadership and not just proposals that frankly do not stand up to any kind of scientific or expert analysis. Thank you.

Senator INHOFE. Thank you, Senator Clinton.

Senator Bond, did you say you would yield to Senator Boxer?

Senator BOND. I would accommodate my colleague from California.

Senator INHOFE. Senator Boxer?

Senator BOXER. Thank you; I am going to speak very fast, because I only have 4 minutes. I am going to lay out these questions, and I am going to look forward to your answers.

There is an article in the "High Country News" about a situation where people are claiming that the Fisheries Chief who assisted in the case of this Wild Trout Disease was fired, along with 18 people in his department. I would like you to respond to that in writing; because I will tell you, it is so crucial. We do not want a message to go out that employees who do their work are under some jeopardy. I just wanted to get your side of it, in writing.

Also, on mercury, which you probably are aware I was going to ask you about this, it is a terrible toxin. Most at risk are children and the unborn. According to the CDC, one in 12 women of childbearing age have blood mercury levels exceeding EPA safe levels; and according to the New York Times, EPA canceled and slowed down the rulemaking. I want to know if you will ensure that the Agency moves forward and gets the rule this year; so if you can write me about that.

Then I know you are a strong supporter of States' rights. I wanted you to know that what is happening to us in California is there may be a move to preempt us in terms of air pollution. So I wanted to get your view of preemption issues.

Then Superfund, you mentioned you were very proud that you had a site voluntary cleaned and you said it was collaborative. I just want to make a very strong point to you, because Superfund is very near and dear to my heart because I happen to have 100 sites in my State and we have 1,200 sites nationwide. There has been a slow-down of clean-up to half of what it was under the Clinton Administration.

Now I strongly believe Superfund is a collaborative effort. Yes, at the end of the day, if the people who are causing the pollution will not cooperate, there is a right to go to court.

But I wanted you to know, I think with your leadership and being a leader and bringing people together, we could move some of this forward between the States, the local communities, the responsible parties, and get Superfund moving again.

So I think it is really important, and I would like your opinion on the Superfund fee that Senator Chafee and I are trying to reinstate. I will put all this in writing for you. You do not have to take copious notes on it.

I want to know if you think carbon dioxide should be regulated, because I am a little concerned about that issue, since the National Governor's Association opposes the Kyoto protocol and favors voluntary measures.

I wonder if you feel it is time we had some law, as Senator Jeffords has proposed and, I think, Senator Carper, as well, to actually clean-up carbon dioxide. It does kill people. It does hurt people. It is causing our children to have higher levels of asthma.

Also, just in closing, I have a point that I talked to you about when we had our one-on-one meeting. I have never had such a time just getting information, and you pledged to me that you would make sure that we did. So if you could just perhaps give that answer before my time runs out.

I will be asking you for information, because it is the only way I can do my job. I represent 35 million people. That is a lot of people. I represent the fifth largest economy in the world. I have to have information for my industries, for activists, for my community leaders, for my nonprofits.

So will you pledge that even if we do not agree at the end of the day, that we will not have to resort to subpoenas, which we almost did twice here, because we could not get information on NSR or Superfund. So could you assure us that you will try to do your best to make information available to us on a timely basis?

Governor LEAVITT. Senator, it is my desire to work in a collaborative, straight-forward and transparent way with you. As I have indicated a couple of times today, there are historic tensions between branches of Government that I will have to learn to navigate, and I will do my best within those confines.

Senator BOXER. Well, I look forward to answers before our mark-up, Mr. Chairman, because they are important.

Governor LEAVITT. I will be happy to respond.

Senator BOXER. I did not get a chance to show the 50 roll-backs, but I am going to send them over to you. I have got them. We are going to send them to you, to see the 50 roll-backs. Thank you so much.

Governor LEAVITT. Thank you, Senator Boxer.

Senator CORNYN. Mr. Chairman, parliamentary inquiry. The record remains open for questions that we might want to submit to Governor Leavitt in writing, does it not?

Senator INHOFE. It will remain open, and we are going to have a business meeting a week from tomorrow, at which time we will report Governor Leavitt. The record will remain open until that time.

Senator CORNYN. Thanks very much.

Senator INHOFE. I am sorry, follow-up questions, is that what you are asking? That will remain open until noon tomorrow.

Senator CORNYN. Noon tomorrow?

Senator INHOFE. Yes.

Senator Bond, you have been very patient and you have not been heard, yet. You are recognized at this time.

Senator BOND. Thank you very much, Mr. Chairman; my apologies to you and the members of the committee and the others. I found myself in a natural disaster this morning, trying to get to work, as several people may have. We have certainly cured the drought problem, at least in this part of the United States. I have spent more than enough time on the road.

I apologize for not being here earlier, and also we had a very important intelligence hearing. But this is an extremely important hearing, and I thank you, Mr. Chairman, for holding this hearing and being ready to move the nomination of Governor Leavitt to head the Environmental Protection Agency.

I think the President has nominated an excellent candidate for EPA. As a former Governor myself, I look forward to the leadership, management skill, and State perspective that the Nation's longest-serving Governor will bring EPA. I will warn you, Governor, that things will change. It is a lot different from running a manageable State to running a Federal agency.

But from what I have seen of Governor Leavitt's record, he stands for the Environmental Principles that we desperately need here in Washington: collaboration, not polarization; national standards and neighborhood solutions. We should reward results, not programs. We should put science at the lead for the facts and do the process for priorities, and set markets before mandates.

Governor Leavitt has a record of environmental achievement to match his environmental vision. The air in Utah and in the West is cleaner and clearer because of the work Governor Leavitt has done.

All of Utah now meets all Federal air quality standards. Visibility over the Grand Canyon has improved after the Governor's role with the Western Regional Air Partnership. Utah is among the Nation's cleanest watersheds. I did not know you had any water; no, excuse me.

[Laughter.]

Senator BOND. But the watershed is clean. I know there were real problems in Utah, seriously, and it has improved dramatically during the Leavitt administration.

Seventy-three percent of Utah's streams currently meet Federal water quality standards, compared to 59 percent 10 years ago and 60 percent, nationwide. That is a pretty good record.

Utah's most environmentally sensitive land is better protected because of Governor Leavitt's service. Governor Leavitt helped protect 500,000 acres of land in national parks, monuments, recreation areas, and wilderness areas.

Unfortunately, Governor Leavitt, you are entering a job in a city where political opponents try to use the environment for political gains. Environmental and health benefits from drastically reduced levels of nitrous oxide and sulfur oxide, dioxide, and mercury pollution in the President's Clear Skies proposal are being held hostage by those who want to use global warming as a political issue against the President.

I would remind my colleagues, as I recall, I and 94 other Senators voted unanimously to oppose the so-called Kyoto Agreement. That agreement would have put stringent economic burdens on the

United States, while leaving major polluters like China and India uncovered by the terms.

Environmental benefits, improved energy security, more efficient and reliable electricity protection, and New Source Review improvements are being attacked by the President's political opponents.

Even some of my own modest, incremental suggestions for improved environmental collaboration and process in the Transportation Bill to get the environmental concerns into the bill earlier were mis-characterized and leaked to the press and criticized by stakeholders with whom we were trying to work, resulting in significant delays in moving forward on the Surface Transportation Bill.

In addition, there has been reference made to the Clean Air Act and California's efforts. For the record, the Clean Air Act has an exemption and says that States cannot regulate small engines under 175 horsepower used for off-road, for construction and agriculture.

The proposal, which leads down the road requiring catalytic converters on everything from lawnmowers to leaf blowers to chain saws has tremendous fire dangers. It also would ship roughly 22,000 American jobs off-shore, and require that these snow blowers and leaf blowers and chain saws with catalytic converters be made in China.

We believe that there is a much better way to do that, to help California meet its clean air goals. We will provide that to the State of California, the Air Regulation Board, and we will hope that they would not impose the tremendous burden on workers in the United States and dangers when there are better means of achieving the environmental goals.

But President Bush is maintaining a strong commitment to the environment and the Environmental Protection Agency. In the face of funding a war on terrorism, growing deficits, and record tax cuts, President Bush has requested more money for EPA.

I happen to know a little bit about that, chairing the Appropriations subcommittee. President Bush's $7.6 billion request for EPA is more than the previous President requested for EPA in his last budget.

Each year, President Bush has sent us larger requests for EPA. President Bush's $431 million request for EPA enforcement is the largest request for Federal environmental enforcement funds in our Nation's history.

The President is doing good things for the EPA and the environment. I look forward to your good leadership in EPA. I know that we can continue to make progress working together, using the collaborative processes, the market processes that you have emphasized, enforcing the law where people refuse to take opportunities to move forward. I urge my colleagues to allow a vote on your nomination without delay.

Senator INHOFE. Thank you, Senator Bond.

I think perhaps as is often the case, we overlook the most significant parts of hearings. I think we did this time. I do not believe you have introduced your wife, yet.

Governor LEAVITT. That would be a pleasure for me to do, and it would probably keep me out of trouble at home, too, thank you. I am very pleased to have my wife, Jackie, with me today. She has been heroic through all of this.

Senator INHOFE. It is nice to have you here, Jackie; and it will not always be this way.

[Laughter.]

Senator INHOFE. Now I have to have a unanimous consent request. If there is no objection, I would ask that the staff have time and authority to make conforming and technical corrections to the Highway Extension Bill.

Let us do this; we will wrap this up. As I say, we will go ahead and have a business meeting a week from tomorrow.

Senator Jeffords, if you would like to have some time, feel free to do so for questions.

Senator JEFFORDS. Yes, I certainly do. Governor, it is great to be here with you. I am a great States-righter. I had to take the State of New York to the United States Supreme Court to make them obey the environmental laws in Lake Champlain. So we are very sensitive in Vermont about making sure that we are not imposed upon.

Do you believe that the States should be allowed to have and enforce environmental laws that are more stringent than the Federal laws?

Governor LEAVITT. I do, and in most cases, many cases, they do now.

Senator JEFFORDS. Will you ensure that the water quality impacts are fully evaluated for regulations that are issued under the Clean Water Act?

Governor LEAVITT. I am not sure I understand fully, Senator, the impact of that question. Obviously, the goal for me, if I am confirmed by the Senate, is to assure that not just the water is cleaner, but the air is cleaner, as well; and that we make substantial progress in the environment during the course of my service.

Senator JEFFORDS. I will take that. One of the critical issues you will face as EPA Administrator is securing the Nation's chemical plants. This is one I am deeply concerned about. The stakes are very high.

In March of 2002, the U.S. Army Surgeon General warned that a terrorist attack on a chemical plant in an intensively populated area could kill up to 2.4 million people.

Although this committee unanimously passed the bill last Congress, and although the Administration has called for legislation, the issue languishes due to the influence of relatively few plant owners who fear regulation. So the Administration has not pushed for us. As Administrator, will I have your commitment to press for legislation in this area?

Governor LEAVITT. Senator, I currently serve as a member of the Homeland Security Advisory Council, which was previously the President's Homeland Security Advisory Council. Much of that came as a result of my experience as the Governor of Utah during the 2002 Winter Olympic Games.

That was the first gathering of the world after 9/11, and it became very clear at that moment that Homeland Security was ev-

eryone's second job. It is going to be part of virtually every industry. It is going to be part of every Government agency, State and local, and they have to be coordinated. It would be my intent to assure that the Environmental Protection Agency played its role in meeting that obligation.

There was a moment during the 2002 games when for about 3 hours, we thought that the Salt Lake International Airport had been infected with anthrax. I had sitting at my table some of the best professionals in the world. That was a day I was glad to have the EPA there.

We were able to make a decision that needed to be made in a short period of time as to whether to close the international airport and throw the Olympics into a much different event than it turned out to be.

I pledge to you that if I am confirmed that kind of experience will be loaned, whenever necessary, whenever possible, to local officials, to State officials, and to others, as we contemplate that very important part of our future.

Senator JEFFORDS. I would like to work forward with you on pursuing legislation in this area, to make sure that we do have the security in our chemical plants and things. I look forward to working with you.

Governor LEAVITT. Thank you.

Senator JEFFORDS. EPA Administrator Whitman said that the Federal Government should be "held to the same standards of environmental clean-up as the private sector." Do you agree with this statement; and if so, do you also agree that the military should be held to the same standard as the rest of the Nation, with respect to complying with environmental laws?

Governor LEAVITT. Senator, I do believe that the Federal Government and Federal agencies need to do their part and need to be held to the same standards.

I have had substantial experience in working with various defense-related facilities. For example, Hill Field is a large maintenance depot that is in my State. We have a number of test and training ranges, and I am quite familiar with those military missions, and the task of assuring that they can complete those missions.

The bottom line is, we all need to keep the law. I have found that they are willing and, in many cases, exemplary in the approach that they have taken to help us meet our various State environmental commitments.

Senator JEFFORDS. It seems very unlikely that the Administration's multi-pollutant legislation will ever gain the kind of support that other bipartisan bills have gathered. This is largely due to the significant shortcomings in the Clear Skies.

In 2001 and in 2002, there were bipartisan discussions to achieve a compromise, but we did not succeed, due to the White House intervention. Would you be interested in putting the resources of EPA to work and help us get a compromise bill that could pass a committee in the Senate?

Governor LEAVITT. As I indicated earlier to you, I know that the President currently has three legislative priorities; one of them

being the Clear Skies. Frankly, it is something that I have some passion for, because I have seen it work.

I am very hopeful that Clear Skies can pass, so that we can move forward as a Nation in being able to achieve more environmental progress at a faster rate, but do it in a way that is not going to compromise our ability to be competitive in the world economically.

Senator JEFFORDS. May I ask unanimous consent to place Senator Lieberman's opening statement in the record?

Senator INHOFE. Without objection, so ordered.

[The prepared statement of Senator Lieberman follows:]

Thank you, Senator Jeffords.

I am going to conclude this, but before I do, I would ask Senator Bond, since he was not here for the round of questioning, if you had any other remarks that you wanted to make before I do so.

Senator BOND. Thank you very much, Mr. Chairman. I have had the opportunity to discuss many of these issues with the Governor. I found his responses to be both knowledgeable and encouraging for his work on the environment, so I have no further questions for him; thank you.

Senator INHOFE. Thank you, Senator Bond.

Senator JEFFORDS. I have just one request, Mr. Chairman.

Senator INHOFE. All right, yes, sir.

Senator JEFFORDS. In addition to the questions that my staff will draft for submission by our deadline for the hearing follow-up, I now ask unanimous consent to include in the record the following documents addressed to me that contain questions for Governor Leavitt from Senators Corzine, Stabenow, Congressman Stupak, the People for Ethical Treatment of Animals, and the Center for Progressive Regulation. I also expect, as is our usual practice, that the record will remain open until such questions are answered.

Senator INHOFE. First, you said statements that were made as a part of the record, which there would be no objection to. But then when you have questions, you are talking about Congressman Stupak and other people. I might find objection to that. What is your intent?

Senator JEFFORDS. Well, we want to make sure that there are opportunities for people to be able to get information to make their judgment on how to support or non-support.

Senator INHOFE. Would it be your intention not to have a business meeting until these questions are answered?

Senator JEFFORDS. No, I do not believe so. I do not intend to have any delay. It was just to make sure that these questions get answered and can be made a part of the record.

Senator INHOFE. The chair would object to those that are not members of the committee, because it is the tradition of the committee only to have questions responded to from the members of the committee. Most of yours are not, and I have no objection to that. But as far as some of the other organizations, that is not a part of this hearing, and I believe it is legitimate.

Senator JEFFORDS. Governor Whitman, I know, she did allow that; but I will not pursue this, other than to expect that we can cooperate with Governor Leavitt.

Senator INHOFE. I am sure we will, Senator Jeffords.

Senator JEFFORDS. We will provide them to him and he will make his discretion.

Senator INHOFE. For my final comments, let me just mention, it has been brought up a few times today about the World Trade Center. There has been, and I am at this time releasing, the Majority staff report on the I.G. investigation into the World Trade Center air quality issues. I ask that it be made a part of the record.

Senator JEFFORDS. Without objection.

[The referenced document follows.]

Senator INHOFE. One of those statements in there is quoting the Inspector General, and he said, "In regard to the monitoring data, we found no evidence that EPA attempted to conceal data results from the public." The OIG also stated that was neither a conspiracy nor an attempt to suppress information.

The reason I asked the last question, Governor, of you was that sound science is something that is so important. It is to this committee; it is to me, anyway, and I know that it is to this Administration. You have been asked several questions about CO2, about the fourth pollutant, as some would like to refer to it as.

I would only like to say that this is a huge issue, and it is one that I am going to ask you to look at all of the impacts, while you are thinking about this issue.

Horton Econometrics Forecasting Associates, and that is Horton School of Economics, came out with an analysis as to what would happen in America if the Kyoto Treaty were complied with. It would cost 2.4 million U.S. jobs, and it would reduce GDP by 3.2 percent, or around $300 billion, which is more than we spend on primary and secondary education, combined.

They said because of Kyoto, American consumers would face higher goods, medical, and housing costs, and then it went on to quantify. They said, at the same time, an average American household of four would see its real income drop by $2,710 in 2001 and each year thereafter. Under Kyoto, energy and electricity prices would nearly double, and gasoline prices would go up an additional $.65 a gallon.

Now it goes into a lot more detail than that, and I think you are probably aware that the American Black Chamber of Commerce and the Hispanic Chamber of Commerce have come out and quantified the number of jobs that would be lost, some 511,000 jobs that would be Hispanic workers; 864,000 jobs of black workers; and they are very concerned about this issue.

So it gets down to looking at the science. I would suggest to you that recently, James Schleschinger, former Energy Secretary for the Carter Administration, came out with very strong statements that the science is certainly not settled.

Dr. Richard Lindsen, an MIT scientist, and he was a former member of the National Academy of Sciences, said there is a definitive disconnect between Kyoto and science.

Should a catastrophic scenario prove correct, Kyoto would not prevent it. Dr. Frederick Sites, a past-president of the National Academy of Sciences, and he is a Professor Emeritus at the Rockefeller University., compiled the Oregon petition, which reads as follows:

"There is no scientific evidence that human release of carbon dioxide, methane, and other greenhouse is causing, or will in the foreseeable future, cause catastrophic heating of the earth's atmosphere and disruption of the Earth's climate."

This goes on and on; and, in fact, over 4,000 scientists, 70 of whom are Nobel Prize winners, signed the Heidelberg appeal, which says there is no compelling evidence that exists to justify controls on greenhouse gases.

Finally, the Harvard/Smithsonian study compiled and examined results at more than 240 peer reviewed papers, published by thousands of researchers over the past four decades. This is the most comprehensive study of climate change ever, and they say that there is no convincing evidence.

I would just say that we are dealing with something that is highly emotional, and very likely, this could be maybe the greatest hoax ever perpetrated.

That is why it is important, Governor, in the position that you will be taking, that you look at the scientific evidence on all these decisions, as well as this one.

I appreciate very much your patience and your wife's patience, and we will now adjourn our meeting.

[Whereupon, at 12:30 p.m., the committee was adjourned, to reconvene at the call of the chair.]

[Additionals statements submitted for the record follow:]

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

Mr. Chairman, thank you for calling this hearing today on what I consider to be one of the most important jobs in the executive branch. I have reviewed Governor Leavitt's record of accomplishments in his current role as Governor of Utah. I am pleased that he places strong emphasis on coalition building and consensus seeking. I think these are the kinds of leadership skills that a successful EPA Administrator must possess.

That said, I would like to express my concerns over what I deem an inherent conflict associated with the position of EPA Administrator in this Administration. We have seen evidence that White House politics take precedence over the formulation of data and the distribution of information. I strongly believe that this kind of political manipulation of scientific information is diametrically opposed to the mission of EPA—to protect the public health and human environment. How can EPA protect American's and the environment in which we live if EPA cannot make decisions based on sound scientific data?

I am encouraged by Governor Leavitt's enthusiasm for his nomination to this position, and I hope that he will demonstrate to this committee that he will be the voice for science over politics and full disclosure of facts over secrecy.

Finally, I hope that Governor Leavitt will provide this committee with real answers to the questions posed on all of the important issues before the EPA. While I recognize that the Governor has a steep learning curve, I must state clearly that answers that promise only to investigate and learn about the issues will not satisfy me. Nor should these kinds of answers satisfy this committee. Furthermore, I hope that you, Mr. Chairman, will respect the rights of committee members to get full answers to our questions before we are expected to vote on Governor Leavitt's nomination.

Governor Leavitt, I look forward to your testimony. I plan to submit the majority of my questions to the record, and I will look forward to your answers.

Thank you, Mr. Chairman.

STATEMENT OF HON. JOSEPH I. LIEBERMAN, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Mr. Chairman, in considering Governor Leavitt's nomination to serve as Administrator of the EPA, I seek answers to questions not only about his qualifications, but

also about his commitment to the Agency's independence and his allegiance to President Bush's failed environmental agenda.

I posed many of these questions in a letter to the Governor weeks ago, and I was deeply disappointed to learn last Tuesday that he refuses to answer them. Donald Rumsfeld answered my questions prior to his confirmation hearing. Tom Ridge did the same. Why will Governor Leavitt not answer them?

I suspect the White House issued the gag order. It would certainly be consistent with its pattern of information control on the environment. In-a practice reminiscent of the Soviet Union, the Bush Administration has systematically suppressed scientific and public health information that conflicts with its polluter-friendly environmental agenda. It has routinely dodged, ducked and denied legitimating questioning—and has shown nothing but favoritism for private interests and nothing but contempt for the public interest on the environment.

Why does the White House reject clear evidence that global warming is a real and growing threat to the environment? Senator McCain and I, who are sponsoring legislation on this matter, demand to know.

Why did the White House delete the EPA's warnings about air quality and public health at and around Ground Zero in the aftermath of September 11th, endangering the lives of thousands of survivors? Senator Clinton and I, who have pressed the White House for answers, demand to know.

Why will the White House not disclose information regarding the public health impacts of its recent rollback of Clean Air standards? Senator Jeffords and I, who raised these concerns over 2 years ago, demand to know.

To each of the pressing questions, we have gotten nothing but silence.

This systematic stonewalling by the President has not only destroyed his credibility on the environment, it has covered-up policies that destroy the environment itself. It is time the Administration come clean on its environmental record—and cleanup its act.

And it is time the EPA assert its independence and resist the White House's efforts to control it. I cannot in good conscience support Governor Leavitt's nomination until I am convinced that he will uphold the EPA's mandate to be an independent advocate for protecting the environment. And I will block Senate consideration of his nomination unless I am given assurances that he will do this.

America's elected leaders and public officials have a moral responsibility to protect public health, to preserve our environment, and to provide future generations with a world better and cleaner than we . found it. I am committed to meeting this responsibility; President Bush is not. The question before is where Governor Leavitt stands.

STATEMENT OF GOVERNOR MICHAEL LEAVITT, NOMINATED TO BE ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. Chairman, I am honored that President Bush has nominated me as Administrator of the United States Environmental Protection Agency. I sit before you today, respectful of your role and ready for your assessment of my fitness to serve.

In the weeks leading up to this hearing, I have had the opportunity to visit with nearly all of you. You have been candid and generous with your time and insights. Thank you and the committee staff for the courtesies extended.

Our conversation today will likely have two components: my fitness to serve as Administrator of the United States Environmental Protection Agency, and the policy differences that exist on environmental issues. As a Governor who has served for more than a decade, I understand the complexities, emotions, fears and conflicting values that are fundamental to environmental issues. I'll do my best to be responsive to your questions and sensitive to our differences.

When President Bush announced my nomination, I described an experience I had at the Grand Canyon at age eight. My family arrived at the south rim at twilight, just in time to see a giant shadow creep across the canyon.

Thirty-six years later, I stood at nearly the same spot, but as the Governor of Utah. This time, a brown haze stretched across the sky that had once been so clear. I was there to co-lead a commission, charged with rescuing that view.

The Grand Canyon Visibility Transport Commission was created under the Clean Air Act. We were to convene States, tribal nations, Federal agencies, local governments, private industries and environmental groups to protect the air over this international treasure. If we failed in 5 years, the law made clear the Federal Government would take on the task.

Four years passed and nobody budged. Every State, tribe and local government protected its turf. Industry and environmental groups traded barbs; it looked to me like the whole thing would implode.

As the 5-year deadline approached, slowly the group began to unite. Serious problem solving and collaboration began to occur, and, ultimately, a 20-year plan was developed. We developed a way for every State to design its own plan that met national standards. Importantly, we agreed that if a State failed to meet the standard, a mandatory market-trading system would kick in.

This experience taught me that enforceable national standards can be a catalyst to bring parties together, but national standards work best if participants are allowed to use innovative neighborhood strategies.

The Grand Canyon effort changed environmental problem solving in the West and led to the creation of the Western Regional Air Partnership, a collaboration of three Federal agencies, 13 States and 13 tribal nations. We now have a region-wide plan for SO2 and we're closing in on a NOX agreement.

The Western Regional Air Partnership has taught me that environmental solutions (just like environmental problems) transcend political boundaries.

These experiences in cleaning up the air in the West, and many experiences since, have caused a well-defined environmental philosophy to crystallize in me. The philosophy is called "Enlibra." The word is derived from Latin roots and means "to move toward balance." Balance, in this context doesn't mean splitting the difference, but rather to apply the collective wisdom of the productive middle ground to make environmental progress.

Former Governor John Kitzhaber (D-Ore) and I, coined the word Enlibra as we compared experiences. We were in different political parties and dealt with different environmental problems, yet both of us saw environmental disputes dividing our communities, diminishing our nation's economic competitiveness, costing the public millions of dollars in legal battles and taking decades to resolve. We concluded there has to be a better way.

The two of us were joined by another dozen Governors and invited hundreds of environmental practitioners of every persuasion to help capture the principles that lead to balance: balance between this generation and the next, balance between sustainable environments and sustainable economies and balance among regions.

The outcome was a simple set of beliefs, a philosophy, a shared doctrine of environmental management.

For example, one of the principles is "Markets before Mandates"—a belief that people move farther and faster when they move willingly. Another is "Reward Results, Not Programs"—we should value and measure improvement, not the rote adherence to regimen.

A story illustrates another principle of Enlibra: "Collaboration, Not Polarization."

I've been party to hundreds of environmental cleanups, including dozens of Superfund and Brownfield projects. One I'm especially proud of occurred in the Salt Lake metropolitan area and is the largest mine-related water reclamation project in the history of the United States.

Groundwater contamination from the Kennecott Copper Mine threatened the water supply of Utah's population center. The State of Utah worked with Kennecott, the local water district and the EPA to organize a remediation plan that will clean-up the groundwater and provide 8,000 acre-feet of drinking water per year. It was accomplished without a dime of Superfund money and in a fraction of the time it would have taken if it had become a Superfund site. It was a great collaboration, and it occurred because well-meaning people (industry and regulators alike), joined together to solve a problem in a cost-effective and timely way. This was Enlibra in action.

Every significant step of environmental progress I've been involved in has been a product of collaboration. Collaboration does not eliminate litigation, but it can minimize it. Collaboration doesn't take away hard decisions, but it improves acceptance. Collaboration doesn't lead to instant solutions, but it does accelerate progress. Most importantly, first-rate collaborations are more than compromise; they are problem-solving expeditions that penetrate the fortress of polarized extremes.

Collaborations always have critics, cynics and saboteurs. They regularly break down and often fail, but those that break through become beachheads of innovation, staging areas for progress, launching pads for new technology.

Moreover, successful collaborations restore people's confidence in their government. They show we can do more than fight, that we can find common ground to serve the common good.

I would like to share one more story that illustrates a principle of Enlibra. In February of 2002 it was the privilege of our country and my State to host the 2002

Olympic Winter Games. Working with Federal and State agencies and volunteers, the Salt Lake Organizing Committee set four environmental goals:

- Net zero air emissions,
- Zero waste,
- Complete compliance with all Federal, State and local environmental standards, and,
- The planting of 100,000 trees.

These became more than Olympic goals, they were national goals. Federal, State and local environmental officials spent 7 years planning, preparing and training. In the final execution we accomplished everything we set out to do.

What is the explanation for this success? I like to think it had something to do with a largely emblematic, but meaningful symbol. A worker assigned to the Olympic environmental effort explained it to me:

Everyone on our team wore those funky purple Olympic coats. We had people from the EPA and other Federal agencies working along side workers from State and local government, private sector professionals and volunteers. We all looked the same. Once we all wore the same color jacket nobody said, "that's not my job." It was about getting the job done. We were Americans unified in a goal that enlisted every spectator, every athlete and every vendor. We did it.

The Enlibra principle employed here is simple: Change a Heart, Change a Nation. The key to environmental progress is not the Federal code alone; it's our ethical code. It is the aggregate of our individual commitment to care for this planet, to protect our natural assets, to ensure that our citizens' health and safety are protected.

In closing, I would like to express my admiration for the dedicated professionals who work for the United States Environmental Protection Agency. Many in the Agency have devoted their career to the noble pursuit of protecting our environment. In my nearly 11 years as Governor, I have observed their expertise and my first priority, should you confirm me, would be to reach out and learn from these dedicated employees and earn their trust.

Mr. Chairman, if confirmed, I pledge to you, the Senate and the American people my full commitment that I will give this aspiration the full measure of my heart. There will always be genuine disagreement, but my aspiration is to achieve unity in our beliefs, so we can attain harmony in our purpose. I will listen to the views of all stakeholders and all points of view. I will work to make environmental protection more than an Agency; I will make it an ethic.

Thank you.

UNITED STATES SENATE

COMMITTEE ON ENVIRONMENT
AND PUBLIC WORKS

ROOM 410 DIRKSEN BUILDING WASHINGTON, DC 20510

INFORMATION

REQUESTED OF PRESIDENTIAL NOMINEES

In order to assist the Committee in its consideration of nominations, each nominee is requested to complete the attached Statement For Completion By Presidential Nominees. The Statement is intended to be publicly available. In the event that a nominee asks that a specific answer be kept confidential, he or she should notify the Chairman and Ranking Member.

The original and forty (40) copies of the requested information should be made available to the Honorable James M. Inhofe, Chairman, Committee on Environment and Public Works, U.S. Senate, Washington, DC 20510 (Attn: Staff Director) as soon as possible.

Name of Nominee: Michael Okerlund Leavitt

Business Name: **State of Utah**

Business Address: 210 State Capitol

City, State & Zip: Salt Lake City, UT 84114

Business Email: mol@utah.gov

Business Phone: 801-538-1525

Cell Phone: 801-560-6453

Home Address: 1872 Laird Avenue

City, State & Zip: Salt Lake City, UT 84108

Home Phone: 801-582-1070

UNITED STATES SENATE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Full Legal Name: Michael Okerlund Leavitt

Position to which nominated: Administrator, Environmental Protection Agency

Date of Nomination:

Date of birth: 2/1/51 **Place of birth:** Cedar City, Utah

Marital status: Married **Full name of spouse:** Jacalyn Smith Leavitt

Name and ages of children: Michael Jr. 27; Taylor, 25; Anne Marie, 21; Chase, 19; Westin, 13.

Education:

Institution	Dates Attended	Degrees Received	Dates of Degrees
Southern Utah University	1/70 – 5/78	Bachelor of Arts	May, 1978

Employment record:

List all positions held since college, including the title and description of job, name of employer, location, and dates. If you were terminated involuntarily from any position(s), please note the circumstances.

Position Title	Employer	Address	Dates	Terminated (Y/N)
Governor	State of Utah	210 State Capitol Salt Lake City, UT 84114	1993 – present	No
Chief Executive Officer	Leavitt Group Agency	216 S. 200 W. , Cedar City, UT	Approx 5/80 – 1/ 93	No

Position Title	Employer	Address	Dates	Terminated (Y/N)
	Association	84720		
Chairman	Public Affairs Advisory Group	1358 S. Main, Salt Lake City, UT	Approx. 6/85 – 12/88	No
Member, Board of Directors	PacifiCorp	826 N E Multnomah, Portland, OR	Approx 1/89 – 12/92	No
Member, Board of Directors	Great Western Thrift and Loan	Salt Lake City, UT	Approx 89 – 12/92	No
Member, Board of Directors	Utah Power and Light	826 N E Multnomah, Portland, OR	Approx. 12/86 – 1/89	No
President	Michael O. Leavitt Insurance Agency	Cedar City, UT	Approx 6/78 – 5/80	No
Agent	Dixie Leavitt Agency	Cedar City, UT	Approx 6/73 – 6/78	No
Planning & Polling Coordinator	Reagan/Bush Re-election Campaign	Washington, DC	Approx 3/84 – 12/84	No
Campaign Manager	Senate election – Orrin Hatch	Salt Lake City	Approx 3/82 – 12/82	No
Campaign Manager	Senate election – Jake Garn	Salt Lake City	Approx 11/79 – 12/80	No
Campaign Manager	Congressman Dan Marriott	Salt Lake City	Approx 6/78 – 12/78	No
Director	Congressman Dan Marriott	Salt Lake City	Approx 1/78 – 5/78	No

Honors and awards:

List significant scholarships, fellowships, honorary degrees, military medals, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Date	Honor/Award
8/99 – 7/00	Chairman, National Governors Association
6/93 – 6/94	Chairman, Western Governors Association
12/94 – 12/95	Chairman, Council of State Governments
11/99	Public Official of the Year, Governing Magazine
2/95	Nathan Davis Award, American Medical Association
8/97	Thomas Jefferson Award, American Legislative Exchange Council
1/2000	Outstanding Statesman Award, Foundation for North American Wildsheep

Memberships:

List significant memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Office held (if any)	Dates
Envision Utah	Honorary Chairman	Approx. 1/97 – to present
Western Governor's University	Trustee	6/95 - present
Oquirrh Institute	Trustee	Approx. 5/01 - present
Center for the New West	Trustee	Approx. 10/96 – 2/02
American Legacy Foundation	Investment Chairman	Approx. 9/99 – 12/02
Homeland Security Advisory Council	Chairman: State and Local Government Council	6/11/02 – present
Advisory Commission on Intergovernmental Relations	Presidential Appointee	Approx. 1/94 – until commission was dissolved in approx. 1996
Since Jan. 1993, As Governor is honorary member of various community organizations and served in various capacities to support charitable organizations	Honorary Member	Jan. '93 – to present – all positions would terminate upon resignation as Governor.

Qualifications:

State fully your qualifications to serve in the position to which you have been named.

During the last nearly eleven years, I have served as Governor of Utah. That service has included terms as Chairman of the National Governors Association, Western Governors Association and Council of State Governments. I have also served as the co-chairman of the Grand Canyon Visibility Transport Commission and the Western Regional Air Partnership. In those capacities, I have dealt with nearly every category of environmental issues handled by the Environmental Protection Agency.

I view environmental improvement as being one of mankind's most noble pursuits.

See attached biography for additional information.

Future employment relationships:

1. Indicate whether you will sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate. XX ☐ yes ☐ no

2. As far as can be foreseen, state whether you have any plans after completing government service to resume employment, affiliation or practice with your current or any previous employer, business firm, association or organization.

☐ yes If so, please explain _____

XX☐ no

3. Has anybody made a commitment to you for a job after you leave government?

☐ yes If so, please explain _____

XX ☐ no

4. (a) If you have been appointed for a fixed term, do you expect to serve the full term?

☐ yes

N/A

☐ no

(b) If you have been appointed for an indefinite term, do you have any known limitations on your willingness or ability to serve for the foreseeable future?

☐ yes If so, please explain _____

XX☐ no

(c) If you have previously held any Schedule C or other appointive position in the Executive branch, irrespective of whether the position required Congressional confirmation, please state the circumstances of your departure and its timing.

Advisory Commission on Intergovernmental Relations: Commission was dissolved in approx. 1996; Homeland Security Advisory Council : appointment will terminate upon resignation as Governor.

Financial Statement:

Note: The Office of Government Ethics will provide the Committee with a copy of your Executive Personnel Financial Disclosure Report (SF-278).

1. List sources, amounts and dates of all anticipated receipts from deferred income arrangements, stock options, uncompleted contracts and other future benefits which you expect to derive from previous business relationships, professional services and firm memberships or from former employers, clients, and customers. Amounts should be indicated by the categories established for reporting income on Form SF-278, Schedule A.

Retirement benefits from the Utah Retirement Systems for service as Governor of the State of Utah. Based on termination date of Oct. 31, 2003, and a retirement date of Feb. 16, 2013, at age 62, the lifetime benefit would be approximately $3,178.00 per month.

Leavitt Group Profit Sharing Plan is a qualified profit sharing plan that I participated in up until Jan. 1993, with the Leavitt Group Agency Association. I am eligible to draw an income at age 59 1/2 of amount determined by the amount in the account at the time. The account currently has between $100,000 and $1,000,000 in it and a schedule of the underlying assets is included in Form 278.

401K plan for the Utah Retirement Systems – this is a plan offered by the State of Utah, to which I have contributed. It has assets between $50,000 - $100,000. Schedule of the underlying assets is included in the Form 278.

I receive a distribution of dividends from stock held in Leavitt Group Enterprises, a closely held corporation, which owns approximately one hundred insurance agencies throughout the United States. In the past, the distibution has been between $40,000 - $60,000 per year.

2. Are any assets pledged?

☐ yes If so, please explain _____
XX☐ no

3. Are you currently a party to any legal action?

☐ yes If so, please explain

No personal litigation, but as capacity as Governor, I am named in several legal actions on behalf of the state.

☐ no

4. Have you filed a Federal income tax return for each of the last 10 years? If not, please explain the circumstances.

XX□ yes

□ no If not, please explain _____

5. Has the Internal Revenue Service ever audited your Federal tax return? If so, what resulted from the audit?

□ yes If so, please explain _____

xx □ no

Potential conflicts of interest:

1. Describe any financial or deferred compensation agreements or other continuing of interest: dealings with business associates, clients or customers who will be affected by policies which you will influence in the position to which you have been nominated.

None

2. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest, or the appearance of conflicts of interest, with the position to which you have been nominated.

None

3. Describe any business relationship, dealing or financial transaction (other than taxpaying) which you have had during the last 10 years with the Federal Government, whether for yourself or relatives, on behalf of a client, or acting as an agent, that might in any way constitute or result in a possible conflict of interest, or an appearance of conflict of interest, with the position to which you have been nominated.

In my capacity as Governor, I dealt routinely with every department of the Executive Branch and Congress.

4. Explain how you will resolve any potential conflict of interest, or appearance of a conflict of interest, that may be disclosed by your responses to the above items.

See the undertaking letter provided to the Office of Government Ethics.

5. Explain how you will comply with conflict of interest laws and regulations applicable to the position for which you have been nominated. Attach a statement from the appropriate agency official indicating what those laws and regulations are and how you will comply with them. For this purpose, you may utilize a statement by the relevant agency Ethics Officer.

See the undertaking letter provided to the Office of Government Ethics.

Political affiliation and activities:

List all memberships and offices held in, or financial contributions (in excess of $1,000), and services rendered to any political party or election committee during the last 10 years.

Membership/Office/Political Party	Dates	Amount (if applicable)
Chairman, Bush 2000Campaign, Utah	Approx. 12/99 – 11/00	
Vice Chair, Platform Committee, Republican National Convention	8/96	
Chairman, Republican Governors Association	11/94 – 11/95	

Published writings:

List the titles, publishers and dates of any books, articles, or reports you have written. (Please list first any publications and/or speeches that involve environmental or related matters.)

A list of published speeches can be accessed at website: governor.Utah.gov – speeches. In capacity as Governor, I have been called on constantly for speeches, typically not published.

Additional Matters:

1. If there is any additional information which you believe may be pertinent to the Members of the Committee in reaching their decisions, you may include that here.

No

2. Do you agree to appear before all Congressional Committees which seek your testimony?

☐ xxx yes

☐ no If not, please explain_____

3. Having completed this form, are there any additional questions which you believe the Committee should ask of future nominees?

☐ yes If so, please explain _____

xx☐ no

AFFIDAVIT

Michael O. Leavitt) **ss**, being duly sworn, hereby states that he/she has read and signed the foregoing Statement for Completion by Presidential Nominees including the Financial Statement and that the information provided therein is, to the best of his/her knowledge and belief, current, accurate, and complete.

Subscribed and sworn before me this 4th day of September , 2003.

Notary Public

DENISE BROWN-CURTIS
NOTARY PUBLIC, DISTRICT OF COLUMBIA
MY COMMISSION EXPIRES FEBRUARY 28TH, 2006

Governor Michael O. Leavitt

Michael O. Leavitt, the 14th governor of Utah, has led the state through an era of change and unparalleled prosperity. Elected in 1992, reelected in 1996 with the largest vote total in state history and the second governor in Utah history to be reelected to a third term, Leavitt has carried out a vision of improvement and innovation while positioning Utah for success in a new millennium.

Under Leavitt, Utah has been named the "best-managed state" in America, the "best place to locate a business" and host of the 2002 Winter Olympics. Sales, income and property taxes have all been reduced.

Crime is down and student achievement is up. Open spaces are being preserved. Air pollution is diminishing. Highways and public transportation are helping people to move around efficiently. Welfare reliance is shrinking.

Governor Leavitt's leadership extends beyond the state's borders as well. He is past chairman of the National Governors' Association and a leading national voice on issues such as welfare reform, federal-state relations, e-commerce and balanced environmental management.

Born on February 11, 1951, in Cedar City, Utah, Leavitt graduated with a bachelor's degree in economics and business from Southern Utah University and married Jacalyn Smith. The governor and first lady are the parents of five children.

After earning his degree, Leavitt joined the Leavitt Group, a regional insurance firm. He eventually became president and chief executive officer of the company, establishing it as one of the top insurance brokers in America. He also served as an outside director of two large public corporations and was a member of the Utah State Board of Regents, overseeing the state's nine colleges and universities.

Leavitt was successful in his first bid for public office, winning the governorship with 42% of the vote in a three-way race in 1992. He won reelection in 1996 with a record 74% of the popular vote. He is only the second governor in Utah history to be reelected to a third term.

At his first inauguration, Leavitt pledged to take the state to a "whole new level of performance." In the course of two terms, his vision of performance has become reality.

The average elementary class size in Utah is down by three students, while teacher salaries are up - all part of a 56% increase in overall spending for education in the Leavitt years.

Leavitt education initiatives include the state's first charter schools, stricter graduation requirements and measures to guarantee reading proficiency, improve the education environment and bring technology to every classroom.

One in every four jobs that now exist in Utah was created on the Leavitt watch. Utah's traditional dependence on the defense industry has given way to diversification and an

Influx of high-tech industries.

Household incomes are rising and unemployment is low.

Welfare reliance has fallen by more than half. In addition, 400,000 more Utahns have health insurance than when Leavitt took office in 1993.

Highways in Utah are being rebuilt and repaired at an unprecedented rate, including the largest design-build highway project in American history, a $1.6 billion total reconstruction of Interstate 15 ahead of schedule and under budget.

Leavitt is a founder of Western Governor's University and creator of the Enlibra environmental management philosophy that has been adopted by the National Governors Association.

He negotiated the school trust lands swap with the federal government that secured millions of dollars for Utah school children; and he designed the "digital state" initiative that will deliver high-speed Internet access statewide and guarantee Utah's place in the global economy.

The governor has received numerous awards and honors and has been called on regularly by the president and congressional leaders to resolve federal issues that directly affect the states.

Leavitt embodies the hopes, dreams and beliefs of Utah, a youthful, energetic state. Asked once by a reporter how he would like history to remember him and the Leavitt years, he replied:

"I'd like them to say Mike Leavitt was the governor that led us through a period of unparalleled growth and managed our obligation as a generation. That he helped us transition to the Information Age, and that our schools were better as a result. I'd like them to say that he oversaw a fundamental change in our philosophy regarding how we help people - that we began once again to help them as opposed to maintain them. And, most of all, that during the time he served, there was never a question that he was looking after our best interest."

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. Governor Leavitt, I want to thank you for you assurances in our meetings that Tar Creek will receive the highest level of attention from the EPA. As we have had many discussions to date and will have many more once you are confirmed, I would just like to get you on record to committing your highest level of attention and involvement with the cleanup of the Tar Creek Superfund site in Oklahoma.

Will you commit to ensuring the health and safety of every resident in Tar Creek is the top priority when making decision regarding Tar Creek?

Response. If confirmed, I can assure you that protecting the health and the surrounding environment of the residents of Tar Creek is a priority of the EPA.

Question 2. Will you commit to making the remediation of a Tar Creek a top priority for the EPA?

Response. If confirmed, I can assure you that the Tar Creek site will remain a top priority for EPA.

Question 3. Will you commit to an open, honest dialogue with all residents and officials involving EPA decisions and actions with regard to Tar Creek?

Response. If confirmed, I can assure you that EPA will continue its efforts to maintain an open and honest dialogue with the residents and officials of Tar Creek.

Question 4. Over the last few years their have been innovative settlements in Superfund that have used environmental insurance to expedited cleanup and protect trust fund resources. The Agency and DOJ have been reluctant to embrace these innovative concepts. Will you direct Agency Enforcement staff to vigorously explore these options and develop approaches that will enable this and other innovative tools to be used when it will expedite cleanups and protect the taxpayer?

Response. I am not familiar with the specifics of the environmental insurance settlements in the Superfund program. If confirmed, I commit to examining this issue and to vigorously explore innovative tools to expedite cleanups.

Question 5. EPA had cited several aviation fuel providers for not having secondary containment for their trucks. Aviation fuel providers were shocked at the application of these regulations to their vehicles. It had long been the understanding of the industry that the secondary containment requirement of the SPCC rules did not apply to aviation fuel trucks used on airports. This had been confirmed by approval of many airport SPCC plans that do not address this requirement for aviation fuel trucks. The aviation industry has sought to work with the EPA to provide the Agency with an understanding of the inappropriateness of imposing this requirement on aviation fuel trucks, yet the Agency has been slow to respond to these concerns and seems little interested in recognizing the unique nature of airport fueling operations. What steps will the EPA take to ensure that aviation fuel providers, particularly those at smaller non-commercial airports, are not unduly burdened by imposing secondary containment requirements on fuel trucks used only to transport and deliver such products?

Response. I am not familiar with the specifics of the secondary containment requirements of the SPCC rules. If confirmed, I commit to examining this issue.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR VOINOVICH

Question 1. The 2000 Clean Water Needs Survey identifies $181.2 billion worth of wastewater infrastructure needs nationwide, including over $8 billion worth of needs in Ohio. Communities in Ohio and across the Nation are struggling to comply with the mandates of the Clean Water Act. For example, the city of Akron has developed a $377 million Combined Sewer Overflow Long Term Control Plan. Unfortunately, there simply is not enough money available at the Federal level to help communities like Akron make the improvements necessary to protect public health and the environment. Moreover, wastewater infrastructure investment would create thousands of jobs nationwide. That is why I have joined many of my colleagues in calling for increased funding for the Clean Water State Revolving Loan Fund program, which provides low-interest loans to communities for wastewater infrastructure projects.

Governor Leavitt, do you agree that we have a water infrastructure crisis in this country? As EPA Administrator, what would you do to address this crisis?

Do you support increased funding for water infrastructure projects, including loans and grants? Will you push the Bush Administration to include higher levels of funding in its budget requests?

Will you work with the State of Ohio and cities like Akron to develop reasonable, locally driven plans to address their unique water infrastructure needs?

Response. I know from first hand experience that our drinking water and wastewater infrastructure is aging and that local communities have significant needs. I recognize the importance of the revolving loan fund and how valuable those funds have been to local communities. I look forward to being briefed in detail on this issue and to finding innovative ways to help address this problem.

Question 2. The city of Akron and the Ohio EPA have worked in good faith to produce a conceptual agreement for Akron's Combined Sewer Overflow-(CSO) Long-Term Control Plan. The Ohio EPA has spent significant time and resources to reach agreement with the City. That agreement will result in $377 million being invested by Akron to correct its CSO problems. The City and Ohio EPA have agreed to a 30-year implementation plan, with most of the projects producing the most water quality benefit being completed in the first 15 years. The City is moving forward with its plan, and is designing the first major project.

U.S. EPA Region 5 has indicated that it may want to pursue a Federal consent decree and require that the City complete the work in a shorter timeframe of 10–15 years. The City does not want this to go to court. Ohio EPA would ask that the Region give proper deference to the State of Ohio and not re-open this settlement. Opening up the agreement and re-negotiating would not be fair to Akron and is not an efficient use of resources. Ohio EPA would like to do a State consent decree rather than a Federal consent decree.

Governor Leavitt, do I have your commitment to work with the State of Ohio and the city of Akron to resolve this matter in a manner acceptable to all involved parties?

Response. I am not familiar with the agreement you mention between the city of Akron and the EPA, but if confirmed, I will certainly look into this matter.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR CHAFEE

Question 1. In the coming months, the EPW committee will once again turn to the issue of reauthorizing funding for wastewater and drinking water infrastructure. This year, EPA's budget included a drop in funding for water infrastructure assistance. What are your thoughts on the role of the Federal Government in addressing the nation's multi-billion dollar backlog in water infrastructure projects?

Response. I know from first hand experience that our drinking water and wastewater infrastructure is aging and that local communities have significant needs. I recognize the importance of the revolving loan fund and how valuable those funds have been to local communities. I look forward to being briefed in detail on this issue and to finding innovative ways to help address this problem.

Question 2. Environmental insurance products have proven to be extremely effective tools in facilitating faster and less costly cleanups of contaminated properties, such as brownfield and Superfund sites.

a) How do you envision environmental insurance products being utilized to promote cleanups in the future?

Response. If confirmed, I am committed to an effective and efficient EPA Superfund and Brownfields program. I support the use of innovative tools to leverage Federal and private resources to clean up contaminated sites.

b) Are there impediments to the utilization of environmental insurance products in the context of the Superfund program that would require new legislation?

Response. I cannot speak for the Agency on whether there is a need for Federal legislation to address the use of environmental insurance in the context of the Superfund program.

Question 3. In March 2003, the Phase II Storm Water Rule went into effect, requiring States and municipalities to begin developing and implementing management plans and general permits for stormwater runoff in urbanized areas. Last year, this committee approved an amendment, signed into law as part of the Great Lakes and Lake Champlain Act of 2002, that provided a 1-year fix for States to retain maximum flexibility in utilizing Section 319 funding for addressing stormwater concerns.

a) What is the current status of a State's ability to utilize 319 funds for Phase II programs and activities? What will the status be at the start of the fiscal year 2004 budget cycle?

b) If Congress does not provide another temporary extension providing States with flexibility to utilize 319 funds for Phase II activities, will 319 funds be eligible for use in a Phase II geographic jurisdiction in the future?

c) During an EPA briefing with committee staff, the Agency indicated a list of stormwater activities that would be eligible to receive Section 319 funding, including "monitoring and evaluation," "information and education," and "development of enforceable policies". As many of these items are specifically required to be included in Phase II NPDES permits under the rule's six minimum control measures, would you identify what guidance the Agency is providing to States to clarify 319 uses as they proceed with development and implementation of their Phase II programs?

Response. I have not been fully briefed on the Clean Water Act's 319 program. In general, I believe that States should be given significant flexibility to solve difficult environmental problems.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR MURKOWSKI

Question 1. WETLANDS.—As my opening statement noted, 40 percent of Alaska—some 174 million acres-is classified as wetlands, yet many of the areas are isolated and not by any stretch of the imagination can they be called navigable. Despite the opportunity created by the Northern Cook County case to address the jurisdictional status of these areas, there has been no movement on the issue. Governor, can you give us your views oh the appropriate role of the EPA in resolving this issue?

Response. Over the past 11 years, I have had many opportunities to work on issues related to wetlands. I believe EPA has an important role in determining the jurisdictional reach of the Clean Water Act. I have not been fully briefed on this specific issue, but I will consider the input of States and others before determining how to proceed.

Question 2. METALS AND MINING.—As I understand it, research under the auspices of the EPA suggests that it may be more appropriate to use a dissolved concentration standard for metals found in the effluent from permitted mining operations, rather than the current standard where the metals content is expressed in terms of "total recoverable metals." However, the EPA has yet to implement such a change in NPDES permits. This is a serious issue in certain operations where river water with naturally occurring mineral particles is added during treatment. Suspended particles in river water may artificially inflate the effluent numbers unless the more accurate standard is used. Isn't this an area where sound science and common sense should come together, and if so, what should be done to ensure that they do?

Response. It is my intention to ensure that Clean Water Act standards are based on sound science and are translated into effective and enforceable permitting requirements. I am not familiar with the details of this issue, but I look forward to learning more.

Question 3. EPA'S APPROACH TO TRIBAL GOVERNMENTS.—Alaska has 228 federally recognized tribes—one half of the nation's total. Yet only one Alaska tribe has a reservation providing it with a land base, and most consist of isolated and remote villages. This is distinctly different from the situation with tribes in the Lower 48 States with large land bases. EPA is currently forming policies and providing substantial amounts of grant funds directly to tribes in a manner that may be appropriate in the other States, but is not the best way to accomplish the desired results in Alaska. For example, one standardized effort was to collect and recycle batteries and other household hazardous materials. However, in at least one Alaska community, once such materials were collected, there was no way to recycle them onsite and there was no way to pay the cost of moving them to another location, so they were simply put into the local landfill—already substandard and in the process of being closed. The result was groundwater contamination that was a greater threat than leaving the materials alone. This could have been avoided had the Agency worked more closely with State authorities and others, rather than applied a one-size-fits-all solution. How can this kind of situation be avoided in the future?

Response. I strongly believe that there needs to be continuous dialogue between EPA, regions, States, and Tribes because a one-size-fits-all solution frequently is not the best way to protect human health and the environment.

Question 4. WATER QUALITY/COASTAL WATERS.—One of EPA's charges is to monitor the state of the nation's water resources. It has made it a priority to pursue an Environmental Monitoring Assessment Program which will characterize the state of freshwater resources in 14 western States. However, Alaska, with 40 percent of the nation's surface water resources, has been excluded, and so has Hawaii. The Agency has also funded a National Coastal Survey to examine the state of the coastline. Alaska has close to 50,000 miles of tidal shoreline—well over twice what the "contiguous" States have in all. And yet EPA's survey has been funded for only a small part of the Alaska shoreline. What, in your view, is the best way to ensure that Agency activities provide all States with equal treatment.

Response. I am not aware of the specifics of this issue, but if confirmed, I commit to looking into the details.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. According to Environmental Protection Agency (EPA) reports and records, the State of Utah does not compare favorably to other States with regard to certain aspects of its environmental record. For instance:

- according to a 2003 EPA report on Clean Water Act enforcement, Utah tied for last place for performance in six key environmental indicators, and;
- according to the 2001 Toxic Release Inventory, Utah has the second highest volume of toxic chemical releases in the country.

Are you satisfied with this performance? Would you expect to have a higher standard for the nation's environmental record?

Response Regarding Clean Water Act Enforcement

I inquired of the Utah Department of Environmental Quality and was supplied with the following information. At the time the reports were pulled from the EPA PCS data base, our data entry were incomplete; the missing data were flagged as violations. Other data was incorrect. The data are now current, and Utah's low rate of noncompliance ranks with the 10 best States in the Nation.

I am informed that of the Kennecott violations cited in the report, five of the six were not actual violations. Three of the reported violations were due to data entry errors in PCS, one was a reporting error by the permittee, and one appears to be a problem with the PCS system itself. The data base has been corrected. One item which is flagged as a violation is for a compliance schedule being missed on a supplemental environmental project done by a third party. This information should not have been coded into PCS in the first place and is not a Kennecott violation. The reported 900 percent exceedance of mercury was due to an error in the coding of the effluent limits. Their actual discharge did not exceed permit limits.

I am not satisfied with the difficulties in utilizing the data base, but I do support the resulting information and the value of access to this information.

Response Regarding Toxic Release Inventory

It is important to remember that the releases identified in the toxic release inventory for Utah are releases that are approved under permits issued in compliance with environmental laws. These releases are not violations of environmental law. It is recognized that some industries, such as mining, must sometimes remove large volumes of waste rock in order to reach the ore body. Since TRI requires reporting of this removal of waste rock, the TRI will by law include large volumes of releases. These are not measures of violations of environmental law or damage to the environment. They are a reflection, for example, of the actions necessary to conduct mining operations.

I am satisfied if the reporting is used in the context of TRI, not as a reflection of perceived environmental violations.

Question 2. Governor, can you think of any reason why EPA should not provide me and the 19 bipartisan cosponsors of the Clean Power Act with an estimate of the benefits of our legislation, which we requested in May 2001, using the same methodology used for the Administration proposal?

Response. As I stated at the hearing, if confirmed, it is my intention to work with you directly, straightforwardly, and in a way that would supply us both with information needed to meet our common goal of clean air.

Question 3. In 2001, the Agency told industry that a "transport" rule would be necessary to achieve attainment with the fine particle standard if multi-pollutant legislation didn't pass. Very little work has occurred since then to issue that rule and multi-pollutant legislation is not moving. Will you use the Clean Air Act's authority to propose a "transport" rule next spring?

Response. I am not familiar with the issues associated with EPA's authority to propose a "transport" rule. I look forward to learning more about this matter if confirmed as EPA Administrator.

Question 4. In June 2003, reports surfaced that Clean Water Act enforcement was faltering under the Bush Administration. An internal analysis performed by the EPA documented extensive non-compliance with discharge permits and a decline in enforcement activities. For example, there was a forty-five percent decrease in EPA formal enforcement actions between 1999 and 2001. Enforcement personnel have been reduced by 100. What priority will you give enforcement at the Agency? What specific changes will you seek, and how will you articulate the need for those changes to the White House?

Response. I am not familiar with the statistics you are citing. I look forward to being briefed on the specifics of EPA's enforcement program and what steps, if any, may be necessary to strengthen that important program. Ensuring compliance with the Nation's environmental laws will be one of my highest priorities. It is my view that enforcement is an important tool that can and should be used to promote compliance.

Do agree with current EPA policy that the general measures for the selection of cases for criminal enforcement are the presence of significant environmental harm and culpable conduct?

Response. If confirmed, I look forward to being briefed on the specifics of EPA's enforcement program and on what changes, if any, are appropriate.

Question 5. I understand that the American Trucking Association would like EPA to delay the heavy-duty diesel engine rule for on-highway vehicles. The final rule, which Governor Whitman affirmed in her first few months in office, has benefits that significantly outweigh its costs. Would you commit to not delaying the implementation of that rule?

Response. I understand that there are tremendous health benefits associated with this rule, and I look forward to learning more about it if I am confirmed as Administrator. I will review the heavy-duty diesel engine rule to ensure that it is being implemented in accordance with the requirements of the Clean Air Act.

Question 6. As you may know, the National Academy of Sciences has criticized the Agency's representation of uncertainty associated with environmental hazards. The National Academy of Sciences has suggested that this representation should be broader and include high and low levels of uncertainly. It seems logical that this principle should extend to consideration of costs and benefits in Agency rulemaking and when the Administration proposes legislation. And it should include a discussion of non-quantifiable costs and benefits. Would you agree?

Response. I am not familiar with the National Academy of Sciences' evaluation that you reference. If confirmed, I welcome the opportunity to learn more about the Academy's work and EPA's current practices.

Question 7. There is a serious nationwide health threat posed by emissions of toxic air pollution, specifically by those compounds characterized as "hazardous air pollutants" (HAPs) under the Clean Air Act. EPA's latest estimates of the exposure and health risks associated with only 32 of the 188 HAPs identified by the Clean Air Act provide some sobering figures. For example, EPA has established one in one million as the generally acceptable level of risk for cancer. Yet more than 200 million people in the U.S. live in areas where the lifetime cancer risk from exposure to HAPs exceeds 1 in 100,000. Approximately 3 million face a lifetime "cancer risk of 1 in 10,000. These numbers are startling. As EPA Administrator, what action do you expect to take to address this problem?

Response. If confirmed, I am committed to ensuring that EPA undertakes the actions necessary to protect human health and the environment from the risks posed by hazardous air pollutants. Although I have not been briefed in detail about this issue, I look forward to learning more.

Question 8. If confirmed, would you proceed with closed negotiations with the oil industry on the definition of waters of the Untied States as part of the settlement talks with the industry lawsuit on the Spill Prevention Control and Countermeasures Plan lawsuit?

Response. I am not familiar with this issue or with the settlement talks, and I would need to know more about them to formulate an opinion.

Question 9. EPA's data indicates that one in four people in America, including ten million children, live within four miles of a Superfund site. Yet this Administration has broken with the Reagan, Bush and Clinton Administrations in opposing the Superfund polluter fees that pay for cleaning up abandoned sites. At the same time, the pace of cleanups has plummeted during this Administration, from' an average of 87 annually during the last Clinton Administration, to only 40 over the last several years. What will you do to increase the pace of Superfund cleanups?

Response. If confirmed, I am committed to the effective and efficient use of funding for the cleanup of Superfund toxic waste sites to protect human health and the environment.

Question 10. A recent GAO report confirmed that the Superfund trust fund, which once contained over $3.6 billion, will be entirely exhausted in just a few weeks. The full costs of cleaning up abandoned sites and for program administration—roughly $1.5 billion—will now need to be borne by the general treasury Do you agree with the Administration that polluters should not pay the cost of cleaning up abandoned sites, and that instead such costs should be foisted on the average taxpayer?

Response. I support the polluter pays principle, which I understand is the Administration's position. Parties responsible for the toxic waste at Superfund sites are responsible for cleaning them up. If confirmed, I commit to continuing a strong EPA Superfund enforcement program.

Question 11. Because of the expiration of the Superfund fees, the President has asked Congress to appropriate $1.1 billion dollars for the Superfund out of general revenues in fiscal year 2004. Not only does this squeeze funding for other priorities, but it makes it impossible for Superfund appropriations to keep up with inflation, let alone what EPA has described as the "larger and more complex" sites that the Agency is confronted with today. The inevitable result is a program that lacks adequate resources for site assessments, cleanup and administration, and that instead relies on band-aid solutions. Without reauthorization of the fees, what specific steps would you take as EPA Administrator to ensure that all stages of the Superfund pipeline have adequate resources to fully safeguard communities?

Response. I am committed to getting the highest possible benefit for Superfund expenditures. I will ensure that Superfund resources are used in an efficient manner for managing the "pipeline" of sites, and that the Agency uses the best science and expert advice to identify and address priorities based on risks to human health and the environment.

Question 12. EPA is reportedly considering creating a new Superfund milestone to highlight the extent to which a cleanup improves "the potential land uses of a Superfund site" for commercial or residential redevelopment. This raises concerns that redevelopment' pressures could compromise the protectiveness of a cleanup. As Administrator, would you support the use of such economic criteria in Superfund, a public health statute?

Response. I am unfamiliar with the issue referenced in your question, but I look forward to learning more if confirmed. However, I can assure you that I strongly support the Superfund program's statutory mandate to protect human health and the environment.

Question 13. The Superfund statute has an explicit preference for permanent cleanups. Increasingly, however, cleanups are relying on "natural attenuation" and zoning and other "institutional controls" to minimize exposure. This focus on short-term costs leaves dangerous toxic waste in our communities and places the health of future generations at risk. Do you agree with Superfund's preference for permanent cleanups?

Response. I am unfamiliar with the issue referenced in your question. If confirmed, I commit that EPA will continue to follow the statutory requirements in the Superfund law.

Question 14. Concerns have been raised that EPA, in implementing the new brownfields legislation, is not requiring cleanups to be subject to any governmental oversight, or to comply with established cleanup standards. Do you feel that this is an appropriate use of Federal funds?

Response. I am unfamiliar with the issue referenced in your question. If confirmed, I am committed to the effective and efficient use of funds to clean up and redevelop Brownfields properties.

Question 15. What type of advisory role to Congress do you believe the EPA has as the nation's in-house experts on environmental policy, and does that advisory role apply to all Members of Congress and committees?

Response. I look forward to working with the committee and, within the context of normal separation of powers constraints, will make every effort to provide you with advice in a timely and comprehensive manner.

Question 16. In your decisionmaking at the Agency, what deference do you plan to give to Agency legal interpretations and policies that have been in place for decades?

Response. As a general matter, I will consult with EPA's staff with respect to prior legal interpretations and policy positions taken by the Agency. I will take earlier decisions into account and consider them seriously when addressing new issues.

Question 17. Can you describe the manner in which the Agency uses section 309(c)(1) as a part of your enforcement program?

Response. My enforcement philosophy is that the first goal should be compliance. It is our responsibility to move people toward this goal, and if there are those who avoid or evade the law, the full weight of the EPA and the law should be used to assure their compliance.

Question 18. During your confirmation hearing, you stated that every American deserves clean water. EPA's own gap analysis identifies a wastewater infrastructure spending gap of $270 billion over 20 years and a drinking water infrastructure

spending gap of $265 billion over 20 years. Please specify what you will do to address this gap. For example, will you ensure that the President's budget for the next fiscal year does not include the 40 percent cut in water infrastructure that we saw in fiscal year 2004?

Response. I know from first hand experience that our drinking water and wastewater infrastructure is aging and that local communities have significant needs. I recognize the importance of the revolving loan fund and how valuable those funds have been to local communities. I look forward to being briefed in detail on this issue and to finding innovative ways to help address this challenge.

Question 19. During your confirmation hearing, you spoke about the cleanup of the Kennecott Copper Mine as an example of the Enlibra philosophy encouraging cooperation. That cleanup has not begun yet, and the public had no role in the "technical review committee" that selected the proposed cleanup. Concerns have been raised that the cleanup will result in pollutants being dumped into the Jordan River and that the Great Salt Lake ecosystem may be threatened. How does the public process at Kennecott compare to that required under Superfund?

Response. The public process for the Kennecott cleanup is very significant. Many government and public representatives were involved in the Technical Review Committee. The proposed cleanup plan is the subject of extensive public hearings and comment periods extending over several months. These are still ongoing. The discharge permit was also subject to a 30-day comment period for the public and to review by EPA. The discharge permit is in full compliance with the Clean Water Act and will protect the river and the lake.

Question 20. It is my understanding that today's technologies are able to achieve greater than a ninety percent reduction in mercury emission from some types of coal. As Administrator, would you commit to finalizing, on schedule, a mercury MACT standard that matches today's maximum achievable control technologies?

Response. I am not familiar with all of the issues associated with this question and, if confirmed, I would welcome the opportunity to learn more about the technologies available to reduce mercury.

Question 21. The Emergency Planning and Community Right to Know Act explicitly states that each toxic chemical that was "manufactured, processed, or otherwise used" by a facility is subject to the reporting requirements of the Toxic Release Inventory program. EPA is developing a rule to clarify the extent to which toxic releases from mining activities, such as arsenic, lead and mercury, are subject to the disclosure requirements of the TRI program. As Administrator, will you uphold the law and require the mining industry to report all toxic chemicals that are "manufactured, processed or otherwise used"-including the billions of pounds of toxics extracted as waste rock that often cause acid mine drainage and metal leaching?

Response. I am aware of the arguments regarding the listing of mining wastes as part of the TRI and that EPA intends to clarify the rules. I am not familiar with all the issues surrounding this specific topic.

Question 22. The Outdoor Industry Association is strongly considering moving the Outdoor Retailer trade show out of Utah. The industry's concern was Utah's legal settlement with the Department of Interior over wilderness inventory areas across the West, and the settlement's potentially negative impact both on ensuring the full spectrum of quality recreation experiences for the 149 million Americans who participate in active outdoor activities, and outdoor recreation's contribution to Utah's economy. The industry issued a statement in August saying they were "cautiously encouraged" about your proposals to both protect Utah's recreation gems and to work to build a stronger recreation economy in Utah, but waiting to see if the proposals will be backed up with action and policy. Have there been any new developments on this issue since August? If so, what are they? Will your Administration implement policies to back up your statements before you leave office if you become EPA Administrator?

Response. The State of Utah desires to develop Utah as an outdoor recreation capital, protect access to premier outdoor recreation destinations and protect wilderness-quality lands in Utah. To this end, I have made a commitment to make the outdoor industry in Utah a high priority industry (called an economic ecosystem in Utah) and utilize the resources of the State to develop the industry. One component of this development is the protection of outstanding natural areas that form the backbone of the outdoor recreation industry. Part of this commitment includes formalizing the State's interest by creating a task force to identify Utah's premier outdoor recreation destinations, inventory the current land protections and recommend changes to these protections, if necessary, to preserve Utah's scenic assets. I have also made it clear that the State of Utah desires to protect wilderness-quality lands in our State.

Question 23. Government projections expect carbon dioxide emissions from the power plant sector to increase by about 46 percent by 2020. Do you support increasing emissions of greenhouse gases?

Response. A passive approach to address climate change is insufficient. The President has proposed a series of immediate, deliberate actions that I fully support: establishment of a national goal on the reduction of greenhouse gas intensity, substantial increases in research, partnerships within the international and industrial sectors, new agriculture sequestration projects, and focus on new technologies.

Question 24. Clear Skies would allows nonattainment areas to extend their attainment deadline beyond what is permitted under the current Clean Air Act. Do you think that is prudent in terms of public health?

Response. I am committed to working with you to ensure that clean air legislation includes aggressive goals to reduce air pollution so we can meet air quality standards. I believe the President's Clear Skies proposal, in combination with his other air quality initiatives, will achieve these goals. This approach includes incentives to reduce pollution earlier in the next decade than the current Clean Air Act. If confirmed, I will work with States to ensure our public health based standards are met.

Question 25. On April 28, 2003, I asked Governor Whitman in writing when the Agency would deliver the economic analysis of various levels of the standards to control power plant mercury and air toxics emissions. This was requested repeatedly in 2002 by the Federal advisory committee working with EPA on these standards and repeatedly promised by the Agency. EPA last committed to a delivery date of April 11, 2003. Last week, 4 months after my request was submitted, I received the following answer—"that work group finished its report to EPA on October 30, 2002." That was it, no analysis. Obviously, EPA never intended to keep its promise.

Do you think EPA should keep its promise, rather than give such an answer to Congress and the Federal advisory committee and the public?

Response. I am not familiar with the specifics about the FACA report and delivery date. As I have stated in my testimony, it is my intention to work with Congress directly, straightforwardly, and in a way that would supply us both with information to meet our common goal, which is clean air.

Question 26. The EPA Staff Draft on the fine particle standard, which is done as part of the 5-year review requirement in the Clean Air Act for all air quality standards, suggests that the current annual and the 24-hour standard should be more stringent. If you become the Administrator, will you commit to expediting the Agency's review and final determination using all the latest public health information?

Response. I have not had an opportunity to be briefed in detail on this issue. If confirmed, I welcome the opportunity to learn more about it and am committed to ensuring that the review is undertaken in accordance with the Clean Air Act and that the best available public health information is considered as part of the review.

Question 27. Will you keep to the schedule in the attached list of air quality-related deadlines as announced by or required of the Agency, and alert the committee in advance of any changes to this schedule? See EPA deadlines document.

Response. Whenever possible, it will be my goal to meet the scheduled deadlines for all rules and regulations at the EPA.

Question 28. As you may know, the Executive Order on regulatory review (No. 12866), says that EPA must do an assessment of costs and benefits of potentially effective and reasonably feasible alternatives to a regulation, identified by agencies or the public. Given that directive, can you commit to us that if you become the Administrator, the Agency will provide an assessment of alternatives suggested by the public for the utility air toxics/mercury MACT rule?

Response. I am not familiar with the specifics of this issue, but if I am confirmed I intend to fully comply with all legal requirements.

Question 29. The Resource Conservation and Recovery Act requires that the Federal Government and all political subdivisions using appropriated funds must give a preference to the procurement of products made with recovered content, with certain limitations. Should the Federal Government extend its procurement power further to encourage the development of "greener" products and services that emit less harmful pollution?

Response. I will need more information on the Federal Government's procurement rules and regulations and voluntary initiatives before forming an opinion. If confirmed, I would continue EPA's strong commitment to green purchasing, its compliance with the appropriate procurement requirements and its efforts to assist other Federal agencies in this area.

Question 30. EPA recently proposed a settlement agreement that would require the Agency to re-issue a proposed rule on Regional Haze and BART (Best Available

Retrofit Technology) by April 15, 2004. Do you see any reason that rule should not still include a 90–95 percent reduction in Particulate Matter emissions from uncontrolled sources?

Response. Through my work as co-chair of the Western Regional Air Partnership (WRAP), I am aware of discussions regarding the re-issuance of the proposed rule. However, I have not had the opportunity to discuss specifics of the settlement agreement or evaluate any potential conflict of interest due to my involvement in WRAP. Therefore, I will defer comment at this time.

Question 31. Do you think it is wise for the White House to tell EPA and other agencies to analyze regulations using the so-called "senior discount" where the lives of older people are valued at about 2/3 of the average persons?

Response. I am only generally familiar with the use of cost and benefit analysis but, if confirmed, I look forward to learning more.

Question 32. Although the Administration has acknowledged the importance of limiting power plant NOx emissions, it has not yet issued the final rule necessary to complete power plant emissions reductions required by the NOx SIP Call. Will you commit to finishing up Phase II of the NOx SIP Call by the end of this year?

Response. One of my primary goals is to ensure cleaner air for all Americans, and power plant emission reductions play an important part in achieving this goal. If confirmed, I look forward to understanding more about this important matter and will ensure that EPA's actions are consistent with the requirements and goals of the Clean Air Act.

Question 33. A number of States and localities are concerned about the impacts of climate change and global warming on their citizens health and welfare, the economies of their States, and their natural resources. They are thus moving forward to address greenhouse gas emissions, either by adopting or exploring mandatory reduction measures, or by taking other steps to reduce these emissions. Do you support the role of States and localities in being laboratories for innovation with respect to emission reductions or do you think that such innovation should be squelched in favor of one national policy that is not sufficient in the view of those States and localities?

Response. State and local governments have been leading innovators in the environmental arena for decades. I look forward to working cooperatively with States and local governments to help them continue to develop creative approaches to address environmental problems.

Question 35. . What are the possible effects of global warming on Utah?

Response. Climate change science is complex and projections based on hypothetical models vary widely.

Question 36. . If the State of Utah has conducted an analysis of the impacts and costs and benefits of Clear Skies on the State, please share it with the committee.

Response. No, the State of Utah has not conducted an analysis of the impacts and costs and benefits of the Clear Skies legislation.

Question 37. . As was discussed briefly in the hearing, your State air director represented Utah's position in April 2003 on the Administration's final and proposed New Source Review rules as "making the situation worse." You suggested that his concerns were met or addressed in the final rule issued on August 27, 2003. However, since the final rule on routine equipment replacement was not much different from the proposal, it is not clear how those concerns were address. Please explain how Utah's stated concerns were satisfactorily addressed in the final rule.

Response. The Utah Department of Environmental Quality's (DEQ) primary concern was that New Source Review needed to be improved. DEQ's March 2003 suggestions were all directed to the Annual Maintenance, Repair and Replacement Allowance (AMRRA) proposal. The comments were received and properly weighed; all were addressed.

Question 38. . Federal studies tell us that school buildings are in such bad shape that one-third have serious problems with indoor air pollution, which EPA has found is much worse than outdoor pollution. EPA has worked hard to help local schools understand how to prevent or fix Indoor Air Quality (IAQ) problems. It has also published guidelines on how to design "healthy and high performance school" that promote good indoor air, energy efficiency, and environmentally preferable materials. As Administrator, will you ensure that these initiatives at EPA's offices of Indoor Environments and Child Health Protection are expanded?

Do you believe that EPA should invest more in basic indoor air research, invest more in working with State agencies and pediatricians so they can work with local schools, and begin to develop indoor air quality standards that will protect children's health, safety and learning ability?

Response. If confirmed, I look forward to learning more about the issue of indoor air quality. I will ensure that healthy environments for children at school are a high priority at EPA.

Question 39. . The committee is aware of press accounts which span several years and relate to allegations of impropriety by former members of the Salt Lake City Bid Committee for the 2002 Winter Games. We are also aware of the March 1999 report of the U.S. Olympic Committee on this matter. Is there anything pertaining to this matter that you would like to share at this time?

Response. No.

Question 40. . A study has been commissioned to the National Academy of Sciences to assess the impacts of the NSR rule changes. By what scientific method will the study measure the NSR rule changes effects on human health? Specifically, how will the study collect, measure and evaluate incidence rates of lung disease, asthma, and hospital visits?

Response. I am not familiar with the NAS study that you reference.

Question 41. . In the past, the EPA has relied on anecdotal evidence and selected case studies to draw conclusions about the potential effects of NSR rule changes. How will you ensure that the NAS study does not rely on such anecdotal case studies?

Response. I am not familiar with the NAS study that you reference.

Question 42. . The EPA has consistently delayed conducting a scientific analysis of the effects of NSR rule changes. By law, the NAS has until March 3, 2004 to publish an interim report. If the NAS is unable to complete a thorough analysis by the deadline, what steps will you take to assure that additional resources will be provided for them to complete the study?

Response. I am not familiar with this issue, if confirmed, I look forward to learning more.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS ON BEHALF OF SENATOR CORZINE

Question 1. Do you believe the EPA's mission includes protecting citizens from noise pollution, including noise from airplanes and airports? Was the EPA given exclusive Federal authority to coordinate Federal Agency programs that relate to noise research and control under the Noise Control Act of 1972, 42 U.S.C. 4901 et seq., and the Quiet Communities Act of 1978, 42 U.S.C. 4913, as amended by Pub. L. 95–609, 2? And isn't an important aspect of EPA's authority its mandate to aid the FAA in its regulation of airport noise and to suggest noise measures that are necessary to protect public health and welfare? [See 49 U.S.C. 44715 (b)-(d))

Response. I appreciate the concern you raise. If confirmed, I expect to learn more about this issue and about EPA's authority to address noise pollution.

Question 2. Given that authority, shouldn't the EPA provide an independent scientific and technical review of noise impact studies performed by the FAA and in particular the 65 dNL standard used by the FAA?

Response. I appreciate the concern you raise. If confirmed, I expect to learn more about this issue and about EPA's role in helping to address noise pollution.

Question 3. Shouldn't the EPA provide comments and assistance to the FAA during the EIS process for redesign of flight routes into and out of Newark, LaGuardia, Kennedy, and Philadelphia International Airports to ensure that the FAA properly and fully considers reducing noise as a goal of the redesign?

Response. I appreciate the concern you raise. If confirmed, I expect to learn more about this issue and about EPA's role in helping to address noise pollution.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS ON BEHALF OF PEOPLE FOR THE ETHICAL TREATMENT OF ANIMALS (PETA)

Question 1. As you know, the Environmental Protection Agency (EPA) requires chemical toxicity tests involving animals. You may not know, however, that the EPA uses more animals in chemical toxicity tests than any other Federal agency. Animal protection advocates contend that they have met with resistance by the EPA when proposing reforms and the adoption of more sophisticated non-animal tests. Replacing animal test with non-animal tests is appealing from a humane standpoint, as well as from a scientific standpoint, since there can be no question, for example, that a human cell culture test is relevant to humans in a way that a test on rat

or dogs will never be. Non-animal test are also often faster and less expensive than animal methods. In 1999, the EPA published a proposed rule for skin absorption testing using a non-animal method, but the proposed rule has never been finalized. What priority will you place on changing the EPA's policies so that methods such as those above are accepted preferentially over their old-fashioned animal-based counterparts?

Response. I have not been briefed on the technical and scientific issues related to animal and nonanimal testing in relation to policymaking. If confirmed, I will make every effort to ensure EPA's policymaking is based on the strongest possible scientific basis.

Question 2. The EPA uses virtually none of its more than $600 million annual research budget to research, develop, or validate sophisticated in vitro test methods. Frequently, in vitro test methods are more economical, more reliable, more relevant than animal tests, and are also more humane. What portion of EPA's research budget are you prepared to devote to developing in vitro test methods?

Response. If confirmed, I look forward to being briefed on the Agency's research priorities and plans. Until I am briefed and have had a chance to explore this question in greater depth, I am unable to take a position.

Question 3. Questions have been raised concerning the lack of transparency and openness of the EPA's decisionmaking process. The fact that representatives from the animal protection community are not invited to participate in the initial planning stages of EPA testing programs is a continuing source of concern. What changes would you make to EPA policy in order to prevent this from happening in the future EPA programs involving animal testing?

Response. As Governor, I have a long record of supporting collaborative processes. In making important policy decisions, I encourage processes that provide an avenue for a broad range of perspectives to be heard and considered.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS ON BEHALF OF SENATOR STABENOW

Question 1. Last year, Michigan received almost 3.5 million tons of municipal solid waste (MSW) from outside the State, more than double the amount that was imported in 1999. This waste accounts for about one-fifth of Michigan's total trash, and makes Michigan the third largest importer of waste in the United States. More than 57 percent of the waste that is imported into Michigan in 2002 was from Ontario, Canada and these imports are growing rapidly. On January 1, 2003, the city of Toronto switched from sending two-thirds of its trash, to sending all of its trash—1.1 million tons-to Michigan landfills, resulting in 180 truckloads of waste coming into Michigan each day.

As Governor of Utah, you sponsored resolution 00–026 regarding out-of-State waste that was adopted by the Western Governors Association on June 13, 2000. The resolution stated that, "The Western Governors believe each State should do everything it possible can to deal with its own solid waste in-State, including making those hard siting decisions when no one wants it Din their backyard."

a) Do you still support this statement?

Response: Yes.

b) Do you believe that Ontario has a responsibility to deal with its own waste instead of exporting it all to the State of Michigan?

Response. I do not know the specifics of the Michigan-Ontario arrangement, so it would be inappropriate for me to make a judgment on the issue at this time. I would like to clarify the question with respect to the policy resolution. WGA Policy Resolution 00–026, now Policy Resolution 03–12, was renewed in September 2003 by western Governors. The policy deals with interstate management of wastes, and does not specifically address Canadian waste management. In addition to the statement you have identified, the resolution also makes the following policy statement: "The Governors do not support an outright ban on waste shipments between States because there are many examples of safe, effective and efficient cross-border waste management arrangements." (WGA Policy Resolution 03–12)

2) Under the Agreement Concerning the Transboundary Movement of Hazardous Waste (Agreement), which was entered into in 1986, MSW shipments across the Canadian-US border require government-to-government notification. The EPA as the designated authority for the US would receive the notification and then would have 30 days to consent or object to the shipment, however the EPA has never enforced these notification provisions.

a) Do you believe as a matter of public policy that this Agreement should be enforced?

Response. I am not aware of EPA's response with respect to the U.S. and Canada Bilateral Agreement. If confirmed, I look forward to being briefed about this Agreement and EPA's responsibility.

b) As EPA Administrator would you enforce these notification provisions in regards to Canadian MSW shipments?

Response. I am not aware of EPA's response with respect to the U.S. and Canada Bilateral Agreement. If confirmed, I look forward to being briefed about this Agreement and EPA's responsibility.

c) If so, what factors would you consider in objecting or consenting to these MSW shipments?

Response. I am only partially familiar with the cross-border waste shipment issue; I do not have a position on what factors to consider. If confirmed, I look forward to learning more about the Agreement and potential factors to be considered.

d) How much weight would you give to the following factors?

- Impacts to homeland security;
- Impacts on landfill capacity;
- Road deterioration resulting from increased traffic;
- Air emission resulting from increased traffic;
- Continued public support and adherence to the State's recycling laws/efforts; and
- Impacts on public health and the environment.

Response. I am only partially familiar with the cross-border waste shipment issue; I do not have a position on what factors to consider. If confirmed, I look forward to learning more about the Agreement and potential factors to be considered.

e) Are there other factors that you would consider? If so, what would they be?

Response. I do not have sufficient information to respond but, if confirmed, look forward to examining this matter.

f) As a former Governor what weight would you give to a State's objections to receiving Canadian MSW shipments when objecting or consenting under the Agreement?

Response. I do not have sufficient information to respond but, if confirmed, look forward to examining this matter.

g) Would you seek the receiving State's consent before consenting to the MSW shipment?

Response. I do not have sufficient information to respond but, if confirmed, look forward to examining this matter.

h) Would you consider the State's objections to the MSW shipment dispositive as a basis to object?

Response. I do not have sufficient information to respond but, if confirmed, look forward to examining this matter.

Question 3. In an August 26, 2003 letter Robert Springer, Director of EPA's Office of Solid Waste, stated that the EPA is moving forward on a legislative proposal to implement the Agreement.

a) At what stage in the drafting and approval process is the aforementioned legislative proposal?

Response. At this time, I am not aware of the status of the legislative proposal.

b) As EPA Administrator would you make drafting and presenting this proposal to Congress a priority?

Response. At this time, I am not aware of the status of the legislative proposal.

c) What would you include in this legislative proposal?

Response. At this time, I am not aware of the status of the legislative proposal.

Question 4. As EPA Administrator would you support S. 199/H.R. 411, which provides the implementation language for the Agreement? Why or why not?

Response. I am unfamiliar with the provisions in S. 199/H.R. 411, therefore, I have no opinion on the bills.

Question 5. As EPA Administrator would you support S. 383, The Canadian Waste Import Ban Act of 2003? Why or why not?

Response. I am unfamiliar with the provisions in S. 383, therefore, I have no opinion on the bill.

Question 6. As EPA Administrator what other action would you take to address the Canadian trash problem?

Response. I have not had the opportunity to understand the facts regarding the cross-border waste issues, nor to identify problems associated with this issue.

Question 7. A September 8, 2003 Detroit News article revealed that 2–3 truckloads of Canadian MSW shipments are being turned back at the Michigan-Canadian border for containing radioactive materials such as untreated medical waste.

a) Do you believe that the deception of radioactive materials should be a basis for the EPA to object to a MSW shipment?

Response. I support enforcement of prohibitions on the disposal of hazardous waste in landfills not licensed for hazardous waste disposal.

b) What steps would you take to ensure that the MSW shipments do not contain radioactive materials?

Response. I support enforcement of prohibitions on the disposal of hazardous waste in landfills not licensed for hazardous waste disposal.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS ON BEHALF OF CONGRESSMAN STUPAK

Question 1. The Great Lakes Restoration Financing Act was introduced this year and would create a Great Lakes Advisory Board to develop a Comprehensive Lakes Management Plan and provides funding for Great Lakes clean-up efforts. Under this legislation, the EPA Administrator would determine which States qualify for Great Lakes clean-up funding. If enacted, what would you do to ensure the effective distribution and management of Great Lakes clean-up funding among the eight Great Lakes States?

Response. The Great Lakes are indeed a national treasure. If confirmed, I will administer faithfully existing programs and any legislation that may pass Congress and is signed into law by the President.

Question 2. Canada allows offshore drilling in the Great Lakes. As EPA Administrator, what would you do to prevent this practice from expanding—or ban the practice—in our shared resource, the Great Lakes?

Response. I am not familiar with this issue.

Question 3. For more than 10 years the US and Canada have had an agreement on reporting standards for importation and exports of municipal solid waste, yet EPA has never implemented these provisions. Can you assure us that implementing these provisions will occur immediately under your leadership? Why or why not?

Response. I am not familiar with the provisions of the U.S. and Canada bilateral agreement. However, if confirmed, I commit to learn more about this issue.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS ON BEHALF OF THE CENTER FOR PROGRESSIVE REGULATION

Clean Science

There has been criticism of EPA's peer review practices over the years by the GAO and National Academies of Sciences, some of it concerning EPA's conflict of interest requirements. Please describe what you believe the conflict of interest requirements should be for the peer review of scientific research used by EPA in developing regulations.

When should a peer reviewer be excluded from reviewing regulatory science because their objectivity has been compromised?

The EPA has had a full year of experience with the Request for Correction procedure established under the Agency's Information Quality Guidelines. Twelve formal requests have been filed, resulting in eight EPA responses thus far. None of the completed RFC's has resulted in anything other than non-substantive, ministerial changes to published EPA information, yet each has consumed considerable EPA staff time and effort. What changes, if any, would you adopt to the EPA Information Quality Guidelines to reduce this kind of wasteful government activity?

Should relevant, peer-reviewed research ever by excluded from the EPA's effort to identify a science-based protective standard under the Clean Air Act, Safe Drinking Water Act, etc? If so, under what circumstances?

Are there dangers in having a political body review scientific quality?

Response. I believe it is a priority to use the best available science and data to support policy decisions and that all major scientific work products should undergo peer review. I am not familiar with EPA's current peer-review process or the Information Quality Guidelines. If confirmed, I look forward to exploring the issues you raise with the process, but cannot articulate a position at this time.

Enlibra

You are identified as one of the originators of the Enlibra principles adopted by the Western Governors' Association, can we look to those principles to identify your position on issues addressed there?

Response. The Enlibra Principles express well the core beliefs of my environmental philosophy.

Are there any of the Enlibra principles that you would like to disavow in your position as Administrator of EPA?

Response, No.

Changes in Leadership Goals

Please identify any decisions of national significance made by Administrator Whitman with which you disagreed and explain the basis for your disagreement with her approach? How would you resolve the same issue if confronted with it as Administrator?

Response. I have known Governor Whitman for quite some time, and I have a tremendous amount of respect for her and the work that she did as Administrator of the EPA.

Regulatory Reform

Did you support regulatory reform legislation in the 104' Congress? How would you respond if a bill similar to S. 343 (mandating substantial new analytical and cost-benefit analysis requirements) were proposed today? Even if you believe cost-benefit analysis can serve a useful function, do you see any downsides for EPA as an Agency if it were subject to such new statutory requirements?

Response. I agree that cost-benefit analysis can serve a useful purpose. Until I have been briefed in detail on EPA's cost-benefit policies, however, I am not prepared to take a position on any legislative proposals.

White House Oversight

How would you respond if a White House employee or senior officer sought to convince you as Administrator to modify actions from what you and your staff had recommended about a pressing health issue?

Response. I believe it is EPA's duty to provide important health information to the public that is reliable and accurate.

Do you believe that OMB has the authority to instruct you to submit cost/benefit analysis of rules promulgated under statutes that prohibit the consideration of costs?

Response. I intend to comply fully will all legal requirements.

Cost/Benefit Analysis

What changes or additional initiatives would you advocate to improve the quantification of the benefits of environmental policies?

Response. I am not familiar enough with EPA's current practices to comment. If confirmed, I look forward to spending more time on this issue.

Market-Based Remedies

Under what circumstances would you favor the adoption of market-based approaches such as trading of emission credits? Do you believe that such trading is every appropriate for toxic emissions or discharges? Do you support such programs when it is difficult to measure the effect of emission or discharge reductions or when it is impossible to determine the actual emissions or discharges from an individual source?

Response. As I mentioned at the hearing, one of the reasons I support the President's Clear Skies initiative is that I believe that, through the use of market-based trading, we will see reductions of all the pollutants subject to the legislation. In this context, the market-based approach is the best tool we can use. As to other situations, we need to evaluate whether a market-based approach is appropriate or whether other tools are more appropriate.

Regulatory Toolbox

Do you favor the continued use of a technology-based approach to controlling emissions of 29 pollutants from sources like point sources of water pollution?

Response. Yes, as required by the Clean Water Act.

Climate Change

As Administrator, what steps would you take to reduce the threat the United States faces from global warming?

Response. A passive approach to address climate change is insufficient. The President has proposed a series of immediate, deliberate actions that I fully support: establishment of a national goal on the reduction of greenhouse gas intensity, substantial increases in research, partnerships within the international and industrial sectors, new agriculture sequestration projects, and focus on new technologies.

What evidence can you point to that such steps will reduce the threat and by how much?

Response. These steps will enable us to see reductions in greenhouse gas intensity from the work of the international, industry, and agriculture sectors in the short term, while increasing research and developing new technologies for the intermediate to long term. By initiating this work, we will be better able to inventory reductions from sectors and technologies.

Do you think that the United States has obligations to address pollution from its territory that harms other countries?

Response. The United States has a responsibility to protect the air, water and land at home and to work through bilateral and multilateral agreements to reduce pollution globally. If confirmed, I will work to implement policies that protect the global environment.

Enforcement

The Clinton Administration undertook several initiatives in the area of enforcement, including the Policy of State Audit Privilege & Immunity Laws; Compliance Incentives for Small Businesses Policy; Supplemental Environmental Projects (SEP) policy; Performance Track; National Environmental Performance Partnership Systems (NEPPS); establishment of compliance assistance centers; coordinated enforcement against utilities for NSR violations, etc. Thus far there have been very few if any new enforcement initiatives from the Bush Administration.

If you were Administrator, what specific steps would you take to address this problem? Can you pledge to this committee that enforcement levels—number of civil and criminal cases filed, and size of penalties-would be restored to previous levels? Would you supporting bringing the number of EPA enforcement staff back to previous (FY 2001) levels?

Response. I am not familiar with the statistics you are citing. I look forward to being briefed on the specifics of EPA's enforcement program and what steps, if any, may be necessary to strengthen that important program. Ensuring compliance with the Nation's environmental laws will be one of my highest priorities. It is my view that enforcement is an important tool that can and should be used to promote compliance.

States' Rights

The Department of Justice has filed an amicus brief in the U.S. Supreme Court in a case in which manufacturers of mobile-source engines (engines for cars, trucks, etc.) argue that southern California may not adopt its own requirements for large fleets of buses and other mobile sources, and that its requirements are preempted by the Federal Clean Air Act. The case thus threatens States' authority to control air pollution in the way they think best. Do you agree with the Department of Justice's position in this case?

Response. I am not aware of the details of the U.S. Supreme Court case referred to in the question, so I cannot comment on the position taken by the Department of Justice.

Devolution

The National Academies of Public Administration and other influential think tanks have called on EPA to embraces a system of differential oversight, in which it varies its level of oversight based on the relative competence and performance of States administering Federal environmental programs. Differential oversight is an element of NEPPS, the new performance partnership system agreed to by EPA and the States in 1995. In the face of resistance from the States in the late 1990's, however, EPA has dropped the idea of differential oversight. Does he support this idea?

Under what circumstances would you threaten to withdraw delegated program authority?

If you discovered that a State operating a delegated program under a Federal environmental law was initiating few enforcement actions and was failing to provide meaningful opportunities for public participation in enforcement actions, how would you as Administrator respond?

Response. If confirmed as Administrator, I would work with States to determine how EPA can best support their programs, which may, in some cases, result in sharing certain responsibilities and finding other creative solutions. I firmly believe the best environmental results will be achieved through a partnership with the States, and keeping that partnership strong will be one of my top goals.

EPA From a State Perspective

As Governor of Utah what were three specific complaints you had with EPA, and as Administrator of EPA how would you respond to such complaints?

Response. It has been my practice as Governor, if there is a complaint or disagreement, to discuss the matter, gain an understanding of the issue and concerns, and attempt to solve the problem. I will continue to use that approach if confirmed as Administrator of EPA.

Environmental Justice

Consistent with the existing executive order on environmental justice, would you commit to perform a detailed environmental justice analysis of proposed agency initiatives, one that would be included in all significant guidance documents and proposed rules?

Response. I believe that all communities should benefit from environmental protection laws. Until I learn more about EPA's environmental justice program and how they incorporate environmental justice concerns into Agency actions, I am not in a position to propose any changes.

Generally, to what extent should environmental justice be considered in permit proceedings? Should EPA provide guidance to delegated State programs in this regard?

Response. I believe that all communities should benefit from environmental protection laws. In addition, I believe that potentially affected community residents should have an opportunity to participate in decisions that will affect their environment and/or health. I look forward to learning more about EPA's efforts in this area.

Superfund and Brownfields

Do you support the reauthorization of the industry taxes that support the Superfund program?

Response. The first priority should be for polluters to pay, using Superfund's liability system. Beyond that, I support funding for the cleanup of Superfund sites, but do not have sufficient information to declare an opinion on the sources of funding.

Do you support a broader reauthorization of the Superfund statute? What changes would you propose?

Response. If confirmed, I am committed to the effective and efficient use of funding for the cleanup of Superfund toxic waste sites to protect human health and the environment.

Do you believe the Superfund program should be provided additional funding? Would you argue to the President and before Congress for additional funding?

Response. If confirmed, I will continue the strong EPA commitment to clean up toxic waste sites based on their risk to human health and environment.

Should companies remediating contaminated sites be permitted to clean to a reduced extent if they set up institutional controls relating to future uses? Do you see any risks in such arrangements? How should they be addressed?

Response. I do not have sufficient information to articulate policy inclinations to this level of detail.

Mountaintop Mining

What is your view on the mountain top mining cases? Do you believe mining companies should be permitted to put mining waste into valleys where they will block rivers and streams?

Response. I am not familiar with the mountain top mining cases. I look forward to learning more about this issue, if confirmed.

Clean Water Act Jurisdiction

Do you believe it is an appropriate responsibility of the Federal Government to protect against the unregulated destruction of wetland breeding, nesting, and feeding areas for migratory fowl in the United States? Do you believe the Clean Water Act provides that protection? If not, how do you believe that protection might be afforded?

Response. Over the last 11 years, I have had many opportunities to work on wetland issues. I am not sufficiently familiar with the specifics related to destruction of wetland breeding, nesting, and feeding areas for migratory fowl. I look forward to learning more about this issue, if confirmed.

Air Toxics

Do you believe that air toxins are posing threats to the public health in urban areas in the United States? If so, what are the problems and what do you plan to do about it? If not, what is your opinion based on?

Response. Air toxics can pose a threat to public health. I look forward to learning more about the various programs that EPA is implementing to control and provide incentives for limiting and reducing air toxins.

Clean Air Act Attainment

Are you prepared to withhold highway funds to States that do not reach their attainment?

Response. I am not fully familiar with the complexities that surround this issue.

Polychlorinated Biphenyls

This month, through an internal memo, the EPA ended a 25-year-old ban on the sale of land polluted with PCBs, or polychlorinated biphenyls. The ban was intended to prevent hundreds of polluted sites from being redeveloped in ways that spread this toxin and raise public health risks. Indeed, it was PCB pollution that forced the abandonment 25 years ago of the Love Canal community in Niagara Falls, New York. As EPA Administrator, would you continue this practice of allowing the sale of PCB-contaminated land?

Response. I would like to learn more about this specific issue before offering an opinion on the substance of the memo.

RESPONSES BY GOVERNOR MICHAEL O. LEAVITT TO PRE-HEARING QUESTIONS FROM SENATOR JEFFORDS

Question 1. In 1987, the EPA released a, report entitled "Unfinished Business: A Comparative Assessment of Environmental Problems." The Agency and other partners, including the National Governors Association, participated in subsequent similar efforts in 1990 and 1992 to rank the involuntary risks facing public health and welfare and the environment. Based on your current knowledge of environmental problems, what do you perceive as the top five involuntary environmental health risks faced by the American public?

Response. I believe that EPA should rely upon sound science, as well as risk assessment, to establish priorities for environmental protection. If confirmed, I look forward to hearing what EPA's scientists and experts advise in this regard before articulating any preconceived list of priorities for the Agency.

Question 2. In 2001, the National Academy of Sciences reported to the President that, "Greenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise. Temperatures are, in fact, rising. The changes observed over the last several decades are likely mostly due to human activities, but we cannot rule out that some significant part of these changes is also a reflection of natural variability." Do you believe that voluntary measures alone, which have failed to reduce total U.S. emissions, are a prudent approach to the threat of global warming?

Response. A passive approach to address climate change is insufficient. The President has proposed a series of immediate, deliberate actions that I fully support: establishment of a national goal on the reduction of greenhouse gas intensity, substantial increases in research, partnerships within the international and industrial sectors, new agriculture sequestration projects, and focus on new technologies.

Question 3. Prior to any final changes to the NSR regulations, EPA referred 8 cases of violations of NSR regulations to the Department of Justice for prosecution since the beginning of this Administration. Should DOJ prosecute those cases to the fullest extent?

Response. I do not have knowledge of the 8 cases referred to in your question. Until I am confirmed I am not privy to the details of any ongoing enforcement actions or the government's position on those matters.

Question 4. Will you respond to majority and minority committee inquiries for technical assistance and information in a timely and comprehensive fashion. What would you consider to be timely?

Response. I look forward to working with the committee and will make every effort to provide technical assistance in a timely and comprehensive manner. Without knowing the specific nature of the assistance you may request, I cannot commit to a specific timeframe for responding to requests for technical assistance. I expect there will be some variability depending on the complexity of your requests and the resources needed to provide a response.

Question 5. Will you commit to answering in full all outstanding information requests from minority members of this committee no later than 30 days, after being confirmed, if the outstanding requests have still not been satisfied?

Response. If confirmed, I will make every effort to provide information to the committee in a timely and comprehensive manner.

Question 6. According to the General Accounting Office, the Administration's conclusion that their recent changes environment are based on anecdotes and not on

statistically significant, scientifically to the New Source Review program will be beneficial to the sound data. Do you believe that deregulating sources of air pollution requires valid evidence that there will be no harm to public health or the environment before deregulating? If so, will you postpone the effective date of the New Source Review changes pending development of statistically significant, scientifically sound data?

Response. I am aware that there are differing perspectives concerning the recent changes made by EPA to the New Source Review program. If confirmed, I would like to understand in greater depth and detail the data, issues, and perspectives associated with this complex subject. I look forward to the opportunity to be briefed in detail on the NSR changes.

Question 7. Do you think it would make sense to extend the attainment deadlines for areas that will be designated as nonattainment for the new 8-hour ozone standard for some time beyond the current attainment deadline for areas that have not yet attained the 1-hour ozone standard?

Response. I am not familiar with all of the issues that may need to be considered in responding to the question of whether or not it is appropriate to extend the deadline. If confirmed, I would welcome the opportunity to learn more on this topic.

Question 8. You have been intimately involved with the Western Regional Air Partnership. What are your views on the proposed Federal Regional Haze rule and Best Available Retrofit Technology (BART) requirements and the timing and source coverage of those rules?

Response. The Regional Haze Rule provides appropriate tools to improve visibility in our treasured parks and monuments and throughout the West. It recognizes the need for reduced emissions, which can be accomplished through mandated utilization of Best Available Retrofit Technology (BART), as well as through a set of milestones and backstop cap-and-trade program to achieve reductions that are better than BART.

Question 9. What effect will the WRAP have on mobile source emissions controls, either through individual vehicles or land used changes?

Response. The Clean Air Act authorizes only EPA and the State of California to set emission control standards for individual vehicles, so such measures are not addressed in the Regional Haze Rule and are beyond the authority of the Western Regional Air Partnership. The Regional Haze Rule does not address or require an analysis of land use, so this has not been an activity undertaken by the WRAP.

Question 10. You have supported long-term planning efforts in Utah to ensure quality of life and sustainable economic development. Do you believe that infrastructure development, including highway and transportation investments, should be closely coordinated with long-term air and water quality protection and planning efforts?

Response: Yes.

Question 11. What should the United States do to ensure that foreign manufacturers in countries with less stringent environmental requirements do not have an unfair advantage over domestic manufacturers?

Response. I have not spent a lot of time dealing with this issue, but this is a serious concern. If I am confirmed, I would work with the U.S. Trade Representative, the State Department, and other agencies on policies that will implement Congress' direction in recent trade promotion authority legislation that will help create a more "level playing field" for environmental regulation between us and our trading partners.

Question 12. Do you believe that the EPA should be formally elevated to Cabinet/Department status?

Response: Yes.

Question 13. Should EPA have the power to ban fuels and fuel additives, such as MTBE, that cause water quality and resource contamination, as well as those that cause harmful air pollution?

Response. I am not familiar with the issues surrounding the banning of fuel and fuel additives, such as MTBE, and would need to have more information before forming an opinion on this matter.

Question 14. As you may know, studies, indicate that toxic air pollutants from mobile sources increase the risk of cancer and other adverse health effects of those people living within close proximity to high volume traffic roads. Do you believe that such studies and these potential effects should be considered by Federal and State transportation planners before major construction occurs increasing capacity or building new roads?

Response. I would like to be more fully briefed on the details of these studies or the potential effects of toxic air pollutants from mobile sources on people living within close proximity to high traffic volume roads before expressing an opinion.

Question 15. The National Environmental Policy Act includes section 102 reprinted below. If confirmed, will you comply with the requirements of this section?

SEC. 102. The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act, and (2) all agencies of the Federal Government shall

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by title II of this Act, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effect which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Response. I support EPA's important role in implementing the National Environmental Policy Act, along with other Federal and State partners, and if confirmed, I will comply with all applicable laws.

Question 16. Do you believe that NEPA section 102(C) requires the consideration of the potential impacts of greenhouse gas emissions on global climate change?

Response. I have not been briefed on this matter. Consequently, I do not have a position on this issue at this time.

Question 17. Can you describe how the Environmental Protection Agency currently cooperates and coordinates with the National Transportation Safety Board on safety investigations and your plans to continue with or modify that approach?

Response. As I understand it, the National Transportation Safety Board investigates significant accidents involving hazardous materials and then issues recommendations to EPA aimed at preventing future accidents.

Question 18. Will you agree to provide ?the General Accounting Office with adequate and timely access to documents and personnel necessary for GAO to compile information and investigate matters at the request of Congress?

Response. If confirmed, I will ensure that the Agency cooperates on GAO investigations.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR BAUCUS

Question 1. Mr. Leavitt, do you commit to putting the cleanup of Libby, Montana at the very top of your priority list at EPA, if you are confirmed? Do you commit to completing the clean-up in Libby as soon as possible?

Response. While I do not know the details of EPA's Superfund priorities yet, my understanding is that the Libby cleanup is a high priority for EPA. I support continued priority attention to an effective and efficient cleanup.

Question 2. Mr. Leavitt, will you promise to come to Libby as soon as possible after you are confirmed, preferably this fall? Will you promise to sit down with Libby residents, with EPA staff on the ground and hopefully, even Paul Peronard, so that you will understand personally what is needed to finish EPA's job in Libby?

Response. I hope to visit many of the priority Superfund sites around the Nation, as I have those in Utah. There is no better way to learn the issues than to sit down with the people most concerned at the local level.

Question 3. This project rounds out the short list of Region 8 priorities and is a priority for me too. Milltown Dam needs to go, and the contaminated sediment sitting behind that dam needs to be removed. The contaminated sediment should be

removed to the Opportunity ponds. Montana Rail Link will build the lines to the ponds and EPA owns the ponds. This is a good common sense solution for environmental cleanup and for economic development opportunities. Will you commit to taking, a hard look at this option?

Response. I believe all options need to be fairly evaluated prior to an Agency decision. Those options that are supported by local communities definitely deserve consideration.

Question 4. Environmental contamination harms the health of communities like Libby in many ways, including its economic health. As a Governor who fully leveraged his role to benefit economic development for his State, Utah, I look forward to working with you to leverage Brownfields and EPA economic development programs within Montana for rural communities that struggle with the burden of environmental contamination. I ask for your commitment that you will work with me to make this a priority for communities like Libby, too.

Response. The Brownfields program has been an effective and valuable tool in Utah, and I fully support its goals. I am a strong believer in strengthening our local economies and providing for a clean environment using programs, like the Brownfields program, that can optimize both.

Question 5. Maintaining the integrity of the Superfund program is clearly an important issue for Montana. From the new "mini" sites caused by abandoned meth labs, to the many NPL sites in Montana, Montana relies heavily on the Superfund program to protect the public health of its citizens and to restore its environment.

Libby is an excellent example of the need for a stable and solvent Superfund program. Although the EPA has won its latest court case against W.R. Grace, and was awarded more than $50 million, that amount doesn't cover all of EPA's costs nor is it likely that EPA will actually recover anything close to what W.R. Grace actually owes the Agency.

Through no fault of its own, Libby has suffered a terrible environmental and public health disaster. The appropriate State agency has no resources to deal with the problem, and limited authority. The only real back-stop to make things right and help the community back on its feet is the EPA—only the EPA has the necessary resources and expertise. That's the whole point of Superfund and it's an appropriate role for the Federal Government—the folks in Libby are, after all, U.S. citizens.

Mr. Leavitt, what are you views on the Superfund program in general and what are your thoughts on how Congress and the EPA should maintain the integrity of the Superfund program? How can we maintain the fund's integrity by relying solely on appropriations from the General Fund?

Response. I support the goals and objectives of the Superfund program, as I have during my tenure as Governor of Utah. Funding for the program is important, and I will support efforts to provide needed resources, as well as to explore creative new ways to solve environmental problems by working closely with our State, Local, and Tribal partners.

Question 6. Methamphetamine (meth) use and production is an issue of rising importance, as you are likely aware from your role as Governor of Utah. In Montana, as in much of the West, it's reaching crisis proportions. In addition to public health and law enforcement challenges, exploding meth production poses significant environmental contamination problems due to the hazardous chemicals used to produce meth.

Each one of these abandoned meth sites is potentially mini-Superfund site, with no real potentially responsible party. Increasingly the responsibility for clean-up of these sites is falling on EPA—there is no clear authority for the appropriate State agency, the Montana Department of Environmental Quality, to do the work.

Abandoned meth labs are also becoming an issue on Forest Service lands in Montana.

Do you have any thoughts on how we—the States and the Federal Government—can collaboratively address these meth clean-up issues, in terms of resources, expertise and authority?

Response. Methamphetamine use is indeed a serious problem. Unfortunately, we have not been spared from the problem in Utah. Disposal of the waste is covered under existing Federal and State environmental laws. However, like many States, Utah has recognized the need for additional authority regarding testing and clean-up of the residences and building contaminated by meth labs. If confirmed, I will consider whether EPA can play a larger role in these clean-up efforts.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR GRAHAM

Question 1. On your official website as Governor of Utah, you say it is appropriate for the Federal Government to establish national environmental standards, but "States, tribes and local governments should have the flexibility to develop their own plans to achieve the national standards and to provide accountability." As you know many of EPA's programs do not have enforceable standards. To name a few, the Superfund program does not have standards for soil contamination, the water program does not have standards for microorganisms in sewage effluent, for individual or aggregate industrial discharges, or for agricultural runoff. How can States and neighborhoods take effective action on environmental issues when there are no standards, and what would you do to establish standards where they are missing? In other cases EPA has issued standards for individual products, but those products can still cause problems (e.g., there are standards for auto emissions, but auto emissions are still a significant source of pollution, especially in high density areas). How should States, tribes and local governments address such problems?

Response. In situations where the Federal Government has not established national environmental standards, I believe States, Tribes, and local governments should work collaboratively with our Federal partners to determine the appropriate course of action. In Utah, for instance, there is a State groundwater protection law, although there is no equivalent Federal law.

Question 2. As you know, many pollutants cross jurisdictional boundaries. Under your principles, how would States, tribes and local governments prevent pollution that originates outside their boundaries?

Response. The Western Regional Air Partnership is addressing the issue of pollution crossing political boundaries through a collaborative process. I strongly believe the Enlibra principle of "Collaboration, Not Polarization" can be effective in helping to address this issue.

Question 3. Many of the largest polluters are interstate entities. How will these businesses conduct operations efficiently if environmental monitoring and regulation is being managed differently by each of the States, tribes, and local governments in which the businesses operate? How can tribes or local governments that are significantly dependent on one or two major employers avoid being held hostage by those businesses with respect to environmental compliance?

Response. I strongly believe that there needs to be continuous dialogue between EPA, regions, States, and Tribal Governments because a one-size-fits-all solution frequently is not the best way to protect human health and the environment. As I stated above, I strongly believe the Enlibra principle of "Collaboration, Not Polarization" can be effective in helping to address this issue.

Question 4. On your official website as Governor of Utah, you say environmental solutions should be implemented locally, that most environmental challenges transcend political boundaries, and that voluntary interstate strategies and other partnerships should be the preferred approach to dealing with environmental issues. Can you clarify what these means? How do you resolve conflicts with a voluntary approach when trans-boundary pollution generally moves west-to-east with the dominant wind, or downstream in rivers, or down-gradient in groundwater? What are the incentives that will induce an "up-stream" polluter to enter into "voluntary" agreements with their down-stream States, tribes, or local governments, especially if those jurisdictions are not adjacent to the political entity where the polluters are located?

Response. Acknowledging that these are problems that transcend political boundaries is an important first step. The Western Regional Air Partnership is a good example where a collaborative process resulted in an outcome with an agreed upon non-voluntary solution.

Question 5. On your official website as Governor of Utah, you say we should reward results, not programs. As noted earlier, many of EPA's programs are operating without meaningful standards. In light of this, how would you measure results? How would you set goals?

Response. Results must be tied to the quality of our environment. If the air is cleaner, the water purer, the land better protected, then we have made progress. I believe we must continue to improve our ability to measure environmental results.

Question 6. On your official website as Governor of Utah, you say collaboration is needed to break down barriers and find environmental solutions.. However, when you proposed making the San Rafael Swell a National Monument it appears you did it unilaterally, without the participation of either the affected localities or the environmental community. How do you square your principles with your actions on this

matter, and how do you propose to ensure that actions taken at EPA would be inclusive?

Response. Actually, the San Rafael National Monument proposal came from the local community. Public participation is a fundamental component of our nation's environmental laws. If confirmed, I am committed to the effective implementation of these laws, and I will carefully consider the views of all interested parties.

Question 7. On your official website as Governor of Utah, you say environmental progress, and public confidence, improve where there is agreement on the underlying facts, but that policy decisions can still be made if agreement cannot be reached on those facts. This Administration has repeatedly omitted, prevented the collection of, or skewed data that should be part of the environmental debate (e.g., buried research on the Senate's clean air plan, sanitized EPA's report on the environment, prevented EPA from discussing perchlorate pollution, etc.) What steps will you take to ensure that data collections are not manipulated or curtailed for political purposes, and data is widely shared after it is collected?

Response. I believe it is EPA's duty to provide the public with critical health information that is reliable and accurate as soon as that information is gathered and validated.

Question 8. As you know, on environmental issues the data is never complete, and there is rarely agreement on how it should be interpreted. What weight will you attach to protecting public health and the environment, and how will you balance those needs against the goal of reducing the costs of environmental action? How do you propose to break through the data-debate log jams that have delayed meaningful action on a host of environmental issues?

Response. I believe it is EPA's duty to provide the public with critical health information that is reliable and accurate. I am not familiar with the specifics of the data log jam you mention but I will look into it, if confirmed.

Question 9. On your official website as Governor of Utah, you say environmental protection should use market mechanisms rather than mandates. Would you endorse the use of market mechanisms for discharges of toxic substances, and if so, what would you say to the neighborhoods impacted by plants that choose to purchase their compliance rather than reduce their emissions?

Response. I understand that EPA currently implements some programs with market mechanisms, Those would be a starting point for assessing any further use of those mechanisms.

Question 10. On your official website as Governor of Utah, you say decisions on infrastructure, development and environment should be informed by recognition of all benefits and costs. Does this mean that your EPA would attempt to recognize all of the so-called "negative externalities" associated with pollution?

Response. It is my understanding that at the Federal level, the use of cost-benefit analysis is addressed by both statute and Executive Orders. If confirmed, I expect to be fully briefed on this process.

Question 11. I would like to get some further information regarding your involvement with the Legacy Highway in Davis County, Utah. It is undisputed that the wetlands that the highway would affect have national if not international importance to wildlife, being the most significant refuge for migratory birds in the interior west. Throughout the process of proposing the highway, and up to the present as far as I can tell, you were at odds with the EPA concerning your compliance with Federal law, including the Clean Water Act. While the EPA focused on legal deficiencies, you focused on pitching the Legacy Nature Preserve. The EPA's prior positions and the Federal courts have agreed, that proposals should first avoid wetlands, then minimize impacts to wetlands, and as a last case resort, mitigate if necessary. This interpretation of the law seems very different from your desired result, justification of the impacts of your project based on its mitigation package. In fact, your rationale that a project is acceptable if the mitigation is acceptable turns the Clean Water Act on its head. It puts mitigation ahead of avoiding impacts to wetlands and minimizing impacts. During every phase of the highway's permitting process, the EPA was at odds with your position and you attempts to justify impacts based on mitigation.

They rated it environmentally unsatisfactory (which is the EPA's lowest rating of a study) and constantly requested compliance with the law. Just prior to the State of Utah receiving a 404 permit, documents show that Bill Yellowtail, a regional administrator with the EPA, warned you about the "legal liability" of your proposal. The Tenth Circuit indeed concluded that your highway proposal failed to consider a less damaging route and failed to minimize impacts. Instead, it found that you violated the Clean Water Act with your proposal that would put a four lane highway with a large right-of-way-the length of an entire football field-right through some

of the nation's most important wetlands. How can the public trust that you will uphold the Clean Water Act as EPA's Administrator when your past behavior shows a disregard for that law and that is at odds with EPA's own interpretation of the law?

Response. It is and has always been my intention to ensure that the Clean Water Act is enforced fairly and equitably.

Question 12. You may have heard of the "pre-cautionary principle." In short, this principle says that extreme caution is warranted when an action, or proposed action, involves potential harm that is either very large or permanent. The threat of global warming seems to be the type of effect that would fall within the precautionary principle, because of the vast potential costs and human suffering that might occur. How should that affect the debate about reducing atmospheric carbon emissions?

Response. In general, my view is that even though our scientific understanding is constantly evolving, decisions must be made based upon the strongest science available at the time. If confirmed, I would make sure that the Agency's human health and ecological risk assessment methodologies will continue to incorporate methods and assumptions that reflect our approach to environmental policy, as defined by environmental statutes and other public health and risk management orders.

Question 13. According to EPA's draft report, since EPA was created there have been dramatic reductions in most pollutants. During this same period the economy has generally been growing and generally created jobs. What is your plan to continue to make environmental improvements while simultaneously growing the economy?

Response. As I indicated during the hearing, I believe that this Nation deserves to have a clean, safe, and healthy environment. I also believe that the United States can increase the velocity of its environmental progress without compromising its competitive position economically in the world. For example, in Utah, we wrote a new energy policy that called for the development of nearly 5,000 megawatts each year, while still reducing air pollution. We have been able to do that by following a balanced policy for the past 2 years. It is my intent, if confirmed, to continue to work toward balanced environmental policy.

Question 14. On January 15 of this year, EPA announced that it would consider a proposed rule that would limit the scope of the Clean Water Act. By the EPA's own estimates some 20 million wetlands across the country—an area as large as Maine—have already lost Clean Water Act protection under the guidelines they issued to field staff in January. Countless numbers of wetlands, streams, ponds and other waterbodies could be severely impacted if this rulemaking goes forward. In fact, during an initial public comment period 39 out of 42 State agencies that filed comments made clear they oppose proceeding with such a rulemaking. Given your advocacy for giving the States more environmental authority where possible, how would you handle a situation such as this where a strong majority has stated it does not want to lose existing Federal protections? What actions would you take in regard to this rule?

Response. Over the last 11 years, I have had many opportunities to work on issues related to wetlands. Wetlands are a very important part of a natural heritage that we must protect. I have not been fully briefed on the issue, but if confirmed, I commit to you to consider the input from States and others in determining how to proceed on this issue.

Question 15. There have been a number of incidents of what some have construed as White House intrusion into the affairs of EPA. Russell Train wrote the New York Times and said: "Having served as EPA Administrator under both Presidents Nixon and Ford, I can state categorically that there never was such White House intrusion into the business of the EPA during my tenure. The EPA was established as an independent agency in the executive branch, and so it should remain. There appears today to be a steady erosion in its independent status." Please describe what you think should be the role of the White House in EPA's actions to provide unbiased scientific analysis, fully environmental information, and enforce the nation's environmental laws. What would be your course of action if you thought EPA was unable to carry out these duties?

Response. My job, if confirmed, would be to act in full accord with the statutes the Agency implements, and to make sure that my actions, and actions taken by the Administration, are informed by the best science and environmental information that the Agency can provide. As I stated in my testimony, I expect to run the Agency and to elevate matters when, in my judgment, the President needs to be involved.

Question 16. There is a significant backlog of congressional requests from the past 2 years where EPA has failed to be sufficiently responsive. EPA has abandoned its

long-standing practice of providing non-partisan, unbiased analysis for Congress, particularly committee chairman and ranking members. Will you pledge to work with Congress and honor our requests for information?

Response. I believe we should use best available science and allow a disciplined process to help sort out differences in scientific views. I look forward to working with the committee and will make every effort to provide responses to congressional requests in a timely manner.

Question 17. I am troubled by reports that EPA has withheld EPA analysis from my colleagues, Senators McCain and Lieberman, pertaining to their climate bill, and selectively withheld information from Senators Carper and Chafee on the impacts of their power plant legislation. I am further troubled by allegations that the reason for withholding the information may be that the results don't fit the Administrations political and policy goals. Bill Ruckelshaus, the first EPA Administrator who served again under Reagan, noted the following to the New York Times: "Whether or not analysis is released is based on at least two factors. Is the analysis flawed? That is a legitimate reason for not releasing it. But if you don't like the outcome that might result from the analysis, that is not a legitimate reason." Do you agree with Mr. Ruckelshaus' assessment that politics should not dictate EPA's analytical functions and duty to share this information with Congress and the public? What steps will you take to ensure that Congress has the most up-to-date information available by which to make policy decisions?

Response. If confirmed, I look forward to working with the committee and will make every effort to be responsive to your requests in a timely manner.

Question 18. According to an investigative report by the Sacramento Bee, several EPA enforcement officials say they have been pressured by management to pad their enforcement statistics and make it look like they are pursuing more violations of environmental laws than they really are. Will you look into this matter and ensure us that EPA will be completely forthcoming and transparent when reporting to Congress and the public on its environmental reporting?

Response. I am not aware of the allegations, but I will certainly look into this matter if I am confirmed.

Question 19. One of EPA's principal responsibilities is implementing laws passed by Congress as interpreted by the courts. Several recent decisions in the Federal Courts, including two strongly worded decisions in the conservative 4th Circuit, have overwhelmingly affirmed that the Clean Water Act applies broadly to protect our nation's wetlands, streams and other waters. These recent Court rulings plainly demonstrate that no such roll-back of Federal regulations is required under the law. Will you, as Administrator, ensure that current regulations are kept in place and that the Clean Water Act is fully enforced under current regulations?

Response. One of the reasons that I offered myself for this position is because I want to ensure that the air is cleaner, water purer, land better cared for and a healthy environment exists. To that end, if confirmed, I intend to fully enforce with the Clean Water Act.

Question 20. EPA is under a court order to enforce the Clean Air Act and issue a rule by December 31 of this year to reduce toxic mercury emissions from coal-fired power plants, which are the largest unregulated source in the Nation. Because mercury is a potent toxin that, like lead, causes developmental delays in children at even tiny quantities, the Clean Air Act requires EPA to set standards based on the maximum amount that can be technologically reduced. According to a New York Times report, EPA canceled the technical analysis needed to produce a credible mercury rule after EPA's top air official consulted with the White House on how to proceed. What will you do to ensure that EPA moves forward with the necessary analysis in time to produce the rule this year?

Response. I am not familiar with all of the issues associated with this question, and, if confirmed, I would welcome the opportunity to learn more about the issue.

Question 21. In 2000, Congress passed and then-President Clinton signed into law the Estuary Habitat Restoration Partnership Act, S. 835 (public law 106–457). Title VI of this bill is entitled "Alternative Water Sources" and consists of the text of a bill that has been a priority for me and other members of the Florida delegation for some years. As a Western Governor, I am sure you can appreciate the importance of investigating technologies for alternative water supply. The pilot program authorized under Title VI has never received funding, largely because EPA has yet to promulgate regulations for the program. Unfortunately, we are now faced with an expiring authorization for the pilot program (funding was authorized from fiscal years 2002–2004). If you are confirmed, will you pledge to work with this committee to reauthorize and execute the alternative water sources program?

Response. I am not familiar with the Alternative Water Sources pilot program, but I do appreciate the importance of working to assure adequate water supplies. I look forward to learning more about this particular program.

Question 22. As you may know, Florida has 51 Superfund sites. The GAO recently released a report that concluded that the Superfund Trust Fund would be out of money by the end of October. In addition, in July 2001, Resources for the Future (RFF), as directed by Congress in the fiscal year 2000 VA-HUD Appropriations bill, released a report to Congress identifying the needs and future costs of the Superfund program for fiscal years 2000–2009. The report estimated needs in 2004 at over $1.6 billion. The President's fiscal year 04 budget request includes only $1.4 billion for Superfund cleanups.

Response. I am aware that the President's Fiscal Year 2004 budget requested an additional $150 million for Superfund cleanup construction.

Question 23. Do you support increasing the Superfund budget to $1.6 billion to meet the ongoing and ever increasing needs of not only the 51 Superfund sites in Florida, but also the 1200 Superfund sites throughout the country?

Response. I support the President's Fiscal Year 2004 budget that requested an additional $150 million for Superfund cleanup construction.

Question 24. Do you support reinstating the assessment on chemical and oil companies that funded the Superfund Trust fund? If not, why not? How do you intend to meet the monetary demands of these toxic waste sites without any contribution from the trust fund?

Response. The first priority is for polluters to pay, using Superfund's liability system. I support funding the cleanup of Superfund sites, but I do not have sufficient information to articulate a position on the source of funding at this time.

Question 25. The Escambia Treating Company Superfund site in Pensacola, Florida remains a threat to the health of the residents of Pensacola. For more than 10 years, the EPA has acknowledged that threat, but the risk to the residential health remains. To EPA's credit, 358 residents were relocated away from the site due to the dangers posed by the site. However, a mountain of dioxin remains on the site. The Pensacola Chamber of Commerce passed a resolution in June 2003 which recognized the ongoing public health threat posed by the Superfund site and the need to remediate the mountain of dioxin that remains on the site. As EPA Administrator will you commit to providing the Pensacola community with a detailed remediation plan within 3 months of taking office that includes the excavation and treatment of the mountain of dioxin at the site and the completion of the sampling of the groundwater and soil to resolve the human and ecological risks posed?

Response. I am unfamiliar with the Escambia Treating Company Superfund site. If confirmed, I commit to having the appropriate EPA officials examine the issues you have raised.

Question 26. Agrico Chemical Co, also a Superfund site in Pensacola, Florida remains a danger to the health of the residents of Pensacola. The Escambia County Utilities Authority recently acknowledged the existence of a toxic plume contaminating the communities public drinking wells as a result of contamination from Agrico. The community needs the expertise and support of the EPA to address and resolve this problem. As EPA Administrator will you commit the personnel and resources necessary to resolve this drinking water danger that may have contaminated the drinking water of 10,000 residents? Assuming that you make this commitment, will you agree to a meeting between the local health and environmental officials and the EPA within 3 months of taking office to find a solution to the problems posed by the toxic plume, including water supply well replacement or wellhead treatment with filtration, reverse osmosis (RO) with RO reject evaporation pond, offsite disposal of RO reject sludge from pond; onsite deed restrictions, groundwater use restrictions; and extensive groundwater monitoring as contemplated by the Record of Decision?

Response. I am unfamiliar with this particular site and do not have enough information at this time to answer your question. If confirmed, I commit to having the appropriate EPA officials examine the issues you have raised.

Question 27. In the 2002 EPA Inspector General's report, 5 Florida Superfund sites were identified as needing and not receiving adequate funding: Solitron Microwave, Southern Solvents, Trans Circuit, American Creosote and Tower Chemical. Will you commit to providing detailed funding and remediation plans for each site to determine the progress and needs of those sites to ensure that each sites cleanup is on track within 3 months of taking office?

Response. I am unfamiliar with the Superfund sites identified in your question. If confirmed, I commit to having the appropriate EPA officials examine the issues you have raised.

Question 28. The Coronet Industries plant in Plant City, Florida is now under investigation by local and State health and environmental issues for possible environmental contamination of the soil, groundwater and air. The residents near the plant have reported high incidences of cancer and other illnesses. The local officials plan to complete a health assessment in 9 months. The level of concern in the community and the health risks involved necessitate an expedited completion of the health assessment. If you are confirmed as EPA Administrator will you commit to assisting the local officials to complete the health assessment by the end of the year? Will you provide the technical resources and equipment necessary to assist the local officials in completing the expedited health assessment?

Response. I am unfamiliar with the Coronet Industries plant. If confirmed, I commit to examining the issues you have raised.

Question 29. For more than 2 years, I have been seeking the completion of the risk assessment regarding chromated copper arsenate (CCA)-treated wood. If you are confirmed as Administrator of the EPA, will you commit to the completion of that risk-assessment by November 2003? Do you further commit to conducting a public information campaign regarding the findings of the risk assessments to provide local officials and school administrators with guidelines as to how to ensure the safety of children using CCA-treated playground equipment? In addition, do you commit to the inclusion in the risk assessment of the dangers posed by mulching CCA-treated wood?

Response. As I understand it, the industry is phasing out use of CCA treated lumber by the end of 2003 in favor of new alternative wood preservatives. I am not familiar with the specifics of EPA's risk assessment. If confirmed, I will need to be briefed in detail on this issue before making any decisions.

RESPONSES BY GOVERNOR MICHAEL O. LEAVITT TO PRE-HEARING QUESTIONS FROM SENATOR GRAHAM

Question 1. The core principles of Enlibra are focused around consensus seeking to develop common sense approaches to environmental policies. While it is admirable to bring all of the stakeholders on a given issue to the table, as Administrator of the EPA you will likely encounter situations that require you to make a final decision in order to make progress. How will you implement our nation's laws and carry out the missions of EPA as you apply the principles of Enlibra?

Response. I have served nearly three terms as Governor of Utah and have made countless final decisions on critical issues facing my State. The Enlibra Principles express well the core beliefs of my environmental philosophy. It is a philosophy, not a process.

Question 2. In recent months, there have been some disturbing examples of politics overriding EPA's duty to provide accurate environmental assessments. What is your view of EPA's responsibility to the American people to provide full disclosure of reliable, accurate information?

Response. I strongly believe it is EPA's duty to provide critical health information to the public that is reliable and accurate as soon as that information is gathered and validated.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR LIEBERMAN

Clean Air Act

Question 1. Do you support full implementation of the Clean Air Act Amendments of 1990, as signed by the first President Bush?

Response: Yes.

Question 2. As you know, EPA is in the process of implementing the new 8-hour ozone standard. But some cities still haven't met all of the requirements for implementing the pre-existing 1-hour standard. Do you favor requiring these areas to promptly comply with all of their unmet obligations under the 1-hour standard?

Response. I am not familiar with all the issues that may need to be considered in responding to the question. If confirmed, I would welcome the opportunity to learn more about this issue.

Question 3. In the last several years EPA has used a "downwind extension" policy to weaken clean air requirements in cities like Washington, Atlanta, Baton Rouge, Beaumont-Port Arthur and Dallas Texas. As a result, these cities have missed clean air deadlines and have less protective pollution controls than in cities that actually receive more transported pollution—cities like Baltimore, Philadelphia, New York, and Chicago. Four U.S. Courts of Appeal have declared the policy illegal. Will you pledge that you will not seek to resurrect this policy?

Response. I understand the complications of the transport of air pollution across city borders and look forward to learning more about this important topic. I will work to promote clean air policies that protect public health in all U.S. cities and to ensure that EPA's policies are consistent with applicable legal requirements.

Question 4. According to the National Park Service, air pollution causes impaired visibility in most national parks virtually all of the time—and in many parks the problem is worsening. Will you oppose any further delays in the deadlines for States to adopt regional haze plans to address this problem, as required by the Clean Air Act. Do you agree with EPA's 1999 assessment that all States need to require best available retrofit technology for large, aging factories and power plants, in order to meet visibility protection goals?

Response. The Regional Haze Rule provides appropriate tools to improve visibility in our treasured parks and monuments throughout the West. It recognizes the need for reduced emissions, which can be accomplished through mandated utilization of Best Available Retrofit Technology (BART), as well as through a set of milestones and backstop cap-and-trade program to achieve reductions that are better than BART.

Question 5. The Administration's energy policy stresses increased oil and gas production on public lands, and is working diligently on all fronts to accomplish that goal. However, Federal law seeks to prevent significant deterioration of air quality, in part by designating areas, which were national parks, and wilderness areas in 1977 as "Class 1" areas to be afforded a higher degree of protection from degradation of the air quality. EPA reviews Environmental Impact Statements—a current example is a draft regarding oil and gas development on the Roan Plateau in Colorado, which I understand shows that the air quality at the Maroon Bells Wilderness Area will be further degraded by such production. In your view, is it acceptable to allow further deterioration of Class 1 park and wilderness areas? As EPA Administrator, what will you do about it, both in reviewing these environmental impact statements and taking enforcement action?

Response. As a result of the western energy crisis, I believe it is fundamental that we increase our Nation's energy supply, but that we do so in a way that is environmentally responsible. In Utah, we drafted a new energy policy that increases our energy supply while reducing air pollution. I intend to continue to use this balanced approach.

Question 6. EPA is under a court order to enforce the Clean Air Act and issue a rule by December 31 of this year to reduce toxic mercury emissions from coal-fired power plants, which are the largest unregulated source in the Nation. Because mercury is a potent toxin that, like lead, causes developmental delays in children at even tiny quantities, the Clean Air Act requires EPA to set standards based on the maximum amount that can be technologically reduced. According to a New York Times report, EPA canceled the technical analysis needed to produce a credible mercury rule after EPA's top air official consulted with the White House on how to proceed. Will you ensure that the Agency moves with all necessary speed to do the necessary analysis in time to produce the rule this year?

Response. I am not familiar with all of the issues associated with this question, and, if confirmed, I would welcome the opportunity to learn more about the issue.

Environmental Enforcement

Question 7. I'd like to bring to your attention some recent enforcement data:

In fiscal year 2002—the first full year, of the Bush Administration—Agency data suggests that the number of penalties recovered from polluters in civil cases that were settled in Federal court declined by half compared to the previous 3-year average. Defendants paid over $130 million, $84 million, and $94 million, respectively, in fiscal years 1999, 2000, and 2001 to settle judicial actions. In fiscal year 2002, the U.S. Government was able to recover only $51 million in civil penalties.

EPA is able to reduce penalties somewhat for those companies willing to undertake "supplemental environmental projects" that bind them to do work that is beyond what is required to comply with the law. Agency data shows that the value of these SEPs declined from a 3-year average of $106 million between fiscal years

1999 and 2001 to only $43 million in 2002. Does such a drastic drop in Federal enforcement concern you? Will you pledge to investigate what has occurred here?

Response. Traditional enforcement measures such as number of inspections conducted, number of cases filed, and penalties collected are useful management tools. It is also useful to look at "environmental results." If confirmed, I will support a strong enforcement program while continuing to refine approaches for measuring environmental compliance and progress.

CAFOs

Question 8. I would imagine that as Governor of a State with a major concentrated animal feeding operation you are familiar with the public health problems associated. with CAFO's. Circle 4 Farms has had a variety of problems: 80,000 gallons of waste water have polluted the area's groundwater, employees have gotten sick from the fumes, residents complain about the smell and worry they too will be sickened by toxic fumes. Here in Washington, we've seen news reports of CAFO industry representatives meeting secretly with EPA to negotiate an exemption from the Clean Air Act and CERCLA for CAFO's. As Administrator, would you support curtailed enforcement of the Clean Air Act or CERCLA for CAFO's? Would you support an exemption from these laws for CAFO's?

Response. I have not been involved in or briefed on any efforts that you reference. However, Utah has been a leader in the design of the On-Farm Assessment program for the hog industry which addresses all environmental media. Utah also has developed an aggressive program to implement the EPA CAFO rules in our State, which includes inspecting nearly every animal feeding operation (approximately 3000). This program has been touted as an effective model for other States. Regarding Circle 4 Farms, there have been no Clean Water Act violations and no discharges to surface waters at any time. Our State also regulates Circle 4 through a State groundwater permit to insure that groundwater is protected. There have been three formal enforcement actions taken of this permit resulting in a total fine of $48,564. Groundwater at the site is maintained at high quality.

Question 9. Utah's Department of Environmental Quality, Division of Water Quality, submitted comments in opposition to EPA's new rules regulating CAFO's, asserting that the "Utah Strategy" is the preferred approach. As I understand it, the Utah Strategy provides for "voluntary" compliance for 5 years, with enforcement action to be taken only after the 5 years have passed. Do you concur that years of "voluntary compliance is the preferred approach?

Response. Utah has not opposed EPA's new CAFO rules, but did make comments during rule development to ensure that our effective strategy to quickly and completely address these operations was not preempted. As a result of our strategy, we are far down the road in implementing the new CAFO rule. Nearly every animal feeding operation in the State has been inspected (almost 3000) to identify every CAFO. All large CAFOs have already been permitted as a result. Small animal feeding operations with runoff problems are tracked and allowed time to voluntarily correct deficiencies. If continuous progress is not made over a defined period of time, enforcement actions or permits will be initiated. The Utah strategy has been very comprehensive in identifying problems and results in permitting or corrective action much sooner than what would be achieved by a traditional Federal approach.

Question 10. With this background, what assurance can you provide us that as EPA Administrator you will insure that EPA aggressively oversees the States to insure compliance with the new regulations and will take enforcement action when necessary?

Response. As I have mentioned in my previous response, Utah has not hesitated to take enforcement actions where warranted and required under either Utah or Federal law. Similarly, I understand and support the need for reasonable and effective oversight of State programs while providing States the flexibility granted under Federal law to tailor programs to most effectively achieve environmental results.

Question 11. I understand that you signed legislation prohibiting Utah residents from suing CAM's on nuisance grounds. If you are not aggressive about enforcing the requirements of the law, what recourse do members of the public have to protect their health?

Response. I have included the text of law (UC 73–38–7) to which you refer below. This statute was enacted in 1995 and is a result of urban encroachment on existing agricultural activities. It is an unfortunate phenomena that people often build new residences near existing agricultural operations, to enjoy the open space and rural setting, only to eventually complain about normal farm smells. This statute does protect public health and safety. It also requires agricultural operations to comply with Federal, State and local laws.

78–38–7. Agricultural operations—Nuisance liability.

(1) Agricultural operations that are consistent with sound agricultural practices are presumed to be reasonable and do not constitute a nuisance unless the agricultural operation has a substantial adverse effect on the public health and safety.

(2) Agricultural operations undertaken in conformity with Federal, State, and local laws and regulations, including zoning ordinances, are presumed to be operating within sound agricultural practices.

Question 12. This Administration does not have a strong record of enforcement of CAFO's. For example, I understand that the Bush EPA has filed only one Clean Water Act case in court and 30 administrative actions against CAFO's. As EPA Administrator do you intend to reinvigorate the enforcement of the Clean Water Act and the Clean Air Act against CAFO's (and indeed other sources of pollution) or will you continue on the course set to date by the Administration?

Response. The objective is compliance with environmental laws. I am aware of national concerns regarding CAFOs. I am also aware that EPA has recently issued revised regulations to better address water pollution from these operations. I am not familiar with enforcement issues regarding CAFOs. If confirmed I look forward to being briefed on CAFO compliance, including State and Federal enforcement.

Question 13. Just recently, there has been leaked to the press an amnesty deal, in which EPA "covenants not to sue" huge animal factories for violations of the Clean Air Act the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund" law). In exchange for EPA's commitment not to sue, CAFOs will pay $500 in penalties and will contribute $2,500 toward a monitoring fund. Any CAFO (or smaller animal feeding operation) may achieve immunity from EPA prosecution by paying these moneys. Will you support this amnesty deal?

Response. I am .not familiar with the specifics of these negotiations. If confirmed, I will review them and decide based upon the merits of the issues.

Global Warming

Question 14. According to the National Academy of Sciences report in June 2001—a report requested by the Bush White House:

"Greenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise. Temperatures are, in fact rising. The changes observed over the last several decades are likely mostly due to human activities, but we cannot rule out that some significant part of these changes are also a reflection of natural variability."

(A) Do you agree that global warming is occurring?

(B) Do you agree that the 1990's were the hottest decade on record?

(C) Do you agree that most of the warming that has occurred over the last 50 years is due to human activities?

(D) Do you agree that global warming threatens water resources?

(E) Do you agree that global warming threatens vulnerable ecosystems, such as alpine meadows?

Are you aware that the concentration of CO_2 in the atmosphere has risen more than 30 percent since the beginning of the industrial revolution?

Are you aware that CO_2 and other greenhouse gases remain in the atmosphere for decades to centuries, and that as a result, we will be stuck with elevated concentrations of these gases for hundreds of years?

Even if there are uncertainties about the precise impacts from continued emissions growth, isn't it dangerous to let CO_2 concentrations keep rising to levels that haven't been seen in the whole history of the human race?

(I) Are you aware that power plants are the largest source of CO_2 emissions in the U.S., responsible for 40 percent of U.S. CO_2 emissions?

(J) Are you aware that automobiles are the second largest source of CO_2 emissions in the U.S., responsible for about 20 percent of U.S. CO_2 emissions?

Are you aware that the Administration's voluntary "goal" for CO_2 emissions would allow emissions to continue rising by 14 percent over the next decade—the same rate that they increased during the last decade?

Response. I am aware of the June 2001 National Academy of Sciences report, but I do not have sufficient knowledge of the science to provide definitive answers to this series of questions. The President has proposed a series of immediate, deliberate actions that I fully support: establishment of a national goal on the reduction of greenhouse gas intensity, substantial increases in research, partnerships within the international and industrial sectors, new agriculture sequestration projects, and focus on new technologies. These steps will enable us to see reductions in greenhouse gas intensity from the work of the international, industry, and agriculture sectors in the short term, while increasing research and developing new technologies

for the intermediate to long term. By initiating this work, we will be better able to inventory reductions from sectors and technologies.

Protection of the Ozone Layer

A very disturbing scientific report last week indicates that the Antarctic ozone hole is larger this year than it ever has been before. This raises serious questions about whether we have yet turned the corner on recovery of the earth's fragile ozone shield.

Question 15. Governor Leavitt, do you think the United States is doing enough to protect the ozone layer from ozone-destroying chemicals?

Response. I am aware that the U.S. has been a partner in the Montreal Protocol—the international agreement to phaseout harmful ozone-depleting chemicals. I look forward to learning more about what can be done to further protect the ozone layer.

Question 16. The report on this year's ozone hole is particularly disturbing in light of the Bush Administration's slackening efforts to protect the ozone layer. The U.S. is seeking huge exemptions from the Montreal Protocol—a Senate-ratified treaty that the U.S. helped negotiate—for methyl bromide, the most dangerous ozone-destroying chemical still in widespread use. Are you aware that the U.S. exemption request for methyl bromide would reverse the phase-out of this chemical and increase the amount produced in the United States?

Response. I am not familiar with all of the issues associated with the use of methyl bromide. I look forward to learning more about this area and the United States' efforts to implement the requirements of the Montreal Protocol. I will work to uphold all international agreements and protect the ozone layer.

Question 17. Why should the U.S. Government reverse the phase-out of methyl bromide and allow production of this very dangerous chemical to increase again?

Response. I am not familiar with all of the issues associated with the use of methyl bromide. I understand the phase-out of methyl bromide is an important issue, and I will work to find alternatives to chemicals such as methyl bromide.

Question 18. Methyl bromide is also an extremely toxic chemical—capable of killing large numbers of people who inhale only small amounts. Are you aware that the Department of Homeland Security has expressed concern over the risk that terrorists could kill thousands of people by hijack and releasing supplies of methyl bromide that are in everyday commerce?

Response. I understand there are concerns with the use of methyl bromide and will work to find alternatives to such chemicals. I will look into the issue of terrorist usage of such chemicals and coordinate with the Department of Homeland Security to see what EPA can do to help ensure that such chemicals do not get into the hands of terrorists.

"Whirling Disease"

Question 19. You have characterized science as often ambiguous and reflecting the underlying values of the scientists who make assumptions in the scientific process. During your tenure as Governor of Utah, there was a "realignment" of the Division of Wildlife Resources (DWR) in which more than 70 employees lost their jobs and which also resulted in the creation of a new.board for the control of aquaculture, according to news and subsequent reports. Among the jobs eliminated were those held by a herpatologist whose honesty about the decline of the frog population in Utah was reportedly unacceptable to Utah developers and by several staff throughout the DWR who had been involved in the investigation of "whirling" disease at the Leavitt family fishery and the illegal transfer of fish from there to other waters.

(A) How do you respond to critics who assert that EPA employees who do not make "politically correct" assumptions during the scientific process, or who pursue investigations based on the facts, will, like those employees in Utah, be reorganized out of their jobs?

Response. This question is based on inaccurate information. I support the use of science for facts and recognize the capabilities of EPA staff to bring the best science to solving problems. The reorganization of Utah Wildlife Division. responsibilities and employees was not in response to actions of individual employees. The reorganizations were conducted within the Department of Natural Resources when a new Department Executive Director was appointed at the beginning of my administration; I had no role in the reorganization. The former Chief of Fisheries, Bruce Schmidt, made it clear in a public forum letter published in the Salt Lake Tribune that, "throughout the attempt to clean up whirling disease, the Governor had no direct involvement in the decisions made regarding the investigation or the negotiations on actions required to eliminate and/or contain the disease." (Salt Lake Tribune, 9/13, 2003.)

(B) In response to concerns expressed regarding the current state of morale at the EPA, you have stated that you would work to gain the confidence of the employees, spend time listening to them, and try to understand the source of the problem. In light of this history at the DWR, how do you propose to gain the confidence of EPA's employees?

Response. The organizational change referred to occurred more than a decade ago and ultimately resulted in both improved efficiency and morale. I look forward to meeting with EPA employees to listen to them, understand the issues, and discuss the options and recommendations on environmental issues. I hope to earn their trust through working together, solving problems, and leading by example.

Clean Water Act

Question 20. As EPA Administrator you would have responsibilities as a custodian of the nation's wetland resources. The EPA has the power to veto permits issued by the Army Corps of Engineers for the dredging or filling of wetlands, an authority seldom exercised. Are there any circumstances under which you, as EPA Administrator, would veto a proposed permit in order to protect wetlands? If so, please describe the principles that would guide your veto decision.

Response. As I mentioned during my confirmation hearing, as a Governor over the course of the last 11 years I have worked on many different occasions on issues related to wetlands. Wetlands are a very important part of a natural heritage that we want to protect. If confirmed, I would look at the facts of any particular case and the options available to me to determine a course of action.

Question 21. A key protection for wetlands is contained in the Section 404(b)(1) Guidelines and prohibits issuance of a permit for any non-water-dependent project with impact to wetlands if a practicable alternative with less impact is available. This rule, in essence says, that because wetlands are so valuable, they should not be built in if there is a sensible way to avoid doing so. However, this protection is not fully complied with. What would you do to insure compliance with this requirement?

Response. I am not familiar with the specifics regarding this particular issue and, if confirmed, would ask to be briefed and then make an informed decision on how to advance protection of wetlands.

Question 22. The American taxpayers are spending approximately $8 billion to restore the Everglades which has been damaged by sprawling development during the past fifty years. Now there are reports that the Federal agencies, including the Environmental Protection Agency, are allowing similar sprawling developments in Southwest Florida in an area referred to as the Western Everglades. As a result, there is a loss of watershed and wetland function, of critical habitat for threatened and endangered species, and of clean water in an area which is a valuable national resource. I have written to the acting Administrator asking what steps the EPA is taking to protect the Western Everglades. What assurances can you provide that we will not continue the same development mistakes that we made in Southeast Florida in Southwest Florida? What steps are you prepared to take to protect the Western Everglades?

Response. Although I am not familiar with the particulars of the impact of development during the past 50 years on the Everglades, I do know that this Administration recognizes the importance of working to protect the sensitive aquatic resources of the Everglades. If confirmed, I intend to learn more about this issue and the appropriate role for EPA in this important work.

RESPONSES BY GOVERNOR MICHAEL O. LEAVITT TO PRE-HEARING QUESTIONS FROM SENATOR LIEBERMAN

New Source Review

Question 1. The Utah Department of Environmental Quality, Division of Air Quality (DAQ), wrote a letter to the U.S. Environmental Protection Agency on March 21, 2003 (on letterhead with your name). DAQ criticized the proposed routine maintenance, "repair and replacement" rule that EPA had proposed on December 31, 202. The Division wrote that the proposed rule "adds an additional complex regulatory program to the existing case-by-case RMRR exclusion procedure.

Question 1(A). Did that specific criticism refer, at least in part, to the proposed rule's "equipment replacement" provision which EPA then promulgated on August 27, 2003? If you believe it did not, please explain why not.

Response. I do not know but am told that the specific suggestion did not refer to "equipment replacement." The Division expressed nine concerns that were all di-

rected to the Annual Maintenance, Repair and Replacement Allowance (AMRRA) proposal and not the Equipment Replacement Provision (ERP) that was adopted in the final rule.

Question 1(B). If you believe it did, please state whether or not you agree or disagree, with the criticism and the reasons for your agreement or disagreement.

Response. The Utah Department of Environmental Quality's primary concern was that New Source Review needed to be improved. Our suggestions were received and properly weighed; all were addressed.

Question 2. On March 31, 2003, the Director of the Utah Division of Air Quality testified at a public hearing about the proposed "routine maintenance, "repair and replacement" rule that EPA had published on December 31, 2002. His testimony identified four flaws in the proposed rule and concluded by stating: "The Utah Division of Air Quality thinks that the proposal will only create more bureaucracy, cost, and uncertainty with no proven environmental benefit."

Question 2(A). Were the four specific criticisms meant to apply, at least in part, to the proposed rule's equipment replacement" provision, which EPA then promulgated on August 27, 2003? If your answer is "no" with respect to any of the four specific criticisms, identify the criticism and please provide the basis for your answer.

Response. I am not aware of the intent, but as I read the letter, it appeared to be advancing the view that further simplicity could be achieved, plus a concern that adequate records may not be available in some situations.

Question 2(B). For each of the four specific criticisms that were meant in your view, to apply to the "equipment replacement" provision, please state whether you agree or disagree with the criticism. In the instances in which you disagree, please provide the factual basis for the disagreement.

Response. None of the four specific comments appear to reference equipment replacement.

Question 2(C). Was the concluding statement quoted above meant to apply, at least in part, to the "equipment replacement" provision? If no, please provide the basis for your answer. If the answer is "yes," please state whether you agree or disagree with the criticism. If you disagree with the criticism, please provide the factual basis, if any, for your disagreement.

Response. I did not preview Mr. Sprott's comments and cannot be sure what he meant.

Question 3. The General Accounting Office has reported that the recent rules amending the exceptions to the New Source Review program were based on only anecdotal evidence provided by industry groups. (United States General Accounting Office, Clean Air Act: EPA Should Use Available Data to Monitor the Effects of Its Revisions to the New Source Review Program (GAO–03–947 August 2003)). Even Assistant Administrator Jeffrey Hohnstead acknowledged this fact. Do you support a rulemaking such as this that is not based on any empirical analysis? Would you support a rulemaking under your supervision that was based only on anecdotal evidence?

Response. As noted previously in response to Senator Jeffords' question #6, I am aware that there are differing perspectives concerning the recent changes made by EPA to the New Source Review program. If confirmed, I would like to understand in greater depth and detail the data, issues, and perspectives associated with this complex subject. I look forward to the opportunity to be briefed in detail on the NSR changes.

Question 4. The reforms to the New Source Review program have been criticized by the General Accounting Office, the Nation 1 Academy of Public Administration, and State and local air regulators (STAPPA/ALAPCO). Would you be willing to delay the finalization of the rules to account for these critiques? If not, do you believe that the GAO, NAPA, and STAPPA/ALAPCO are all incorrect in their criticism?

Response. Please see the response to Senator Lieberman's question #3, above.

Question 5. In the fiscal year 2003 Omnibus Appropriations legislation, the EPA was instructed to commission a study regarding the environmental and public health impacts of the New Source Review reforms that were finalized on December 31, 2002. If this study shows that the rule will increase pollution and/or have negative environmental and public health impacts, will you rescind the rule?

Response. Please see the response to Senator Lieberman's question #3, above.

Question 6. If emissions are demonstrated to increase as a result of either the New Source Review rulemaking or through some other credible source, would you rescind the rule in question?

Response. Please see the response to Senator Lieberman's question #3, above.

Question 7. Under the New Source Review reforms, States are permitted to implement their own rules if they are more stringent than the Federal rule. How would you define "more stringent than the Federal rule?" What burden would the States need to satisfy to implement their own rules?

Response. Please see the response to Senator Lieberman's question #3, above.

Question 8. The August 27, 2003 final New Source Review rules regarding the definition of "equipment replacement" are thought to be legally suspect by many legal commentators. If these rules are struck down by the courts, would you enforce the previous rules against any emitters that undertake offending projects that were permitted under the new definition of "equipment replacement?"

Response. Please see the response to Senator Lieberman's question #3, above.

Question 9. Currently, some 13 States plus local air districts in California have petitioned the court to overturn the New Source Review rule finalized on December 31, 2002. In addition, various States have vowed to or have already filed legal challenges against the August 27, 2003, final New Source Review rule on "equipment replacement. Should the States succeed, and the rules be deemed invalid, will you vow to reform New Source Review by requiring all grandfathered facilities to install modern pollution controls within the next 10 years as recommended by NAPA?

Response. Please see the response to Senator Lieberman's question #3, above.

Question 10. Since the summer of 2002, Senator Jeffords and I have repeatedly asked for documents pertaining to EPA's internal analysis of the New Source Review rulemakings, including analysis of the enforcement cases and the emissions impacts of the rules that have now been finalized.

Will you request of EPA that this information be provided to us prior to your confirmation hearing?

Response. It is my intention to work with you in a way that would supply us both with information needed to meet our common goal, which is clean air. If confirmed, I will look into this request for information.

Application of Enlibra Principles

Question 11. You took the lead in developing the "Enlibra" principles which were adopted by the Western Governor's Association for the management of environmental issues. You have also stated that you will use the Enlibra principles as a model at the Environmental Protection Agency if promoting collaboration among stakeholders.

One of these principles is the following:

"Collaboration, Not Polarization—Use Collaborative Processes to Break Down Barriers and Find Solutions."

Yet in April, you participated in two nationally significant public land policy decisions—the April 9 Memorandum of Understanding between Utah and the Department of Interior on processing RS2477 rights of way claims under the new disclaimer rule and the April 11 settlement agreement with Utah prohibiting the designation of new wilderness study areas on our public lands. These agreements were reached through a secret, non-public process and affected not only the public lands located in Utah, but public lands throughout the Western United States. With regard to the MOU, critics assert that you refused to involve several stakeholder groups in the MOU negotiations despite—epeated requests to do so and further, that you have continued to withhold all information on the negotiations.

(A) Explain how the process for negotiating these two significant agreements with the Department of the Interior was consistent with the Enlibra principle of collaboration.

(B) Public participation is a fundamental tenant of public land decisionmaking. Please explain why you believed it was appropriate to reach these agreements behind closed doors in contradiction of the principle of public participation.

(C) What assurances can you provide to skeptics that your application of the Enlibra principle of collaboration and inclusion will be different in your role as Administrator of the EPA than it was in the development of the April agreements?

Response to A, B & C. The MOU is an agreement to open a collaborative public administrative process in which every American can participate. The MOU itself does not decide the ownership of a single road. The April 11 agreement was the settlement of 7 years of litigation. During that period, any stakeholder could have intervened, but chose not to.

The RS2477 agreement establishes a classic collaborative process that will avert decades of polarization and expensive litigation. The wilderness lawsuit occurred because collaboration broke down. I have engaged. in numerous attempts to resolve wilderness disputes, including a collaboration where former Interior Secretary Bab-

bitt and I were able to reach agreement, but the extremes on both sides of the discussion killed the proposal.

My record as Governor includes many notable examples of successful problem solving on a large scale issues: Envisions Utah, Partnership For Quality Growth, Western Regional Air Partnership, and the Grand Canyon Visibility Transport Commission are all examples.

Question 12. You have advocated the principles of Enlibra for problem-solving instead of politics, litigation and obstructionism. Yet your administration as Governor of Utah has successfully utilized litigation or the threat of litigation to influence national public policy; notably, the agreements described above were reached after Utah threatened or filed lawsuits. The current Administration has made use of the settlement of lawsuits as a device for establishing significant public policy to the exclusion of members of the public. What assurances can you provide to critics who are concerned that as EPA Administrator you would profess a model of "collaboration" under the Enlibra principles but at the same time welcome lawsuits which provide an opportunity for additional closed door policymaking in settlement agreements like that which occurred in the Department of the Interior agreements?

Response. The wilderness litigation was not a welcome lawsuit for either side. Again, I strongly believe in the principle of collaboration and will apply it whenever and wherever conditions are appropriate. Collaboration rather than polarization or litigation will always be my preferred method of doing business, and I commit to deploying it the best of my ability.

Adherence to Precedent

Question 13. The settlement agreement between the State of Utah and the Department of the Interior which prohibits the Bureau of Land Management from inventorying wilderness-quality lands and designating new wilderness study areas adopted an interpretation of the Federal Land Policy and Management Act which contradicts all previous administrations dating back to President Jimmy Carter and including Presidents Reagan and George H.W. Bush. What re-interpretations of the clean air and water laws can we expect from you as EPA Administrator?

Response. I enthusiastically support the creation of more wilderness in Utah. I have engaged in repeated attempts, dating from before my election as Governor, to get Congress to pass a wilderness bill for Utah. Secretary Babbitt and I jointly put forward a bill resolving the wilderness issue for half of the State, but without success. Long experience has taught me that there is a lot of wilderness to be made down the middle, but no wilderness to be made on the extremes.

I understand the Congress often provides flexibility in implementing environmental policy. I intend to faithfully implement the Clean Air Act and Clean Water Act administered by EPA to ensure protection of human health and the environment.

Concentrated Animal Feeding Operations

Question 14. Large animal feeding operations or, CAFOs, have been identified as major point sources of water pollution and air pollution. EPA, however, has taken few steps to regulate these pollution sources, although they are clearly subject to Federal environmental pollution control laws.

(A) What actions will you take to control these sources?

Response. I am aware of national concerns regarding CAFOs. I am also aware that EPA has recently issued revised regulations to better address water pollution from these operations. In my State, we have completed inspections of essentially every animal feeding operation (about 3000). Every large CAFO has been permitted and the medium and small ones have been identified and targeted for compliance assistance or regulatory permitting.

Question 14(B). Since 2002, EPA has imposed a moratorium on enforcement against air emissions from CAFOs. What act on will you take to reverse that moratorium?

Response. I am not personally familiar with this enforcement moratorium. If confirmed, I will request a briefing on this issue.

Question 14(C). The Environmental Protection Agency has privately negotiated with CAFOs regarding potential amnesty from the Clean Air Act in exchange for limited monitoring of pollution at some CAFOs. Will you end the so-called settlement discussions with industry and act to collect data regarding air emissions?

Response. I am not familiar with the specifics of these negotiations. If confirmed, I will review them and decide based upon the merits of the issues.

Question 15. The General Accounting Office recently issued a report finding that EPA and the States are ill prepared for implementation of EPA's new rule for regu-

lating wastewater discharges; Livestock Agriculture: Increased EPA Oversight Will Improve Environmental Program for Concentrated Animal Feeding Operations. (C-AO–03–285, January 2003). The States have failed to provide for the additional staff required to process permits, conduct inspections and take enforcement actions. In addition, EPA has not provided for additional resources to carry its oversight responsibilities.

(A) What actions will you take to insure the ability of the States to implement this program?

Response. I am not familiar with the NAS report or the status of permitting and enforcement actions in other States. If confirmed I will have an opportunity to become more knowledgeable about other State programs. The success of the Utah CAFO program may prove useful. Through a partnership of the DEQ Division of Water Quality, the Department of Agriculture and Food, EPA, the U.S. Natural Resource Conservation Service, and the Utah Farm Bureau, all of Utah's CAFOs (over 3000) have been inventoried in the last 18 months. All large CAFOs requiring permits have been permitted. Where groundwater protection is of concern, permits have also been issued under the State's groundwater protection program. Small CAFOs are implementing best management practices; operations with problems are being monitored and will be required to be permitted if conditions do not improve to meet standards. All of this work has been accomplished without additional Federal or State funding, utilizing 1/3 of a scientist's time within the DEQ Division of Water Quality to manage the program.

Question 15(B). The GAO report was also critical of EPA's failure to exercise adequate oversight of the States which, in some cases, have failed to issue permits for operations that may threaten water quality. Describe your philosophy regarding oversight of this important program and the action that you will take to improve EPA's oversight.

Response. I am neither familiar with EPA's oversight of other State programs nor aware of the comments in the GAO report regarding EPA's oversight. If confirmed as Administrator of the EPA, I expect to be briefed on this matter.

Question 16. The EPA is currently conducting a variety of studies of the impact of the constituents of CAFO wastes on public health What assurance can you provide that these studies will continue? What actions will you take to ensure a thorough and accurate scientific review, without improper bias, so that the investigators may objectively focus on the issues at hand?

Response. I am not aware of the specific studies that EPA is currently conducting related to CAFO wastes. If confirmed, I would need to assess what ongoing efforts the Agency is conducting in this respect. Overall, I do believe it is a priority to use the best available science and data to support policy decisions and that all major scientific work products should undergo peer review.

Toxic Release Inventory

Question 17. Do you support the public's right to know through the EPA's Toxic Release Inventory Program (TRI) about toxic, chemicals released into their air and water?

Response. Yes. The public needs information about the environment in their area. This type of information allows people to make informed decisions that affect their individual lives and communities. The Toxic Release Inventory can provide useful information for individuals and community planning, as long as the report is used in the context of TRI, not as a reflection of perceived environmental violations.

Question 18. The EPA has consistently supported a strong Toxic Release Inventory Program, in order to protect the public's right to know about toxic pollution, including pollution from the mining industry. According to an August 26, 2003 letter from Marianne Horinko, Acting Administrator, the EPA intends to engage in a rulemaking to clarify how mining pollution must be reported under the program. Given the agency's past strong support for the public's right to know, will you commit to ensuring that this rulemaking will continue to allow the public to get information about all toxic releases from mining operations, such as arsenic, lead and mercury, regardless of what form those toxic releases take—waste rock or other material?

Response. I am aware of the arguments regarding the listing of mining wastes as part of the TRI and that the EPA intends to clarify the rules. However, I am not familiar with all of the issues surrounding the specific topic that you mention. I look forward to learning more about this specific issue, if confirmed.

Hardrock Mining

Question 19. In a February, 2003 internal report prepared by EPA's Office of Enforcement and Compliance, Utah was identified as one of 14 States which had sig-

nificant non-compliance with discharge requirements under the Clean Water Act.[1] In the past 2 years, according to EPA's Enforcement and Compliance history, Kennecott Mining in Utah has exceeded the discharges allowed under its Clean Water Act permit, 6 times, including mercury releases which exceeded its NPDES permit by 900 percent. Given the record of significant non-compliance in Utah, what assurance can you give that you will act to ensure full enforcement of the Clean Water Act, especially with regard to hardrock mining operations?

Response. It is my intention to ensure that the Clean Water Act is enforced fairly and equitably. I inquired of the Utah Department of Environmental Quality and was supplied with the following. At the time the reports were pulled from PCS, our data entry was incomplete, and the missing data was flagged as violations. The data are now current, and Utah's rate of noncompliance ranks with the 10 best States in the Nation.

I am informed that the Kennecott violations cited in the report, five of the six were not actual violations. Three of the reported violations were due to data entry errors in PCS, one was a reporting error by the permittee, and one appears to be a problem with the PCS system itself. The data base has been corrected. One item which is flagged as a violation is for a compliance schedule being missed on a special environmental project done by a third party. This information should not have been coded into PCS in the first place and is not a Kennecott violation. The reported 900 percent exceedance of mercury was due to an error in coding of the effluent limits. Their actual discharge did not exceed permit limits.

Question 20. EPA has been criticized for inadequate oversight of permitting programs. What will you do improve EPA oversight of the NPDES program?

Response. It is my understanding that EPA staff have already begun productive discussions with the States about a number of options to improve oversight of the NPDES program. I look forward to hearing the results of those discussions and promoting efforts to improve both Federal and State performance in this area.

Question 21. An August 2003 EPA Inspector General's report evaluating the EPA's Hardrock Mining Framework recommends that the EPA should determine the estimated financial, human health and environmental impacts associated with hardrock mining sites where the EPA currently has primary responsibility for handling cleanup as well as hardrock mining sites where there is future likelihood that EPA may have lead cleanup responsibility. (IG Report No.2003—P–00010, August 7,2003).

(A) Do you agree that this is an important task?

Response. I am not familiar with the specific findings. or conclusions of the August 2003 EPA Inspector General report on hardrock mining. Generally, as Administrator, I will seriously consider the findings of the Inspector General and seek the advice of Agency experts in responding to such findings.

Question 21(B). How would you go about gathering this information?

Response. Please see response to Senator Lieberman's question #21-A, above.

Question 22. The 2003 IG Hardrock Mining report found that State permitting and enforcement programs are often not effective for the various environmental problems related to hardrock mining pollution.

(A) Will you commit to giving mining States adequate oversight to help effectively implement Clean Water Act permitting at hardrock mines?

(B) The 2003 IG Hardrock Mining report also found that the EPA is not fulfilling its commitment to implementing the Mining Framework, the goal of which is to protect human health and the environment at proposed, active, and abandoned mine sites on both Federal and non-federally managed land though appropriate and timely pollution prevention, control and remediation.

Response to A and B. While I am not familiar with the specific findings or conclusions of the August 2003 EPA Inspector General report on hardrock mining, I agree that there needs to be an effective partnership between EPA and States in implementing the Clean Water Act to protect human health and the environment.

Question 23. What commitments will you make to strengthen the role of the EPA in assuring the cleanup of toxic mining waste?

Response. If confirmed, I will continue the strong EPA commitment to clean up toxic waste sites based on their risk to human health and the environment.

Question 24. A June 1997 IG report found that EPA has not pursued mining regulatory opportunities under the Resource Conservation and Recovery Act to mitigate the environmental damage from mining waste. (EIDMF6–08–0016–7100223, June

[1]Gugliotta, "Study Documents Failure to Enforce Clean Water Act," The Salt Lake Tribune, June 6, 2003.

1997). Will you commit to pursuing the regulatory options which are available to EPA under RCRA?

Response. I am not familiar with the specific findings or conclusions of the June 1997 EPA Inspector General report on regulatory opportunities under the Resource Conservation and Recovery Act (RCRA). If confirmed, I am committed to the effective implementation of EPA's RCRA program.

Question 25. Currently, mining sites make up 87 of the sites on the National Priority List for the Superfund program; demonstrating that the Superfund program is critical for ensuring the cleanup of mining sites. Will you commit to ensuring that the resources of the Superfund program are used to clean up mining sites?

Response. If confirmed, I am committed to the effective and efficient use of funds for all sites listed on the Superfund National Priorities List (NPL), including those that are mining sites.

Question 26. Will you commit to ensuring that the resources are sufficient to ensure cleanup that will protect the environment and human health at all NPL sites?

Response. If confirmed, I am committed to the effective and efficient use of funds for the cleanup of Superfund toxic waste sites to protect human health and the environment.

Cost Benefit Analysis

Question 27. What is your view about the appropriate role and methodology of cost-benefit analysis in establishing pollution-control requirements and in other environmental regulatory decisionmaking? What is your view about the appropriate role of comparative risk assessments that make judgments about allocation of agency resources and priorities based on the comparative risks of different regulated activities and costs of controlling those risks?

Response. If confirmed, I am committed to efficient use of funds for the cleanup of Superfund toxic waste sites to protect the health and the environment.

In my experience on the State level, agencies consider, among other things, the costs and benefits of potential regulations. It is my understanding that at the Federal level, the use of cost-benefit analysis is dictated by both statute and Executive Orders. If confirmed, I expect to be fully briefed on this process including the potential role of comparative risk assessment.

Question 28(A). In so far as you support the application of cost-benefit analysis and comparative risk analysis in environmental decisionmaking generally, what methodology and standards will you apply in developing and approving regulations under environmental statutes that require "technology standards" or protection of public health with an adequate margin of safety, or "feasibility" standards, or protection of the environment?

Response. If confirmed, I intend to-full) comply with all environmental statutes.

Question 28(B) If an environmental technology standard, for example, satisfies the statutory criteria mandating such a standard, what assurance can you provide that you will not reject or delay the standard because you conclude that it fails a cost benefit test or is low priority under a comparative-risk test?

Response. If confirmed, I intend to comply with all of our environmental statutes.

Question 29. Some of the goods involved in environmental policy—e.g., aesthetic values, the quality of life in a community, ecological values, health values, and distributional concerns—are qualitatively diverse, and are difficult or impossible to monetize, or even quantify. Do you agree? How do you believe such values should be characterized and taken into account in regulatory decisionmaking?

Response. I am not familiar enough with EPA's current practices to comment. If confirmed, I look forward to spending more time on this issue.

Question 30. A decision to discount the value of future benefits, and, if so, the decision to apply a steep discount rate, can very significantly reduce the estimated benefits of certain regulations, like many environmental regulations, that prevent long-term ecological harm and long-latency diseases like cancer. Discounting generally has much less downward effect on the calculated benefits of safety regulations, which tend to prevent more immediate injuries.

(A) Do you agree?

(B) What are your views about whether to discount and what discount rate to use?

(C) How would you apply discounting to regulations that protect future generations?

(D) Should we apply a method for calculating benefits under which the preservation of the lives of our children counts for less than preserving our own lives?

Response to A-D. If confirmed, I will review EPA's current policy regarding discounting before making a decision. This is a very complex issue, and I look forward to learning more about it.

Question 31. EPA has traditionally placed an equal value on all lives saved by environmental protection. However, in connection with its "Clear Skies" initiative and other recent regulatory proposals, the administration applied the so-called "senior discount" factor, an alternative valuation . methodology under which the lives of Americans seventy and over were calculated to be worth 37 percent less—than the level at which all other, younger Americans were valued. Using this cynical tool, the Administration was able to diminish the apparent benefit of life-saving environmental regulations. After a firestorm of criticism from angry seniors, Christine Todd Whitman announced on May 7, 2003, that EPA would no longer use this valuation method.

"The senior discount factor has been stopped," Administrator Whitman was quoted as saying. "It has been discontinued, EPA will not, I repeat, not, use an age-adjusted analysis in decisionmaking. (Katharine A, Seelye and John Tiemey, "EPA Drops Age-Based Cost Studies," The New York Times, May 8, 2003)

(A) Will you likewise ?commit that, if you are confirmed as EPA Administrator, EPA will not use an age-adjusted analysis in decisionmaking?

Response. I am not familiar with Governor Whitman's basis for that statement, but I will review the policy, if confirmed.

Question 31(B). What is your opinion of the use of the Quality-Adjusted-Life-Year (QALY) to measure the benefits of air pollution controls?

Response. I am only generally familiar with cost-benefit analysis and therefore, I am not familiar with the particulars of this issue. I look forward to learning more before articulating a position.

Clean Water Act

Question 32. Currently, the EPA is considering a rulemaking that would redefine waters over which the Federal Government has jurisdiction. (See January 15, 2003 Federal Register Advance Notice of Proposed Rulemaking (48 Fed, Reg. 1991)).

(A) What is your position on this role?

(B) Are you aware that it would significantly diminish Federal jurisdiction over water pollution?

(C) How do you respond to the recent analysis prepared by U.S. EPA Region 3, which purportedly finds that the rulemaking change being considered could result in more than one-half the streams an one-third of all the wetlands in the mid-Atlantic region losing Federal Clean Water A t protections, according to an article in the September 5, 2003 Washington Post?

Response to A, B, and C. I have not reviewed the advance notice of proposed rulemaking. If confirmed, I will have an opportunity to review the notice, including the analysis to which you refer.

Question 33. Thirty States have now commented against this rule, arguing, among other things, that it is an over-expansive reading of the case law and that it would create an inordinate regulatory burden on the States. Given these comments, would you agree to narrow the rule?

Response. If confirmed as EPA Administrator, I will carefully consider the views of all interested parties, including States, which have a critical role in the protection of our nation's waters.

Question 34. How would you act to assure that sources of polluted runoff are appropriately controlled?

Response. If confirmed, I would work with States under their own water protection laws and with other Federal agencies, such as the Department of Agriculture to assure that sources of polluted runoff are appropriately controlled.

Question 35. Do you believe additional investment in our nation's drinking water and wastewater infrastructure is needed? How much? How would you propose to finance it?

Response. I know from first hand experience that our drinking water and wastewater infrastructure is aging and that local communities have significant needs. I am not yet prepared to articulate policy inclinations' at this level of detail.

Additional Matters

Question 36. There have been many instances over the past 2 years where EPA analysis and science have not been made available or congressional scrutiny.

(A) Under your leadership, will you cooperate with both parties in Congress to provide complete transparency of the EPA decisionmaking process?

Response to A & B. If confirmed, I intend to provide you with EPA's best professional advice and analysis.

I am personally committed to cooperating with the Congress and its committees and making progress on the many important and complex environmental issues fac-

ing EPA and the States. I understand and respect Congress's role in oversight, and if confirmed, I will cooperate with Congress and its committees to the fullest extent possible.

Question 37. A point of contention in the debate surrounding multi-pollutant legislation is whether such an approach should regulate emissions of CO_2 from power plants. In the absence of Federal action, many States have now begun to regulate CO_2 emissions themselves. Would you support the inclusion of mandatory reductions in CO_2 emissions in multi-pollutant Legislation?

Response. I support the President's Clear Skies Initiative, and I recognize the value of market-based approaches, such as the acid rain training program, to reduce emissions. However, if legislation requiring EPA to establish mandatory reductions of CO_2 is enacted, as Administrator, I would implement the law.

Question 38. EPA is under court ordered deadlines for many rulemakings, including rulemakings under the Clean Air Act related to Maximum Available Control Technology (MACT) and to the NOx State Implementation Plans. Will you commit to finalizing all of these rulemakings pursuant to the deadline?

Response. I am not familiar with the current status of EPA's efforts to meet these specific court ordered deadlines. If confirmed, I will strive to ensure that EPA addresses these deadlines in a timely manner.

Question 39. One of the important functions that the EPA performs is to review and comment on Environmental Impact Statements, which are prepared by Federal agencies in compliance with the National Environmental Policy Act. Last year, a high ranking official of the Department of the Interior challenged EPA's comments regarding an EIS for a large energy exploration project. What assurances can you provide that EPA professionals will be allowed to provide their expert technical advice on EIS without improper influence from officials who seek a pre-determined outcome in agency decisions?

Response. I support EPA's important role in implementing NEPA, and can assure you that, if confirmed, the advice of EPA's professionals will guide my decision-making.

Question 40. Would you support legislation increasing fuel economy standards for cars, SUVs, mini-vans, and other light trucks? What goals and timetables would you set?

Response. Whether or not fuel economy legislation is appropriate is not a topic with which I am familiar. I do not have a position on this matter at this time.

Question 41. Do you support full implementation of the Food Quality Act to assure that America's food supply is safe from dangerous pollutants?

Response. If confirmed, I will review the current implementation efforts under the Food Quality Protection Act of the EPA. I can assure that I fully support protection of America's food supply.

Question 42. Do you believe that chemical plants should be required to conduct vulnerability assessments and implement security measures following the terrorist attacks of 9/11? Should such measure be voluntary? Should the measures require pollutant source reduction measures?

Response?. I have not been briefed on these proposals, and do not have a position at this time.

Question 43. Do you believe the public has the right to know about the full range of toxic chemicals in food, drinking water, and consumer products? Do you support legislation to require manufacturers to disclose the potential health effects of chemicals that they expose to the public?

Response. I am not familiar with the legislation that you reference.

Question 44. Do you support reinstating the Superfund taxes?

Response. First priority is for polluters to pay, using Superfund's liability system. Beyond that, I support funding the cleanup of Superfund sites, but I do not have sufficient information to declare an opinion on the source of funding.

Question 45. Please explain your view of the role in the Federal Government in environmental protection. Include in particular, the role of the Federal Government in the enforcement of environmental protection laws.

Response. The Federal Government, through EPA, has the responsibility for implementing nondelegated programs or portions of programs. Where a program has been delegated to a State, the State is responsible for enforcement, and EPA's role is one of oversight of the State program. Establishing national environmental standards is an appropriate role for EPA. However, States and local governments need the flexibility of "neighborhood solutions" in order to effectively and efficiently implement the standards.

Question 46. Please explain your view of the role of State and local government in environmental protection.

Response. Where State and local governments implement environmental laws that have been delegated by EPA, they have the primary responsibility for implementation, the State has ultimate responsibility for meeting the responsibilities of primacy, and the State and EPA work as co-regulators in meeting the objectives of environmental programs. Where State and local governments implement laws, such as local planning and zoning or State groundwater protection, the State and local governments have sole regulatory authority. Many times, a project will require various permits or approvals from all three levels of government. It has been our experience in Utah that, when local, State, and Federal entities and stakeholders come to the, table with their individual authorities and capabilities to work together in partnership, and collaboration, they accomplish more environmental progress than they could individually.

Question 47. The States have been taking a much more active role in the enforcement of environmental law in recent years, but some States the institutional capability (sic) possessed by the Federal Government to support these efforts. How do you plan to provide support to the States for their environmental enforcement an compliance tracking? What is your position on cooperating with the States in their enforcement efforts?

Response. As a Governor, I am committed to a strong State-Federal partnership to protect the environment. If confirmed, I will seek the input of the States in determining how to best support their efforts and how to appropriately tailor our support to address their most pressing needs.

Question 48. Many State environmental—protection budgets have been severely cut in the past several years, with a corresponding effect on their ability to administer delegated or authorized Federal environmental programs. For example, it has been reported that the State of California may have to cut the budget for. its environmental protection programs by nearly 50 percent over its budget of 2 years ago. As EPA Administrator, how do you purpose to address this problem to ensure the continued effectiveness of the ration's environmental programs?

Response. I know that many States face budget difficulties. If confirmed as EPA Administrator, I believe EPA will need to work with individual States to identify creative solutions that address their circumstances. Both EPA and States will need to work hard to meet the challenge of tight budgets.

Question 49. The Department of Defense has proposed exemptions from the Clean Air Act, the Superfund Law, and the Resource Conservation and Recovery Act for military readiness and training activities. Do you support these exemptions? Why?

Response. I am not familiar with the specific details of this legislation. I support the efforts of the Department of Defense in training our military men and women to do their job, and I am sensitive to the training needs of the military at training ranges. There are, however, many operational and cleanup activities ongoing at Utah military installations that require regulatory oversight in order to assure appropriate protection of public health and the environment.

Question 50. What is your view of the government's obligation to the public health of all Americans practically low income families in economically distressed communities, who are exposed to a disproportionate amount of toxic pollutants; and senior citizens?

Response. I believe all Americans deserve to benefit equally from the Federal Government's environmental protection efforts.

Question 51. Do you believe local officials have the ability to choose to disregard Federal environmental law within their jurisdictions? What if a local or State official was not following or enforcing the Clean Water Act? As EPA Administrator, what would you do in such circumstances?

Response. Quite simply, I believe everyone should follow the law.

Question 52. Do you acknowledge the pressing problem of global warming is being established by scientific fact? Are you committed to reducing the greenhouse gas emissions that cause it? Do you view voluntary measures t reduce greenhouse gas emissions to be sufficient?

Response. A passive approach to address climate change is insufficient. The President has proposed a series of immediate, deliberate actions that I fully support: establishment of a national goal on the reduction of greenhouse gas intensity, substantial increases in research, partnerships within the international and industrial sectors, new agriculture sequestration projects, and focus on new technologies.

Question 53. Some critics assert that while you say you have protected the environment, your actions appear not to be consistent with this claim. One example in-

volves the DOI/State of Utah MOU on RS2477 claims. These critics point out that after the RS2477 MOU was released, you stated: "If a road is in a national park, wilderness area or even a wilderness study area, we are not claiming it."[2] Yet, according to an August 11, 2003 Federal Register notice proposing closure of a road in the Canyonlands National Park in Utah, the State of Utah and San Juan County assert that they have a RS2477 right of way for the road, the use of which the National Park Service believes is impairing park values. It appears that this assertion of a claim for an RS2477 road is inconsistent with your statements that Utah would not make claims in national parks. Critics fear that as EPA Administrator your actions will continue to be inconsistent with your statements. What assurances can you provide to such critics that your actions will be faithful to your statements regarding protecting the environment?

Response. There is no inconsistency. The State of Utah does not assert a claim to the Salt Creek Road in Canyonlands National Park. National Parks are explicitly excluded from the RS2477 resolution process set forth in the DOI/Utah agreement of April 2003. I stand by that agreement. The erroneous statement in the Federal Register reflects facts that predate the agreement by two to 3 years. At that time, the State intervened in a lawsuit over Salt Creek Road in order to preserve important legal precedents then being challenged.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR BOXER

Question Regarding EPA Rollbacks

Question 1. Governor Leavitt, the EPA's charge is to protect public health and the environment. However. during this Administration's tenure there have been over 300 environmental and public health rollbacks, more than 40 of them originating from the EPA. I attached a list of all of the EPA rollbacks.

Are you aware of all of these rollbacks?

Please comment on each separate rollback—whether you view it as protecting public health and the environment and why or why not—prior to this committee's voting on your nomination.

Response. The list of actions you have provided covers a wide range of Agency actions taken and statements made over the past 2 years. Many relate to complex issues on which I have not been fully briefed. I regret that I cannot at this time assess your characterization of these as "rollbacks." I reiterate that, if confirmed, I intend to fully enforce the laws enacted by Congress and to protect the health, safety and environment of the American people.

TRANSPARENCY AND PUBLIC PARTICIPATION IN DECISION-MAKING

Friday Night Rollbacks

Question 2. Governor Leavitt, I strongly believe that one of the cornerstones of a democracy is the openness and transparency of our government and its decision-making. Do you agree with me on this?

I also believe strongly that part of openness and transparency in a democracy requires that a democratic government inform the public of its policy decisions and the rational for them? Do you agree with me on this?

I also believe that a key part of informing the public in a democracy is ensuring that the government provides the public and its representatives with sufficient information to evaluate a decision, or a policy. Do you agree with me on this?

Governor Leavitt, are you aware are you aware that this Administration has a pattern of issuing environmental and public health rollbacks late in the afternoon on a Friday or on the eve of a holiday? Are you familiar with the 5 late Friday EPA rollbacks from 2003?

Are you aware that when this Administration does issue these rollbacks, it is invariably to the media and it is hours or days later before elected representatives are provided with the details of the rollback? Do you think that such behavior reflects a respect for Democratic principles?

Are you aware that the EPA changed a 25-year old policy prohibiting transfers of land contaminated with PCBs until it the PCBs were cleaned up? Are you aware that the EPA did not notify the public about this policy, and that it is known only because it was leaked to a reporter? Governor Leavitt, is that good democratic governing in your mind?

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[2] Leavitt, "Searching for a Map to Navigate Roads Debate," The Salt Lake Tribune, April 20, 2003

Are you aware that this Administration frequently refuses to provide back up documentation for the public health benefits it claims in these rollbacks, such as its New Source Review decisions? Do you think that such behavior reflects a respect for Democratic principles?

Governor Leavitt, will you commit to us here and now that you will stop the pattern of announcing rollbacks late on Fridays and on the eve of holidays?

Governor Leavitt, will you commit to us here and now that elected representatives will be provided with information on regulatory decisions on a time scale that allows us to meaningfully assess Sand inquire into the meaning and the rationale of the decision prior to the close of business?

Governor Leavitt, will you commit to providing this information to all Senators and Representatives at the same time, regardless of their party affiliation?

Response. Like you, I believe that it is important to have an open and transparent government. I am not familiar with the past practice that you reference, but I look forward to working with the committee and will make every effort to provide assistance and information in a timely and comprehensive manner.

Answering congressional Requests

Question 3. There is a large backlog of congressional requests from the past 2 years where EPA has failed to be sufficiently responsive. Most notably, EPA has refused to provide information on the environmental impacts of the proposed and finalized changes to the New Source Review program under the Clean Air Act and information on its Superfund program. The NSR changes made by the Bush Administration in December and August alone put thousands of lives at risk. The Superfund slowdown has also placed untold numbers of people needlessly at risk. Clearly, this EPA has abandoned its long-standing practice of providing non-partisan, unbiased analysis for Congress, particularly committee chairman and ranking members.

Governor Leavitt, are you aware that this committee was twice on the verge of subpoenaing EPA for information; once on Superfund issues and once on NSR issues?

Governor Leavitt, will you pledge to work with Congress and honor our requests for information?

Will you pledge to present to the pubic and its representatives all of the analysis underlying EPA's decisions during your tenure?

Response. It is my desire to have a very straightforward, candid and open relationship with the committee and other Members of Congress, as I indicated during the hearing and in our private meetings. There have always been tensions between branches of government, but my record as Governor in working hard to communicate is solid, and it will be my objective to be as responsive to you and to the people of this country as possible.

Superfund

Question 4. Superfund sites are the most hazardous waste sites in our Nation. The Superfund law was born out of the Love Canal experience, where a school ground was built on top of an old industrial site contaminated with a variety of toxic pollutants, including PCBs. A key part of Superfund has long been the Superfund Trust Fund, a fund into which polluters pay to ensure the cleanup of orphaned sites, or sites where the responsible parties are refusing to accept responsibility.

Governor Leavitt, the Administration's fiscal year budget for Superfund shifts funding for the cleanup of our nations most hazardous waste sites from the polluters to the taxpayers. President Bush is the first President since passage of the Superfund law in 1980 who has not supported the polluter pays principle.

Governor Leavitt, do you believe that polluters should pay for the pollution they cause, or do you believe that the innocent taxpayers, who are already bearing the public health and environmental costs of this pollution, should be the ones to pay to clean up this pollution?

Response. I support the polluter pays principle, which I understand is the Administration's position. Parties responsible for the toxic waste at Superfund sites are responsible for cleaning them up. If confirmed, I commit to continuing a strong EPA Superfund enforcement program.

Question 5. According to a Resources for the Future Report to Congress, EPA has catalogued more than 43,000 potentially contaminated sited in its Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). More than 41,000 of these sites have had a preliminary assessment to determine whether cleanup is necessary. However, only a small number, approximately 1200 have been placed on the National Priorities List (NPL), which was intended to be the official register of the nation's most hazardous waste sites. NPL

sites are the focus of the Superfund program as they are the only sites that EPA can fund under the Trust Fund.

From 1998—2001, EPA proposed listing an average of 38 sites each year and actually listed an average of 32. In 2002, EPA proposed 9 sites and listed 19, and in 2003, EPA proposed 14 sites, and listed only 8.

Governor Leavitt, what will you do to ensure that the tens of thousands of sites not on the Superfund NPL are cleaned up?

Response. In my experience, the States cleanup far more contaminated sites than does the Federal Government under the Superfund program. I support the continued partnership between the Federal Government and State and local governments in addressing the cleanup of contaminated sites.

Question 6. Governor Leavitt, the Administration has repeatedly asserted that it has "long-standing commitment to clean-up contaminated sites." However, the Administration's 2004 budget proposes to flat line cleanups at 40 per year, down significantly from its estimate of 75 for 2001, and less than half the average of 87 cleanups completed per year in the last 2 years of the Clinton Administration.

Governor Leavitt, do you think that cutting in half the number of clean-ups completed translates into a commitment to cleaning up contaminated sites?

Response. I do not have sufficient information to evaluate whether the number of cleanups alone demonstrates the Administration's commitment to clean up sites. If confirmed, I would assure that the Agency makes the best use of the funds available and would target funds based on risk to human health and the environment.

Question 7. Governor Leavitt, the Administration frequently asserts that site cleanups underway are more complex sites than previous site cleanups. However, EPA has been cleaning up extremely complex sites for decades and I am unaware. of any evidence indicating that the complexity of sites has changed radically over the last 2 years. After the EPW hearing on the President's budget request for 2004, I asked the following questions, which have yet to be fully answered by the Bush Administration:

- Please provide a detailed explanation of what constitutes a more complex site.
- In addition, please summarize the information that your Agency has received that indicates such a radical change in site characteristics over the last 2 years and provide that documentation to this committee.

Governor Leavitt, please provide me with a full and complete response to these questions, along with data to back up your response.

Response. I am not familiar with the specific findings of the Agency on the complexity of site clean-ups, nor am I privy to the information EPA has received over the last 2 years on this matter. If confirmed, however, I commit to looking into your data request.

Question 8. Governor Leavitt, in April 2002, Marianne Horinko, Assistant Administrator for the Office of Solid Waste and Emergency Response, testified before this committee under oath. During that testimony she indicated that if the Fund were not "robust", the Administration would revisit reinstating the polluter fees. Her exact quote was:

"I'm certainly not ruling out the tax. The Administration this fiscal year felt that in the 2003 budget we still had a relatively robust funding source in the remaining trust funds, that we did not have to propose the Superfund tax, but we will look at that again in 2004 and see if we need to revisit that position."

The Trust Fund will be broke as of October 1, 2003, with the full costs of cleanups shifting to taxpayers. As you know, this was exactly reversed in 1995, when taxpayers paid 18 percent of the costs and polluters 82 percent.

Governor Leavitt, as the Trust Fund clearly is no longer "robust", do you believe that the Administration should reinstate the polluter fees? If not, please explain why not.

Response. I support the polluter pays principle, which I understand is the Administration's position.

Parties responsible for the toxic waste at Superfund sites are responsible for cleaning them up. If confirmed, I commit to continuing a strong EPA Superfund enforcement program.

Question 9. EPA's data indicates that one in four people in America, including ten million children, live within four miles of a Superfund site. Yet this Administration has broken with the Reagan, Bush and Clinton Administrations by opposing the Superfund polluter fees that pay for cleaning up abandoned sites. At the same time, the pace of cleanups has plummeted during this Administration, from an average of 87 annually during the last Clinton Administration, to only 40 over the last couple of years. What will you do to increase the pace of Superfund cleanups?

Response. If confirmed, I am committed to the effective and efficient use of funding for sites listed on the National Priority List (NPL) to protect human health and the environment. I do not at this time have sufficient information to articulate a policy for Superfund Cleanups at this level of detail.

Question 10. A recent GAO report confirmed that the Superfund trust fund, which once contained over $3.6 billion, will be entirely exhausted in just a few weeks. The full costs of cleaning up abandoned sites and for program administration—roughly $1.5 billion—will now need to be borne by the general treasury. Do you agree with the Administration that polluters should not pay the cost of cleaning up abandoned sites, and that instead such costs should be foisted on the average taxpayer?

Response. As I have stated above, I am committed to the effective and efficient use of funds for sites listed on the NPL to protect human health and the environment. My first priority is for polluters to pay, using Superfund's liability system. I support the President's proposal to increase funding for Superfund, but I do not at this time have a position on any pending or proposed legislation concerning the source of funds.

Governor Leavitt's Past Record

Question 11. On April 9, 2003, you developed a "Memorandum of Understanding" (MOU) with the Department of the Interior affecting rights of ways across Federal lands. This MOU sets up a process for counties to make rights of way claims across Federal lands in Utah, including lands proposed for wilderness designation.

On April 11, 2003, you reached a settlement with the Department of Interior over the management of public lands in the State of Utah. This settlement stemmed from a lawsuit where the State of Utah sued the Bureau of Land Management, challenging former Interior Secretary Bruce Babbitt's authority to have additional acres considered for wilderness designation. In exchange for dropping the lawsuit, the Interior Department overturned temporary wilderness protection for nearly 6 million acres in Utah.

In both instances, the public was unable to provide input, even though these decisions had significant impacts on their public lands. This lack of public participation is in direct conflict with your stated support for collaboration in environmental management.

Can you explain why the public was left out of these decisions affecting their public lands?

Response. The public was not left out of these decisions. In the case of the RS2477 roads, the MOU is an agreement to open a collaborative public administrative process in which every American can participate. The MOU itself does not decide the ownership of a single road. The April 11 agreement was the settlement of 7 years of litigation. During that period, any stakeholder could have intervened, but chose not to. The wilderness lawsuit occurred because collaboration broke down. I have engaged in numerous attempts to resolve wilderness disputes, including a collaboration where former Interior Secretary Babbitt and I were able to reach agreement, but the extremes on both sides of the discussion killed the proposal.

Question 12. Can you assure the committee that you will have transparency and public participation in decisionmaking?

Response. I commit to public participation and transparency in accordance with Federal laws in the decisionmaking process.

Question 13. Can you envision similar circumstances as EPA Administrator where you will feel it necessary to cut out the public and key stakeholders from decisions affecting environmental laws and their enforcement?

Response. My record as Governor includes many notable examples of successful problem solving on a large scale issues with the collaboration of the public and stakeholders; Envisions Utah, Partnership For Quality Growth, Western Regional Air Partnership, and the Grand Canyon Visibility Transport Commission are all examples.

Question 14. According to an article in the "High Country News" (May 27, 1996) and statements made in "Science Under Siege" by Todd Wilkinson, when scientists in the Utah Division of Wildlife Resources offered information or positions that sought to encourage protection for endangered species, they were reassigned or pressured to leave.

Will EPA employees be permitted to provide scientific information—including information that challenges or questions existing policies—without fear of losing their jobs or other retaliatory actions?

Response. Yes.

Question 15. According to an article in "High Country News" (May 27, 1996), outbreaks across the West in wild trout streams of whirling disease—a parasitic infec-

tion of trout and salmon that can deform the skeletal systems of wild fish species—was traced to a hatchery owned in part by you, Governor Leavitt, and two of your brothers. Since the State of Utah prohibited the release of hatchery-raised fish unless they are disease-free, your family was charged with 30 violations of State aquaculture laws. The article states that the fisheries chief who assisted in the case, Bruce Schmidt, was fired, along with 18 other mid-and upper-level management jobs in his department.

As Administrator of the EPA, will you fire those responsible for enforcing environmental regulations, if the regulated party is a family member or a colleague?

Response. This question and the article that is referenced are based on inaccurate information. As Governor, I have scrupulously avoided making statements or taking actions that could influence State regulations of the aquaculture industry. Personnel changes at the State Division of Wildlife Resources were unrelated to whirling disease and based on recommendations from a national consultant. They occurred as part of a statewide restructuring that impacted every State agency as I began my public service. The former Chief of Fisheries, Bruce Schmidt, made it clear in a public forum letter published in the Salt Lake Tribune that, "throughout the attempt to clean up whirling disease, the Governor had no direct involvement in the decisions made regarding the investigation or the negotiations on actions required to eliminate and/or contain the disease." (Salt Lake Tribune, 9/13, 2003.)

September 11 and White House Interference in EPA Decisionmaking

Question 16. There have been a number of incidents regarding inappropriate White House interference in EPA decisionmaking. The two most notable insights of White House interference come from a leaked memo regarding the June 2003 "Draft Report on the Environment," where the Administration pressured the EPA to remove all references to climate change, and a recent EPA Inspector General report that concluded that White House staff directed EPA to alter its press releases about environmental safety in New York City following the September 11 tragedy.

In contrast, Russell Train, former EPA Administrator, wrote the New York Times and said: "Having served as EPA Administrator under both Presidents Nixon and Ford, I can state categorically that there never was such White House intrusion into the business of the EPA during my tenure. The EPA was established as an independent agency in the executive branch, and so it should remain. There appears today to be a steady erosion in its independent status."

Governor Leavitt, do you agree with Mr. Train's view of the EPA? Will you stand up to the White House if they continue to interfere with EPA's responsibilities to provide unbiased scientific analysis, fully disclose environmental information, and enforce the nation's environmental laws?

Response. I will commit to you that the President will always know where I stand on issues. When presenting the President with an issue I will provide him with the facts as I understand them, the best available science and the opinions of EPA's staff.

PCB's Land Transfer

Question 17. Governor Leavitt, do you believe that government has an obligation to inform the public and its representatives when it changes its positions on issues critical to public health and the environment?

Response. I strongly believe it is EPA's duty to provide critical health information to the public that is reliable and accurate as soon as that information is gathered and validated.

Question 18. Governor Leavitt, do you believe that EPA should inform the public and its representatives of a decision to dramatically ease land reuse of parcels contaminated with polychlorinated biphenyls (PCBs), one of the most dangerous and persistent chemicals known to man, and a decision which overturns a 25-year understanding of statutory language, or should EPA make such a decision with no public participation, no announcement, and no data?

Response. I strongly believe it is EPA's duty to provide critical health information to the public that is reliable and accurate as soon as that information is gathered and validated.

Perchlorate

Question 19. Governor Leavitt, so you believe that it is EPA's responsibility to regulate contaminants in drinking water that threaten public health and the environment?

Response. I believe it is EPA's responsibility to take appropriate action to address threats to public health and the environment. That responsibility must be carried

out based on sound science and a consideration of all the relevant factors at issue within established statutory frameworks.

Question 20. Governor Leavitt, would you find it acceptable to delay issuing such a standard after decades, and hundreds, of studies confirming the dangerousness of a chemical?

Response. I am not familiar with the specific circumstances to which you allude. Every American deserves to have clean drinking water and, if confirmed, I will work to address drinking water issues as expeditiously as appropriate under the circumstances.

Question 21. Based on your responses above, will you commit to immediately finalizing a safe drinking water standard for perchlorate that is protective of the most vulnerable populations, specifically newborns, children and pregnant mothers?

Response. I will commit to working with the dedicated professionals at EPA to take appropriate action.

Question 22. As you may know, the State of California has what could be described as one of the most serious groundwater pollution problems caused by the rocket-fuel chemical perchlorate. The perchlorate pollution, which is impacting tens of thousands of my constituents in the San Bernardino County area, has forced several water providers to shut down or restrict use of approximately 20 groundwater production wells. More recently, several water emergencies have been declared in the area because of the pollution. The perchlorate pollution is located in an area formerly occupied by, among others, a Department of Defense weapons storage facility. The perchlorate contamination is causing severe water supply problems and is having serious negative consequences on economic growth and development in San Bernardino County.

A delegation of representatives from some of the impacted water providers will be coming to Washington on October 8, 2003, to meet with DOD Assistant Secretary John Woodley to develop solutions to this water crisis.

Governor Leavitt, I believe it is important for the new EPA Administrator to play a key role in developing a solution to the emerging perchlorate crisis. If you are confirmed, would you be willing to meet with representatives of the affected water providers on October 8, 2003, to assist in the review of the conditions associated with the perchlorate pollution and to develop solutions to this water crisis?

Response. I will commit to working with the dedicated professionals at EPA to take appropriate action.

Mercury

Question 23. Mercury is a potent neurotoxin that has made its way into the food supply, contaminating fish and posing a risk to people and wildlife that consume fish. Most at risk are children and the unborn. According to the Centers for Disease Control and Prevention (CDC), one in 12 women of childbearing age (8 percent) has blood mercury levels exceeding the EPA safe level for protection of the fetus. This translates into approximately 320,000 babies born annually in the United States at-risk for neuro-developmental delays. 44 States nationwide have issued advisories warning people to limit consumption of fish caught from inland lakes, streams and coastal waters.

EPA is under a court order to enforce the Clean Air Act and issue a rule by December 31 of this year to reduce toxic mercury emissions from coal-fired power plants, which are the largest unregulated source in the Nation. Because mercury is a potent toxin that, like lead, causes developmental delays in children at even tiny quantities, the Clean Air Act requires EPA to set standards based on the maximum amount that can be technologically reduced. The analysis was promised to be delivered to an advisory committee made up of industry, conservation groups, and others, but the meeting to review the data was canceled and they still haven't received it.

According to a New York Times report, EPA canceled the technical analysis needed to produce a credible mercury rule after EPA's top air official consulted with the White House on how to proceed.

Governor Leavitt, will you ensure that the Agency moves with all necessary speed to do this necessary analysis in time to produce the rule this year? Will you ensure that EPA shares this analysis with its advisory group in a timely manner to solicit their input?

Response. I am not familiar with all of the issues associated with this question, and, if confirmed, I would welcome the opportunity to learn more about the issue.

Question 23. As you know, the EPA has been aggressively promoting the Administration's "Clear Skies" legislation in Congress. Clear Skies would eliminate the mercury rule that EPA must propose by the end of the year and replace it with a standard that was picked by the White House. The standard that the White House picked

is far weaker than what EPA had recommended to the White House, according to press reports. No analysis was provided to justify using the weaker mercury numbers, and pointed out about, EPA is now refusing to complete its analysis. The major polluters in the electric utility industry are likely hoping that EPA will "cook the books" to justify a mercury rule that is as weak as the President's "Clear Skies" proposal.

The Clear Skies proposal is far weaker than faithful enforcement of the current Clean Air Act requirements. Environmental groups have obtained a secret briefing that EPA staff provided to electric utilities during this Administration. The briefing demonstrates that the Clear Skies proposal could allow as much as five times more mercury pollution than the current Clean Air Act in 2010.

Governor Leavitt, how do you intend to assure Congress and the public that the mercury standard in the Clear Skies proposal is at least what the Clean Air Act requires today?

Response. I am not familiar with the differing mercury standards. However, I am committed to implement the Clean Air Act. I expect to be briefed on the issue, if confirmed.

Enforcement

Question 24. According to an investigative report by the "Sacramento Bee", several EPA enforcement officials say they have been pressured by management to pad their enforcement statistics and make it look like they are pursuing more violations of environmental laws than they really are.

The statements by EPA officials and the information they provide appear to suggest an orchestrated effort to disguise the fact that EPA is pursuing fewer investigations than in the past. For instance, the "Bee" reported that EPA has lumped 190 counterterrorism-related investigations into its annual performance report to Congress that year, identifying them as EPA-initiated "criminal investigations." One senior EPA agent said: "I called the FBI and said, "If you need us, give us a call." That warranted a (criminal) case number. There was no investigation."

The "Bee" also reported that EPA agents said headquarters pressured them to open criminal investigations on weak leads and on pollution violations they knew had little or no chance of prosecution. "We were encouraged to do that—find anything that's got any breath to it and put a case number on it," one senior agent said. "We were approaching the end of a fiscal year. They wanted to make it look like a good year."

Governor Leavitt, will you commit to investigate this matter and ensure us that EPA will be completely forthcoming and transparent when reporting to Congress and the public on its environmental reporting?

Response. I am not familiar with the details of this issue, but if confirmed I commit to looking into it.

Clean Water

Question 25. Last year marked the 30th anniversary of the passage of the Clean Water Act. This law is one of the nation's great success stories. When the bipartisan legislation was passed, the Cuyahoga River was so polluted it burst into flames and the Great Lakes were nearly "dead." This sad state of affairs was due to reliance on weaker laws that failed to provide a strong Federal backstop providing protection for our waters. Over the past 30 years, the CWA has helped to clean up our waterways, ensure habitat for millions of bird .and other wildlife, and restore some of our most cherished waterways. While much progress has been made, about 40 percent of our waters are still not fit for swimming, fishing and other basic uses. There is still clearly much work to be done. And the States cannot do it alone.

Governor Leavitt, do you support a strong Federal role in enforcing the Clean Water Act so that all of our waters are fishable, swimmable and drinkable?

Response. Yes, I support a strong Federal role in enforcing the Clean Water Act.

Question 26. This year, the EPA announced that it would consider a proposed rule that would limit the scope of the Clean Water Act. By the EPA's own estimates some 20 million wetlands across the country—an area as large as Maine—have already lost Clean Water Act protection under the guidelines they issued to field staff in January. Countless numbers of wetlands, streams, ponds and other water bodies could be severely impacted if this rulemaking goes forward. In fact, during an initial public comment period 39 out of 42 State agencies that filed comments made clear they oppose proceeding with such a rulemaking.

Governor Leavitt, given your advocacy for giving the States more environmental authority where possible, how would you handle a situation such as this where a strong majority has stated it does not want to lose existing Federal protections?

Response. Over the last 11 years, I have had many opportunities to work on issues related to wetlands. Wetlands are a very important part of a natural heritage that we must protect. I have not been fully briefed on the issue, but if confirmed, 1 commit to you to consider the input from States and others in determining how to proceed on this issue.

Question 27. One of EPA principal responsibilities is implementing laws passed by Congress as interpreted by the courts. Several recent decisions in the Federal Courts, including two strongly worded decisions in the conservative 4th Circuit, have overwhelmingly affirmed that the Clean Water Act applies broadly to protect our nation's wetlands, streams and other waters. These recent Court rulings plainly demonstrate that no such rollback of Federal regulations is required under the law.

Governor Leavitt, will you, as Administrator, ensure that current regulations are kept in place and that the Clean Water Act is fully enforced under current regulations?

Response. If confirmed, I intend to fully comply with and enforce the Clean Water Act.

STATES' RIGHTS

Air Quality

Question 28. Governor Leavitt, are you a supporter of States' rights?

Governor Leavitt, under the Clean Air Act, California has been granted the right to regulate air pollution in many areas, as long as its regulations are at least as stringent as the Federal Governments'. The Clean Air Act also allows other States to opt into California's regulations. As EPA Administrator, would you strongly support this aspect of the Clean Air Act?

Governor Leavitt, would you as EPA Administrator support a rider that preempted States' rights under the Clean Air Act to more stringently regulate air pollution?

Response. As a Governor for 11 years, I respect the role of States. I recognize that, as Administrator of the EPA, my perspective would be somewhat different in that my new role would be a national one. I believe that we need National standards, but understand very well that you have to have room for "neighborhood" solutions.

California's Oxygenate Waiver

Question 28. Governor Leavitt, would you as EPA Administrator support or oppose a State's efforts to regulate air quality as long as it complied with the Clean Air Standards?

Response. If confirmed as Administrator, I would review the legal authority for a State to regulate air quality under the Clean Air Act, and work with the State to meet their goals within the parameters of the law.

Question 29. Governor Leavitt, California has applied for a waiver from the oxygenate standard as allowed by the Clean Air Act. Under the Clean Air Act, a State may be granted a waiver as long as it can demonstrate that air quality will be maintained. Would you support of oppose a waiver in this instance?

Response. I am not familiar with this particular issue but look forward to learning more about it, if I am confirmed as EPA Administrator.

Safe Drinking Water

Question 30. Governor Leavitt, under the Safe Drinking Water Act, States have the right to regulate drinking water standards more stringently than does the Federal Government. Do you support this principle?

Response: Yes.

Question 31. Governor Leavitt, would you as EPA Administrator support or oppose another agency's attempts to circumvent State safe drinking water standards?

Response. If confirmed, I intend to fully implement SDWA,

Right-to-Know

Question 31. Do you support the public's right to know through the EPA's Toxic Release Inventory Program (TRI) about toxic chemicals released into their air and water?

Response. Yes. The public needs information about the environment in their area. This type of information allows people to make informed decisions that affect their individual lives and communities. The Toxic Release Inventory, considered in context, can provide useful information for individuals and community planning.

Question 32. Unlike any other industry required to report under the TRI, the hardrock mining industry has been suing the Environmental Protection Agency in

order to be exempted from these reporting requirements. The EPA has, to date, been defending against the hardrock industry's attempts to weaken the public's right to know. You, however, sponsored a Western Governor's Association policy resolution siding with the industry to push for the weakening of the TRI program.

As EPA Administrator, would you support giving the hardrock mining industry a special break or continuing to ensure the public's right-to-know about toxics releases?

Response. As I stated at my confirmation hearing, you are referring to the TRI resolution that is regularly offered. That resolution, put forward at the Western Governor's Association, makes a very simple point: the public does have a right-to-know, but we should also make certain there is a context given to TRI reports.

Question 33. Administrator Whitman called the Toxic Release Inventory "a powerful tool to help citizens access local environmental conditions and to help them make decisions about protecting the local environment." As Administrator, will you fully support the public's right to know about pollution in their communities and oppose any rollback of current reporting requirements?

Response. The public needs information about the environment in their area. This information allows people to make informed decisions that affect their individual lives and communities. The TRI, considered in context, can provide useful information for individuals and community planning.

Global Warming

Question 34. You have expressed your support for the National Governors Association (NGA) policies on global warming. The NGA opposes the Kyoto Protocol and favors voluntary measures to reduce carbon dioxide and other greenhouse gas emissions.

The current Administration has failed to address carbon dioxide emissions that contribute to global warming. In June 2003, the EPA and the White House decided to delete information on global warming in its "State of the Environment" report. In July 2003, the Bush Administration released its 10-year Climate Change Science Program. Rather than direct funds on ways to address global warming, this plan calls for more studies and no action on this important issue. Most recently, the EPA announced that it lacks authority under the Clean Air Act to regulate carbon dioxide and other greenhouse gas emissions from automobiles. Therefore, the EPA will not force automakers to reduce greenhouse gas emissions from automobiles.

Do you believe carbon dioxide should be regulated?

As EPA Administrator, what actions would you take to address the problem of carbon dioxide emissions and global warming?

Response. A passive approach to address climate change is insufficient. The President has proposed a series of immediate, deliberate actions that I fully support: establishment of a national goal on the reduction of greenhouse gas intensity, substantial increases in research, partnerships within the international and industrial sectors, new agriculture sequestration projects, and focus on new technologies.

Standards in Decision-Making

Question 35. Governor Leavitt, this EPA has frequently relied on anecdotes when rolling back environmental regulations, such as New Source Review and PCB-land transfers, but requires years, if not decades, of rigorous scientific study when considering whether or not to regulate to protect public health and the environment, such as a safe drinking water standard for perchlorate and the regulation of carbon dioxide emissions.

Do you believe that regulations rolling back public health and regulations protective of public health should be subject to the same rigorous scientific standards? What do you believe these standards should be? If you do not believe that the same standards should be applied in both types of cases, please explain why not.

Response. The quality of science that underlies EPA's regulations is vital to the credibility of EPA's decisions and ultimately the Agency's effectiveness in protecting human health and the environment. I am committed to ensuring that sound science plays a prominent role in all EPA regulatory decisions.

PBDEs

Question 36. Recently, studies show elevated levels of PBDEs in breast milk. Other studies have shown that human exposure to PBDEs comes mainly from the ingestion of dietary products such as fish and cow's milk or through air borne contaminants. What measures should be taken to prevent ingestion and lower PBDE levels found in the human body?

Response. I fully support EPA's mission to protect human health and the environment. I am not familiar with the specific scientific findings or studies on PBDEs.

If confirmed, I would need to have more information before forming an opinion on this matter.

Question 37. PBDEs are used in only one-fourth of flame-retardants. There are over 200-plus different commercial flame retardant chemicals in use today. According to the Environment California Research and Policy Center, the best alternatives have no acute or chronic effects on health or the environment, have a minimum release during production and are able to suppress the formation of smoke and hazardous fumes during fire. Since PBDEs do not meet all of these and other necessary standards and have been shown to be harmful, should the EPA recommend that manufacturers cease the use of PBDEs?

Response. I would like to be more fully briefed on the effects of PBDEs and their alternatives before expressing an opinion. I do believe that EPA should continue to use high quality science to guide its decisions.

Question 38. PBDEs have repeatedly been said to cause neuro-developmental damage, especially in fetuses and small children. How much information does the EPA need before the Agency will take steps to completely eliminate the use of PBDEs?

Response. I fully support EPA's mission to protect human health and the environment, including the initiative to protect children's health. I firmly believe that public policy decisions should be based on the best available science and data. If confirmed, I would like to understand in greater depth and detail the data, issues, and perspectives associated with this complex subject before forming an opinion on this matter.

Santa Susana Field Laboratory Cleanup

Question 39. There is a contaminated nuclear facility in Southern California called the Santa Susana Field Laboratory (SSFL). For a decade, at the bipartisan urging of the relevant legislators, EPA has been deeply involved in overseeing the cleanup of the site. If confirmed, will you continue to maintain the same, or greater, level of EPA commitment, resources, and activity regarding the cleanup of SSFL?

Response. I am not familiar with the Santa Susana Field Laboratory. However, if confirmed, I am committed to EPA's efforts to protect human health and the environment through the cleanup of contaminated sites.

Question 40. A DOE-EPA Joint Policy in 1995 requires all DOE sites, irrespective of whether they are on the NPL, to be cleaned up consistent with EPA's CERCLA guidance. EPA repeatedly committed to me, in the words of the previous Administrator, that EPA would "ensure that the cleanup is consistent with Superfund cleanup standards." Will you, if confirmed, maintain that commitment?

Response. I am unfamiliar with the policy document referenced in your question. However, If confirmed, I am committed to EPA's efforts to work with other Federal and State agencies to clean up contaminated sites.

Question 41. EPA also previously committed that it would conduct an independent radiation survey at the site, to its CERCLA cleanup levels. Will you, if confirmed, maintain that commitment? And, if DOE balks at funding the survey, will you request sufficient funds in EPA's budget?

Response. I am unfamiliar with the radiation survey referenced in your question. If confirmed, I commit to learning more about this issue.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR WYDEN

Question 1. There are 15 communities in Region 10 that have combined sewers. Knowing that all the communities in Oregon have enforceable orders with the State to control combined sewer overflows (CSOs), why was the city of Portland targeted for investigation?

Question 2. The U.S. Environmental Protection Agency (EPA) received copies of the agreements entered into between the City and the State of Oregon back in 1991 and again when the agreement was amended in 1994. EPA began looking into Portland's efforts in February 2001, 10 years after the City had first signed an enforceable order with the Oregon Department of Environmental Quality. Why did the Agency wait for 10 years to ask questions about the city of Portland's program?

Question 3. The city of Portland is more than halfway toward meeting its goal of a 96 percent reduction in combined sewer overflow volumes. This is a more stringent reduction level than many communities around the country are committed to achieve, and more stringent than EPA guidance. Why would EPA spend scarce re-

sources to pursue a community already on schedule to go beyond what EPA has approved elsewhere?

Question 4. The city of Portland has spent over $100,000 in expenses and staff time to respond to your requests for information, visits, tours, and meetings. How much money has EPA spent on staff time, travel and the use of consultants to undertake this two and a half year effort?

Question 5. The July 7, 2003 letter from Department of Justice claims EPA finds the City to have violated the Clean Water Act because they have had hundreds of CSO events during the past 5 years. How is it possible given that the order signed by the State and the City expressly contemplates CSOs will continue until the abatement program is completed in 2011? Does this mean that the Federal Government does not recognize the CSO abatement orders issued by the State of Oregon?

Question 6. The July 7, 2003 letter discusses the need for the Federal Government to collect penalties from the City. The Portland community has already spent over $500,000,000 of local ratepayer money since 1991 to attack the CSO problem. They will undoubtedly spend at least that much during the next 8 years to finish the job they have already begun. What purpose would a financial penalty serve? What is the economic benefit the City has enjoyed during the past 10 years when sewer rates have tripled to address the very problems all of us are interested in solving?

Response 1–6. As we discussed in our earlier meeting, I am not familiar with the facts of this case. Until confirmed, I am not privy to the details of ongoing enforcement actions or of the government's position, but look forward to being briefed on the subject.

Question 7. In order to evaluate EPA's actions in connection with the city of Portland's Combined Sewer Overflow program, I am requesting the following documents concerning this matter:

- All correspondence, including electronic mail, regarding the Environmental Protection Agency's and your consultants' 2001–2003 inquiry into the city of Portland's Bureau of Environmental Services operation of its wastewater treatment and collection system; compliance with the Combined Sewer Overflow and Separate Sewer Overflow provisions of the City's National Pollution Discharge Elimination System (NPDES) permits (Columbia Boulevard and Tryon Creek Wastewater Treatment Plants); and compliance with Department of Environmental Quality (DEQ) Amended Stipulation and Final Order, No. WQ-NWR–91–75, dated August 11, 1994 regarding the city of Portland's combined sewer system.
- All notes, summaries, communications, meeting schedules, requests for information and documents regarding Portland's compliance with requirements for combined sewer overflow control.
- All correspondence, guidance, initiatives, memoranda, enforcement initiatives or other materials related to EPA's request of the city of Portland for information regarding operation of wastewater treatment and collection systems and compliance with the Combined Sewer Overflow and Separate Sewer Overflow provisions of NPDES permits, within the past 3 years.
- All correspondence, including electronic mail, guidance, initiative, memoranda, and documents or other materials relating to national, regional or local policies regarding the administration of the Underground Injection Control (UIC) program within the State of Oregon within the past 3 years.

Response. Because this is an ongoing enforcement action, I do not have access to any documents.

Question 8. Recently, when Oregon Governor Ted Kulongoski spoke with the President, he made funding the cleanup of the Portland Harbor Superfund site a top priority. If confirmed as EPA Administrator, will you support additional funding for Superfund cleanup projects, including the cleanup of one of the core pieces of transportation infrastructure in the Pacific Northwest—the Portland Harbor? Specifically, will you support the full funding of the McCormick & Baxter cleanup currently estimated at $10 million and for cleanup of the larger Portland Harbor site estimated at $200 million plus?

Response. I am aware of but not fully familiar with the Portland Harbor Superfund site. If confirmed, I am committed to the effective and efficient use of the Superfund.

Question 9. In your written testimony to the committee, you described a successful collaboration to clean up groundwater contamination from the Kennecott Copper Mine that threatened the water supply of Utah's population that was done outside the Superfund program. Aside from the dollars Oregon is seeking to aid in cleanup, would you be willing to work with the State, the local community and other inter-

ested parties to move forward to clean up the Portland Harbor site as quickly as possible, including alternatives outside the Superfund program?

Response. As a Governor, I am committed to a strong State-Federal partnership to protect the environment and public health. If confirmed, I will seek the input of the States in determining how best to support their efforts and how to tailor our support to address their most pressing needs. With regard to Portland specifically, I am not privy to the details and therefore cannot comment at that level of detail.

RESPONSES BY GOVERNOR MICHAEL O. LEAVITT TO PRE-HEARING QUESTIONS FROM SENATOR WYDEN

Question 1. There are 15 communities in Region 10 that have combined sewers. Knowing that all the communities in Oregon have enforceable orders with the State to control combined sewer overflows (CSOs), why was the city of Poland targeted for investigation?

Question 2. The U.S. Environmental Protection Agency (EPA) received copies of the agreements entered into between the City and the State of Oregon back in 1991 and again when the agreement was amended in 1994. Your agency began looking into Portland's efforts in February 2001, 10 years after the City had first signed enforceable order with the Oregon Department of Environmental Quality. Why did the agency wait for 10 years to ask questions about the city of Portland's program?

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Response to Questions 1–6. I am not familiar with the facts of that case. Until confirmed, I am not privy to the details of ongoing enforcement actions or of the government's position.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR CARPER

Motiva Oil Refinery and Consent Decree

Question 1. The nation's largest single source of airborne sulfur dioxide emissions is located in Delaware. The Motiva refinery, in Delaware City, has been a source of problems for decades and a major contributor to the air quality problems in Delaware and New Jersey. In 2001, the EPA, DNREC, and Motiva finally entered into a consent decree to reduce sulfur emissions by installing modern pollution controls on the two major sources of pollutions—the coker and the cracker by the end of 2003 and 2004 respectively. Unfortunately those deadlines will not be met because earlier this year discussions about what type of emissions control should be used led to delays and eventually a revised consent decree proposal. I asked Governor Whitman, who was Administrator at the time, to become personally involved and not allow the elements of the original consent decree to be weakened in any way. She agreed to that and I think was working in good faith with us in Delaware until her departure this summer.

Are you familiar with this consent decree?

Response. I became aware of this situation through our discussions. However, I am not familiar with the details of this consent decree. If confirmed, I look forward to the opportunity to learn about this matter and others undertaken by EPA to ensure that the health and environment of our citizens are protected.

Question 2. Will you commit to work with me, with Senator Biden, and with the people of Delaware to do all that is necessary to reduce emissions at the refinery as soon as possible?

Response. If confirmed, I commit to working with you, Senator Biden and the community to address your concerns. I look forward to learning more about this and other environmental issues in Delaware.

Question 3. Will you personally review the proposed amendment to the consent decree to determine the delays and changes it includes are appropriate and if they are not, will you block it from taking effect?

Response. If confirmed as EPA Administrator, I would welcome the opportunity to learn more about the consent decree to understand whether the changes it includes are appropriate.

CO_2 and Global Warming

Question 4. The committee is currently considering several legislative proposals that would place, for the first time, mandatory controls on the emissions of CO_2 and some other greenhouse gases. Senator Jeffords and I have both offered proposals addressing electric power plants, and Senator Lieberman has an even broader bill addressing CO_2 emissions economy-wide. The President, during his campaign, even supported controlling CO_2. However since he took office his position has changed, although the facts have not. I have several questions on this topic:

1. What is your position on global warming?
2. Do you believe the science to date indicates global warming is happening?.
3. Do you believe emissions of greenhouse gases can continue uncontrolled indefinitely without any negative impact?

Response. A passive approach to address climate change is insufficient. The President has proposed a series of immediate, deliberate actions that I fully support: establishment of a national goal on the reduction of greenhouse gas intensity, substantial increases in research, partnerships within the international and industrial sectors, new agriculture sequestration projects, and focus on new technologies.

Draft Report on the Environment

Question 4. Apparently internal documents at the EPA, which were released to the press earlier this year, suggest that staff at the White House attempted to force the Agency to rewrite information on global warming in its "Draft Report on the Environment". Administrator Whitman made the decision to delete the global warming chapter from the report rather than print false information, but the net result is that the White House has placed what amounts to a gag order on the EPA when it come to discussing global warming and climate change.

Since the report is officially still in draft form, will you agree to review the data, and the edits that occurred including those made by the White House, and consider reinserting the global warming chapter as originally written by the staff at the EPA?

Response. I applaud Administrator Whitman for this valuable report on a wide range of topics relating to the environment. I am not familiar with all of the issues you have raised but, if confirmed, I welcome the opportunity to learn more on this topic.

Clean Air

Question 5. Following up on a point I made in my opening statement, one of the expectations members of the Senate have of the EPA is that it provide reliable, unbiased, information on the various proposals we are asked to consider. Unfortunately during the past 2 years that has not occurred as much as it should. As I think Senator Jeffords mentioned, there is a large backlog of requests that members of this committee have made of EPA which remained unfilled. I am concerned about all of those, however I am particularly concerned about a request I discussed with Governor Whitman earlier this year to provide comprehensive analysis of the Clean Air Planning Act. Given the fact that the President has asked this committee to consider the Clear Skies Act, and we have been provided substantial analysis from EPA of that bill, it seems only fair that we also be provided comparable analysis of the alternatives including my bill and that of Senator Jeffords.

I am concerned that the analysis EPA is planning to conduct of my bill will not provide what I asked for—which is a complete analysis of the bill with the concept

of 4-P (four pollutants) included from the beginning, rather than a 3-P bill with carbon tacked onto the end.

Will you agree to have EPA conduct a rigorous, comprehensive analysis of both the costs and benefits of these two other proposals?

And will you see that such an analysis does not use the results of the Clear Skies analysis and simply modify them to fit the dates and rates of our bills, but rather starts the analysis with fresh assumptions and criteria appropriate to the scenarios described in those two bills, including their requirement for mandatory carbon controls?

Response. As I stated at the hearing, if confirmed, it is my intention to work with you directly, straightforwardly, and in a way that would supply us both with information needed to meet our common goal of clean air.

Changes to Definition of a Wetland

Question 6. This year, the EPA announced that it would consider a proposed rule that would limit the scope of the Clean Water Act and the wetlands that it has traditionally been applied to. By the EPA's own estimates some 20 million acres of wetlands—an area the size of Maine—lost Clean Water Act protection under the guidelines issued to EPA field staff in January. Additional wetlands, streams, and ponds, and other waterbodies could be severely impacted if the proposed rulemaking goes forward. During the initial public comment period on the rule, 39 out of 42 State agencies that filed comments made it clear that they oppose the rule as drafted. Delaware was one of those 39 who asked that the rules not—be changed, particularly because it will leave isolated freshwater wetlands—common in Delaware—with no protections because the State has relied upon Federal law to date, and no comparable State authority exists to prevent loss of these important wetlands.

Given your position of encouraging the States to have more environmental authority where possible, how would you approach a situation such as this where a strong majority has stated it does not want to lose existing Federal protections?

Response. Over the past 11 years, I have had many opportunities to work on issues related to wetlands. Wetlands are a very important part of a natural heritage that we must protect. I have not been fully briefed on this issue, but I commit to you to consider the input from States, and others in determining how to proceed.

Total Maximum Daily Load Rules

Question 7. The EPA has been subject to numerous lawsuits regarding its Total Maximum Daily Load rules over the past decade. As a result, the Agency has compiled a list of the lawsuits. However, do you know, or can you find out, if the Agency has compiled a list of waters that have been successfully cleaned up and removed from the program? If not, would you create such a data base?

Response. I am not privy to such information and do not presently understand the nuances of the issue well enough to commit to creating such a data base.

Mercury MACT Process

Question 8. Under the Clean Air Act and a court-approved settlement agreement, EPA is required to propose regulations by December 15, 2003 limiting mercury emissions from power plants. The Clean Air Act requires those regulations to reflect the limitations achieved by the best-controlled sources in the source category. (The actual Clean Air Act language is "the average emission limitation achieved by the best performing 12 percent of the existing sources. . . .")

EPA established a stakeholder group that met once a month from mid–2001 to early 2003. At EPA's request, the various stakeholders within the group generated numeric recommendations for a standard. Throughout the lifetime of the stakeholder group, EPA indicated repeatedly that it would use the recommendations to run IPM models of possible approaches to a standard. At least four meetings of the group were scheduled with the explicit commitment by EPA that IPM results would be presented—but they never were. Ultimately, the group was disbanded without its recommendations being modeled.

EPA also committed to the stakeholder group repeatedly to having a draft of the rule by June 2003, but this did not happen either. In light of the fact that the Office of Management and Budget typically takes 90 days to review a proposed rule before its release, and given that the proposal is required by December 15, the Administration is clearly way behind schedule.

The reason for this situation is obvious: The Administration claims that Clear Skies will result in a 70 percent reduction in mercury emissions from power plants. The problem with this figure is that it refers to reductions from CURRENT emission levels. A much more meaningful comparison is between Clear Skies emission levels and business-as-usual levels. If EPA were to model the stakeholder recommendations or to come out with a draft rule that was fairly based on the recommendations,

it would be clear that under Clear Skies mercury emissions from power plants in the 2008/2010 timeframe would far exceed what they would likely be under the Clean Air Act.

As Administrator of EPA, would you assure that regulations limiting mercury emissions from power plants are promulgated by the December 15, 2003 deadline?

Response. I am aware that this situation exists, but I am not familiar with all of the issues associated with this question, and, if confirmed, I would welcome the opportunity to learn more about the issue.

Question 9. EPA solicited recommendations for a mercury emissions standard for power plants from the stakeholder group that it established, and made repeated commitments to the group to run IPM models based on the recommendations. Further, in recent years the Agency has used the IPM model in developing major rules. As Administrator, would you use the IPM model in arriving at a proposed mercury rule? If not, why not?

Response. As Governor of Utah, one of my major tenets was the use of sound science and analysis in making informed public policy decisions. If confirmed, scientific and economic analysis will be continue to play a major role in EPA policy.

Question 10. The Clean Air Act requires that regulations for mercury emissions from power plants reflect the limitations achieved by the best-controlled sources. If the Administration promulgates a standard that fairly reflects that requirement, it will be obvious that Clear Skies would be much weaker than the Clean Air Act in dealing with mercury emissions from power plants. As Administrator, how would you deal with this dilemma?

Response. I am still learning about this issue, but if confirmed I intend to comply with all legal requirements.

Request for Updates on the Status of Several Rules/Regulations/Actions

Question 10. Governor Leavitt, As is always the case the EPA is working on a number of rules and proposals.

To name just a few, they include the new 8-Hour Ozone Standard, the PM 2.5 Standard, the Non-Road Heavy Duty Diesel Rule, Air Toxics from Mobile Sources. Attached is a list of 11 rules or regulations that I understand are forthcoming from the Agency.

1. Please provide an update on the status of each of these 11 items.

2. Will you commit to seeing that each of these proceed forward without delay?

I suspect a new EPA Administrator would get an update on these as part of your "orientation" to the job, and I ask that you share that information with us on the committee.

Response. The status of each of the deadlines for the topics set forth in your request is not known to me. If confirmed, I look forward to learning more about each of these important areas and the actions EPA is undertaking to ensure its obligations under the Clean Air Act are met in a timely manner. I am committed to providing cleaner air for the public and will make every effort to ensure that EPA meets applicable deadlines.

RESPONSES OF GOVERNOR MICHAEL O. LEAVITT TO ADDITIONAL QUESTIONS FROM SENATOR CLINTON

Question 1. On Wednesday, January 15, the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) published in the Federal Register an Advance Notice of Proposed Rulemaking (ANPRM) raising questions about the jurisdiction of the Clean Water Act (CWA). Simultaneously, they released guidance to their field staff regarding Clean Water Act jurisdiction over certain non-navigable, intrastate, isolated waters.

Both the ANPRM and guidance represent attempts to remove Federal protection from many waters (including many creeks, streams, small ponds, and wetlands) that have been protected by the Clean Water Act for 30 years.

Do you support the proposed rulemaking to limit the types of streams, wetlands, ponds or other waters that are covered by the Federal Clean Water Act? If so, which waters do think should not be regulated by the EPA or Corps?

Response. Over the last 11 years, I have had many opportunities to work on issues related to wetlands. Wetlands are a very important part of a natural heritage that we must protect. I have not been fully briefed on the issue, but if confirmed, I commit to you to consider the input from States and others in determining how to proceed on this issue.

Question 2. Agencies from 39 States submitted comments to the Bush Administration indicating that they oppose the proposal to restrict the waters that receive Fed-

eral Clean Water Act protection. Many stated that they lack either the legal tools or financial resources to protect all of the waters in their States without the Clean Water Act. Would you support restricting Federal protections even if States opposed such a move?

Response. If confirmed, I intend to utilize a process that takes into consideration input from States, tribes, and local government as well as other interested parties.

Question 3. As Governor of Utah, have you supported any proposal to restrict the scope of the Clean Water Act's jurisdiction, or allow States to determine which waters should be protected by water quality standards?

Response. The State is implementing the Clean Water Act. However, this question may be interpreted to apply to numerous actions or statements regarding the Clean Water Act. During my tenure as Governor, State agencies have made recommendations regarding various aspects of the Clean Water Act and its reauthorization. Both Western Governors Association and National Governors Association have adopted resolutions regarding various aspects of the Clean Water Act and its reauthorization. The State of Utah has been involved in plans to construct the Legacy Highway and in the judicial challenge to the project; aspects of the Clean Water Act are under consideration in this matter. The State is from time to time named as a party in a lawsuit, based in part on some aspect of implementation of the Clean Water Act.

Question 4. If you determined at some point that there was a need to redefine which waters are covered by the Clean Water Act, would you commit to bring such a proposal to this committee and to Congress in the form of legislation rather than making changes to the scope of the law through regulatory changes?

Response. Before I could make a determination whether a legislative fix was needed, I would need to be briefed fully on the issue.

One of the earliest and biggest controversies of this Administration's environmental policies was the effort to reopen the rule that lowered the Safe Drinking Water Act standard for arsenic in drinking water from 50 parts per billion to 10 ppb.

Question 5. If confirmed, would you be aggressive in enforcing the Clean Water Act especially in guiding the cleanup of Onondaga Lake and the Hudson River? Would you use your authorities under the Clean Water Act to regulate ships' ballast discharges in the Great Lakes?

Response. I will be aggressive in enforcing the Clean Water Act. As I said in my confirmation hearing, if there are those who avoid or evade the requirements of the law the full weight of the EPA and the law will be brought to assure their compliance.

I am not familiar with the issue of regulating ballast water discharges by ships into the Great Lakes, but if I am confirmed I will look closely at the issue.

Question 6. As Governor of Utah, did you (individually or as part of the Western Governors Association) or your State agencies take any position with respect to the arsenic in drinking water rule?

Response. Yes, the Utah Division of Drinking Water took a stance that 10 ppb was too low a standard and that 20 ppb would have been a better standard. The Division of Drinking Water based their position on a study that EPA funded in 1997, and published in the Environmental Health Perspectives Volume 107, Number 5, May 1999. The study is entitled "Drinking Water Arsenic in Utah: A Cohort Mortality Study". In the concluding paragraph, the statement is made:". . . cohort members contributed many years to the highly exposed group and some died at an advanced age with no perceived adverse effects, . . ." The Division staff felt that the old standard of 50 ppb was too high, and that additional studies were needed to determine dose/response relationships at the lower 3–10 ppb level that was being proposed.

Question 7. A February 2003 EPA report on Clean Water Act enforcement rated Utah dead last—tied with Ohio and Tennessee—on Clean Water Act enforcement. The report rated the State using a number of factors, and Utah scored very poorly in each category.

Can you explain why Utah was rated last in this report?

Response. I inquired of the Utah Department of Environmental Quality and was supplied with the following information. At the time the reports were pulled from the EPA PCS data base, our data entry was incomplete; the missing data were flagged as violations. Other data were incorrect. The data are now current, and Utah's low rate of noncompliance ranks with the 10 best States in the Nation.

I am informed that of the Kennecott violations cited in the report, five of the six were not actual violations. Three of the reported violations were due to data entry errors in PCS, one was a reporting error by the permittee, and one appears to be

a problem with the PCS system itself. The data base has been corrected. One item which is flagged as a violation is for a compliance schedule being missed on a special environmental project done by a third party. This information should not have been coded into PCS in the first place and is not a Kennecott violation. The reported 900 percent exceedance of mercury was due to an error in the coding of the effluent limits. Their actual discharge did not exceed permit limits.

Question 8. As Governor, did you or your State environmental agencies ever oppose US EPA efforts to enforce Federal laws like the Clean Air Act, Clean Water Act, hazardous waste laws or other laws overseen or administered by EPA? If so, can you provide the committee with a list of any such incidents?

Response. I support implementation of the Clean Air Act, the Clean Water Act, and other laws administered by EPA In 1994, the State of Utah filed a petition in the Federal 10th Circuit Court of Appeals challenging decisions by EPA that 1) Utah's request to redesignate the Salt Lake and Davis Counties Area from a nonattainment area for ozone to an attainment area was incomplete and 2) Utah had failed to timely submit SIP revisions thereby starting a clock that could lead to imposition of sanctions to include restrictions on the use of highway funds. EPA had also informed the State that the finding of incompleteness triggered a ban on conformity findings for new transportation projects. Subsequent actions by EPA offered to Utah an opportunity to submit a reorganized request for redesignation. Utah accepted the offer and EPA withdrew its finding of incompleteness and conformity ban. Utah submitted a revised plan and EPA determined it was complete. Further, EPA initiated rulemaking and determined the State had attained the ozone standard redesignating Salt Lake and Davis Counties to attainment. The case was therefore voluntarily dismissed by agreement of Utah and EPA in 1995.

Utah has also filed Amicus Briefs supporting EPA's adoption of Clean Air Act regulations.

There have been hundreds of compliance actions by the State and EPA during the last decade conducted cooperatively which reflect the State-Federal partnership we have tried to create.

Question 9. Under this Administration, enforcement of many laws administered or overseen by EPA has declined.

If you were Administrator, what specific steps would you take to address this problem? Can you pledge to this committee that enforcement levels—number of civil and criminal cases filed, and size of penalties—would be restored to previous levels? Would you support bringing the number of EPA enforcement staff back to previous (FY 2001) levels?

Response. As I said in my confirmation hearing, if there are those who avoid or evade the requirements of the law the full weight of the EPA will be brought to assure their compliance.

Question 10. Aquatic invasive species are an enormous problem for the Great Lakes which alter the food chain and habitat of native species and cause hundreds of thousands of dollars of damage for industry each year.

Are you aware of the problem of aquatic invasive species and do you support having the EPA take a more active role in preventing new invasions?

Response. I am not familiar with the particulars of the impact of aquatic invasive species on the Great Lakes, but I am interested in learning more about this issue and the appropriate role for EPA in addressing the problem.

Question 11. Research over the past decade has demonstrated that children and the elderly are more vulnerable to a variety of environmental health hazards, and that some populations, particularly low-income and minority communities, face greater exposures to such hazards.

How will you assure the protection of the health of those who are most vulnerable? How will vulnerable populations be considered as EPA sets health and safety standards? What steps will you take to reduce health hazards to those who face higher exposure levels?

Response. I certainly believe it is important to protect sensitive populations from exposure to environmental hazards. I am not familiar with EPA's specific efforts to consider sensitive populations in its rules and policies. If confirmed, I look forward to learning more about what the Agency is doing in this regard and in having the Agency play a leadership role in protecting children, the elderly, and low income and minority communities.

Question 12. In discussing how the implementation of environmental policies and programs should be guided by cost/benefit approaches, the "Enlibra Principles" you promote, as adopted by the Western Governors Association, say "not all benefits and costs can be easily quantified or translated into dollars. There may be other noneconomic factors such as equity within and across generations that should also be

fully considered and integrated into every assessment of options. The assessment of options should consider all of the social, legal, economic and political factors while ensuring that neither quantitative nor qualitative factors dominate." I commend you for acknowledging the importance of qualitative as well as quantitative issues, and for recognizing the impact of our actions across generations.

How would you go about incorporating these principles in Federal policy? What changes to our current cost/benefit process do you espouse?

Response. Enlibra is a philosophy. One of the principles is to recognize benefits and costs. The rationale is simple: we can make better decisions if we are fully informed, including quantitative and qualitative factors. I do not have sufficient information, and it would be premature to recommend specific changes to how benefit-cost analysis is done in the EPA.

Question 13. A strong and effective Office of Children's Health Protection (OCHP) is vital to ensure that the EPA's standards and regulations protect children from environmental health and safety hazards. I believe the OCHP, in collaboration with public health agencies such as the Centers for Disease Control and Prevention, can be instrumental in improving the EPA's research efforts to evaluate the impacts of environmental exposures on children's health and to develop the strongest and best protective measures.

Do you agree with these statements? How do you see the role of OCHP in your EPA? Will the OCHP continue to report directly to you? The Office has been without a permanent director since March 2002, and substantial new responsibilities have been placed in it without commensurate increases in staff and resources. How will you address these problems?

Response. I agree that EPA needs to take a leadership role to protect children from environmental hazards. I am not familiar with the responsibilities of the office you mention or the particular situation with its director or staff resources. If confirmed, I look forward to learning more about this office and its efforts to protect children's health.

Question 14. There are currently 12 Centers for Children's Environmental Health and Disease Prevention Research Centers, two of which are based in New York, one at Mt. Sinai Medical Center and another at Columbia University. The 12 centers combine a multidisciplinary approach to researching, identifying, treating, and ultimately preventing health risks posed to children by environmental hazards in the communities in which they live, play and attend school. The research and outreach that these centers initiate is unparalleled. The centers have not only begun important studies into the potential impacts of our environment on children's health, but have also cultivated invaluable relationships with their surrounding communities.

As you may know, these Centers are jointly funded by the EPA and the National Institute for Environmental Health Sciences (NIEHS). However, the EPA cut their portion of the funding by $1.5 million a year in the 2004 budget, which would essentially leave funding for only 10 centers in the next cycle. Withdrawing support for these programs at this time would weaken the development of these important studies and thwart, rather than foster, the unique community-university relationships that have already been established.

Will you support maintaining funding for these centers in your budget requests so they can continue research efforts on behalf of our nation's children?

Response. I agree that research efforts involving children and other sensitive populations are very important. I would need to be fully briefed before making any decisions on funding of research efforts in this area.

Question 15. The EPA plan to clean up the Hudson River was finally completed after 10 years of analysis. This project is essential to ensuring environmental and public health safety for New Yorkers. This long awaited project gives hope to residents that dredging will cleanup the most contaminated parts of the river, and bring the river's condition to acceptable health and safety levels.

If confirmed, will you support implementation of the Hudson River plan and do everything within your power to ensure that the cleanup proceeds as expeditiously as possible? Further, will you commit to an open and transparent process that provides adequate opportunity for input from the public and all interested parties?

Response. I am certainly committed to an open and transparent process for information sharing and public input. I look forward to learning more about this site and working with communities and other interested parties as the project proceeds.

Question 16. In my time in the Senate, I have witnessed the economic and community benefits of the brownfields programs throughout New York State. New York has the potential to become a leader in the redevelopment of brownfields—thus far it has created jobs, spurred economic development and recycled acres of New York lands. I have co-sponsored the Brownfield Site Redevelopment Assistance Act, and

the Brownfield Revitalization and Environmental Restoration Act of 2001, which was signed into law in January 2002. This law created a significant new influx of Federal resources into brownfield redevelopment activities. The expansion in Federal resources makes it more important than ever that communities across New York State are aware of and able to take advantage of available resources.

Will you support full funding for this important program at its authorized levels in your budget requests?

Response. I am a strong supporter of the cleanup and redevelopment of Brownfield properties. If confirmed, I commit to continue EPA's efforts to provide funding to help State and local governments cleanup and redevelop Brownfield properties.

Question 17. As you are well aware, the EPA recently issued its final rule regarding New Source Review. This new rule which allows plants to get out of placing pollution controls when they replace equipment, even if the new equipment would increase pollution, would have a significant negative effect on New York's environment. As it is, medical evidence strongly links air pollution to asthma attacks, heart attacks, cardiopulmonary disease, cancer, and premature death. The American Lung Association's "State of the Air 2002" report notes that Staten Island had 37 unhealthy air days due to high ozone levels, while Manhattan had 36, Suffolk County on Long Island had 34, and Chautauqua County had 28 between 1998 and 2000. This acid deposition has caused 20 percent of the lakes in New York's Adirondack Park region to become too acidic to support fish life. Federal studies conclude that the percentage of acidified lakes is expected to increase or even double over the next four decades unless upwind emissions of nitrogen oxides and sulfur dioxide, primarily from coal-fired power plants, are reduced.

Will you suspend implementation of these rules, pending a thorough study of its impacts on human health and the environment?

Response. I am aware that there are differing perspectives concerning the recent changes made by EPA to the New Source Review program. If confirmed, I would like to understand in greater depth and detail the data, issues and perspectives associated with this complex subject.

Question 18. Prior to becoming Governor, you were part owner in a fish hatchery, which reportedly spread the fish pathogen "whirling disease" by conducting illegal transfers of infected fish throughout Utah. The farm's owners were reportedly charged with 33 counts by the Utah Attorney General, including the charge of operating a fish-hatchery without a license. It has been reported that once you took office as Governor, 71 employees of the Utah Division of Wildlife Resources were fired, demoted or left the Agency, including those involved in the investigation of the fish hatchery that you . In addition, it has been reported that regulation of commercial fish hatcheries was subsequently removed from Utah's Department of Fisheries and transferred to an advisory committee comprised primarily of fish industry executives.

Are these reports accurate? Can you explain why you made these changes in personnel and the way in which hatcheries are regulated in Utah?

Response. This question and the article that is referenced are based on inaccurate information. As Governor, I have scrupulously avoided making statements or taking actions that could influence State regulations of the aquaculture industry. Personnel changes at the State Division of Wildlife Resources were unrelated to whirling disease and based on recommendations from a national consultant. They occurred as part of a statewide restructuring that impacted every State agency as I began my public service. The former Chief of Fisheries, Bruce Schmidt, made it clear in a public forum letter published in the Salt Lake Tribune that, "throughout the attempt to clean up whirling disease, the Governor had no direct involvement in the decisions made regarding the investigation or the negotiations on actions required to eliminate and/or contain the disease." (Salt Lake Tribune, 9/13, 2003.)

Question 19. Concerned Utah citizens have brought several environmental enforcement cases to my attention that I would like your comments on. According to the information provided to me:

- The Phillips Refinery, in the populated Wasatch Front of Utah, emitted excessive amounts of sulfur more than 1,000 times between September 1994 and November 1997. During the fall of 1994, the company's monitoring system was down as much as 39.6 percent of the time. EPA took enforcement action against the facility in November 1997, but said it may not have, had the Utah Department of Environmental Quality done its job. DEQ instead defended the Phillips Refinery and criticized EPA's action.
- In December 1995, the Utah Department of Environmental Quality (DEQ) issued a Notice of Violation to Envirocare for numerous problems at its radioactive

waste disposal site, including improper storage, leaking containers and cracks in storage pads. The State assessed a $30,000 fine for these violations. U.S. EPA expressed concern over the penalty being too low, and DEQ responded by increasing the penalty to $79,000. Convinced that this was still too low given the severity of the violations, the EPA issued its own Notice of Violation and fined Envirocare over $600,000.

- Your DEQ failed to press US Magnesium (formerly MagCorp), a magnesium ore facility listed by EPA as one of the nation's worst polluters, to reduce its pollution and end illegal dumping practices despite intense local pressure from citizen groups. US Magnesium only started to clean up its act after EPA stepped in with a series of Federal enforcement actions against the company.

Are these descriptions accurate? If so, can you explain why DEQ did not enforce the law in a timely and meaningful manner in each of these situations?

Response Regarding Phillips Refinery

The Phillips Refinery situation resulted from a difference in interpretation of language in the Utah State Implementation Plan (SIP); it was not an issue of the Utah Department of Environmental Quality (DEQ) not doing its job. The Department and EPA Regional VIII spent many months trying to resolve their differences but were ultimately unable to agree. The DEQ did state its position on the matter and defended its SIP language, but DEQ did not defend Phillips. There were no violations of any air quality standards in Davis County during the period in question.

Response Regarding Envirocare

The Notice of Violation (NOV) issued to Envirocare in 1995 was resolved through a negotiated settlement agreement. This settlement included a $30,000 penalty that was calculated using Utah's penalty policy and methodology, both of which are approved by EPA, for violation classification. Using its own penalty policy and calculation methodologies (which are significantly higher than Utah's policies), EPA concluded that Utah's penalty was insufficient. Although the State disagreed, attempts were made to negotiate an amendment to the original settlement in order to satisfy EPA's concerns. These negotiations were never finalized because EPA proceeded to issue its own complaint against the company. This complaint was a copy of the State NOV reformatted into an EPA document. The complaint also included EPA's opinion that Envirocare's potential penalty liability was approximately $600,000. Subsequent to the EPA complaint, Envirocare, the State and EPA negotiated a three-party agreement to resolve the issue, which included an additional penalty of $167,065.20, bringing the total penalty to $197,065.20.

Response Regarding US Magnesium

EPA's involvement in the US Magnesium issue was at the invitation of the State. EPA was asked to provide an interpretation of a Federal hazardous waste rule to assist the State in defining regulated waste streams at the facility. There has been no final resolution of these issues; there have been settlement discussions.

Question 20. Should you be confirmed, would you consider it EPA's responsibility to provide an enforcement backstop for the States in cases where States decline to enforce the law?

Response. It is important that EPA and the States work in concert to achieve environmental compliance. Each partner brings special strengths that support the other. I would ensure that the law is enforced, but EPA can achieve our national goals best by finding ways to improve State compliance programs that have primary responsibility for environmental program implementation in most areas. There are a variety of existing mechanisms to effectively respond in an instance when a State declines to enforce the law.

Question 21. Can you please explain your environmental enforcement philosophy as Governor of Utah. How will it affect your environmental enforcement philosophy as EPA Administrator?

Response. I have always supported enforcement of environmental regulations as Governor of Utah. For example, EPA has given very high marks to the Utah Division of Air Quality's Compliance Program for several years. Utah has been recognized as a leader in compliance assurance and the use of Supplemental Environmental Projects to benefit public health and the environment such as dioxin assessments, renewable energy, and raptor protection. I would continue that philosophy if my nomination is confirmed.

STATEMENT OF U.S. EPA LABOR UNIONS ON IMPROPER WHITE HOUSE INFLUENCE ON EPA'S RESPONSE TO THE TERROR ATTACK OF SEPTEMBER 11, 2001

We, the undersigned representatives of the workers who perform health and environmental protection duties at the U.S. Environmental Protection Agency across America, express our anger and dismay over evidence of the White House's improper actions in connection with communicating health risk information to emergency workers and residents in New York immediately following the terror attacks on that city on September 11, 2001.

EPA's dedicated Civil Service employees performed their duties swiftly and competently following the terror attack, assessing as accurately as possible the environmental health risks faced by the brave rescue workers and nearby residents from toxic substances released in the attack. These workers reported to senior EPA officials their best estimate of the risks, and they expected those estimates and the accompanying recommendations for protective measures to be released in a timely manner to those who needed the information.

The public was not informed of all of these health risks, some of which were avoidable. This information was withheld from the public under orders from the White House. Instead, the Bush White House had information released, drafted by political appointees, that it knew to contradict the scientific facts. It misinformed. And many rescue workers and citizens suffered. Some citizens now face the long-term risk of asbestos-related lung cancer as well as other debilitating respiratory ailments as a result.

Little did the Civil Service expect that their professional work would be subverted by political pressure applied by the White House. This unwarranted and inexcusable interference with the professional work of the Civil Service by politicians reporting directly to President Bush caused rescue workers and residents to be exposed to health risks that could have been, indeed should have been, avoided.

We express our solidarity with the rescue workers and residents who were affected adversely by this outrageous action of President Bush's staff. There is no excuse for White House politicians imposing their values and overriding the Civil Service's best advice on protecting those still digging in the wreckage and those whose homes and offices were covered with toxic debris.

President Bush owes the rescue workers, residents, dedicated Civil Service workers and the American people more than an apology for his actions in this matter. President Bush should take steps to compensate the rescue workers and residents who were harmed by his administration's actions.

The President's political appointees' interference with the professional work of the EPA Civil Service has seriously harmed EPA's credibility. Before there is another national emergency, that credibility must be restored.

The President must pledge to never again order EPA to tell less than the whole truth about a public health emergency.

Signed,

PAUL SACKER,
President AFGE Local 3911, New York.

DWIGHT WELCH,
President NTEU Chapter 280, Washington, DC.

ALAN HOLLIS,
President AFGE Local 3631, Philadelphia.

HENRY BURRELL,
President AFGE Local 3428, Boston.

NANCY BARRON,
President NAGE Local R5–55, Atlanta.

GRETCHEN HELM,
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JOHN C. ANDERSON,
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KEVIN ORENDORF,
President AFGE Local 3607, Denver.

WENDELL SMITH,
President ESC EPA-Unit San Francisco.

PATRICK CHAN,
President NTEU Chapter 295, San Francisco.

MARY ST. PETER,
President AFGE Local 1110, Seattle.

MARK CORYELL,
President AFGE Local 3907, Ann Arbor.

LARRY PENLEY,
President NTEU Chapter 279, Cincinnati.

SILVIA SARACCO,
President AFGE Local 3347 Research Triangle Park.

NITA TALLENT-HALSELL,
President NAGE R12–135, Las Vegas.

LESLEY MILLS,
President NAGE R1–240, Narragansett.

GERALDINE CRIPE,
President NAGE Local R5–95.

OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Evaluation Report

EPA's Response to the World Trade Center Collapse: Challenges, Successes, and Areas for Improvement

Report No. 2003-P-00012

August 21, 2003



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Abbreviations

AEGL	Acute Exposure Guideline Level
AHERA	Asbestos Hazard Emergency Response Act
ATSDR	Agency for Toxic Substances and Disease Registry
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
COPC	Contaminants of Potential Concern
EPA	Environmental Protection Agency
f/cc	Fibers per Cubic Centimeter
FEMA	Federal Emergency Management Agency
FRP	Federal Response Plan
HEPA	High Efficiency Particulate Air
HVAC	Heating, Ventilation, and Air Conditioning
NCP	National Contingency Plan
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NIOSH	National Institute for Occupational Safety and Health
NYCDDC	New York City Department of Design and Construction
NYCDEP	New York City Department of Environmental Protection
NYCDOH	New York City Department of Health
OCEMR	Office of Communications, Education, and Media Relations
OIG	Office of Inspector General
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PCM	Phase Contrast Microscopy
PDD	Presidential Decision Directive
PLM	Polarized Light Microscopy
PM	Particulate Matter
s/mm2	Structures Per Millimeter Squared
TEM	Transmission Electron Microscopy
TERA	Toxicology Excellence for Risk Assessment
TSP	Total Suspended Particulates
VOCs	Volatile Organic Compounds
WTC	World Trade Center

Cover photo: New York Police Department photograph

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

THE INSPECTOR GENERAL

August 21, 2003

MEMORANDUM

SUBJECT: Final Evaluation Report: EPA's Response to the World Trade Center Collapse: Challenges, Successes, and Areas for Improvement
Report No. 2003-P-00012

TO: Marianne L. Horinko
Acting Administrator

Attached is our final report regarding the Environmental Protection Agency's (EPA) response to the World Trade Center (WTC) collapse. This report contains findings that describe problems encountered in responding to the WTC collapse and corrective actions the Office of Inspector General (OIG) recommends. This report represents the opinion of the OIG and the findings contained in this report do not necessarily represent the final EPA position. Final determinations on matters in the report will be made by EPA managers in accordance with established procedures.

Action Required

In accordance with EPA Directive 2750, as the action official, you are required to provide this Office with a written response within 90 days of the final report date. The response should address all recommendations. For the corrective actions planned but not completed by the response date, please describe the actions that are ongoing and provide a timetable for completion. Where you disagree with a recommendation, please provide alternative actions for addressing the findings reported.

We appreciate the efforts of EPA officials and staff, as well as those of New York City, in working with us to develop this report. If you or your staff have any questions regarding this report, please contact me at (202) 566-0847 or Kwai Chan, Assistant Inspector General for Program Evaluation, at (202) 566-0827.

Nikki L. Tinsley

Attachment

cc:
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Executive Summary

The September 11, 2001, terrorist attack on the World Trade Center in New York City and the environmental aftermath were unprecedented. Airborne dust from the collapse of the towers blanketed Lower Manhattan and was blown or dispersed into many of the surrounding office buildings, schools, and residences. This complex mixture of building debris and combustion by-products contained such ingredients as asbestos, lead, glass fibers, and concrete dust. Responding to this crisis required organizations from all levels of government to coordinate their response efforts and to make critical public health and safety decisions quickly, and without all of the data that decision-makers would normally desire.

Unfortunately, this country may experience more terrorist attacks, and a response to such a tragedy could be needed again. Accordingly, we initiated this evaluation, in consultation with the Environmental Protection Agency (EPA) Deputy Administrator, to evaluate EPA's response to September 11. During our evaluation, we sought to answer six specific questions that address how EPA responded and how it could better respond in the future. Those questions, along with summaries of what we found and recommendations for each, follow.

1. Did the available monitoring data and analyses of that data support EPA's major public communications regarding air quality and associated health risks resulting from the collapse of the World Trade Center (WTC) towers?

EPA's early public statements following the collapse of the WTC towers reassured the public regarding the safety of the air outside the Ground Zero area. However, when EPA made a September 18 announcement that the air was "safe" to breathe, it did not have sufficient data and analyses to make such a blanket statement. At that time, air monitoring data was lacking for several pollutants of concern, including particulate matter and polychlorinated biphenyls (PCBs). Furthermore, The White House Council on Environmental Quality influenced, through the collaboration process, the information that EPA communicated to the public through its early press releases when it convinced EPA to add reassuring statements and delete cautionary ones. An EPA draft risk evaluation completed over a year after the attacks concluded that, after the first few days, ambient air levels were unlikely to cause short-term or long-term health effects to the general population. However, because of numerous uncertainties – including the extent of the public's exposure and a lack of health-based benchmarks – a definitive answer to whether the air was safe to breathe may not be settled for years to come. Details regarding the handling of indoor contamination are discussed in relation to Objective 2 below.

EPA has initiated actions to strengthen its risk communication procedures for emergency situations, including the development of a draft Plan for Incident

Communication. We recommend that the EPA Administrator continue these efforts and develop procedures for emergency risk communication to ensure that public pronouncements regarding health risks and environmental quality are adequately supported with available data and analysis and are appropriately qualified.

2. Were EPA actions and decisions in regard to evaluating, mitigating, and controlling risks to human health from exposure to indoor air pollutants in the WTC area consistent with applicable statutes, regulations, policies, guidance, and practice?

EPA's actions to evaluate, mitigate, and control risks to human health from exposure to indoor air pollutants in the WTC area were consistent with applicable statutes and regulations. These statutes and regulations do not obligate EPA to respond to a given emergency, allowing for local agencies to lead a response, and New York City in fact exercised a lead role regarding indoor air. Nonetheless, we believe EPA could have taken a more proactive approach regarding indoor air cleanup. After the City was criticized for its response, EPA began to assume a lead role in February 2002. Prior to initiation of the EPA-led cleanup, many WTC area residents had returned to their homes, and a study indicated most of them had not followed recommended cleaning practices. The full extent of public exposure to indoor contaminants resulting from the WTC collapse is unknown.

We recommend that the EPA Administrator coordinate with other Federal, State, and local agencies to develop protocols for determining how indoor environmental concerns will be handled in large-scale disasters. We also recommend that EPA work with the Department of Homeland Security and other Federal agencies to develop and publish oversight criteria, including State and local agency reporting requirements, for handling indoor air contamination.

3. Were asbestos demolition and renovation work practice standards followed during WTC cleanup and recovery operations and, if not, why not?

We could not conclusively determine the extent to which required work practices regarding the control of asbestos were followed at the WTC site during demolition and debris removal. Since asbestos is a known human carcinogen, EPA has established stringent work practices to control emissions of asbestos resulting from demolition and renovation projects. We found that a significant requirement to reduce emissions in emergency demolitions – wetting damaged buildings before demolition and keeping the waste material wet after demolition – was followed. However, work practices applicable to the transport of debris from the site were employed inconsistently. The specific impact on air quality of any variance from EPA's asbestos emergency work practices is unknown.

We recommend that the EPA Administrator develop specific procedures for ensuring that Federal, State, and local responders follow the appropriate NESHAP work practices for catastrophic emergency situations involving asbestos.

4. To what extent were EPA and government communications regarding air quality and associated health risks: (a) received by the public; (b) understood by the public; and (c) effective in getting people to take the desired actions to reduce their potential health risks?

After the WTC terrorist attack, people received information from many different sources, and many factors – in addition to government communications – could have influenced their actions. Information is a critical component in helping the public minimize their exposure to potential health hazards. However, evidence gathered through government hearings, news polls, health studies, and our interviews indicated that the public did not receive sufficient air quality information and wanted more information on associated health risks. Also, evidence indicated that government communications were not consistently effective in persuading the public to take recommended precautions. Because of these concerns, the OIG conducted a survey of New York City residents regarding government communications. These results will be reported separately.

EPA has initiated several actions to improve its risk communications procedures during emergencies. Further, EPA is working with the Federal Emergency Management Agency to clarify roles and responsibilities for ensuring worker safety during an emergency response. We recommend that EPA continue to coordinate efforts to establish clear Federal roles.

5. What additional actions, if any, should EPA take to improve its response and recovery efforts in the WTC area related to ambient and indoor air quality?

The majority of officials contacted indicated EPA did not need to take additional actions to address outdoor ambient air quality concerns. However, concerns were expressed regarding indoor contamination, and several more measures can be taken to ensure that indoor cleanup effectively minimizes health risk exposure. We recommend that EPA implement a testing program to ensure the indoor cleanup effectively reduced health risks from all pollutants of concern, and implement a verification program to determine whether previously cleaned residences have been recontaminated.

6. Should EPA revise its preparation and contingency planning for dealing with air pollution resulting from environmental catastrophes?

The events of September 11 had national security ramifications not previously experienced, and many persons interviewed spoke highly of the response of EPA and its employees. Still, we, as well as EPA and others, have identified lessons learned from the response that can improve EPA's preparedness for future disasters. An overriding lesson learned was that EPA needs to be prepared to assert its opinion and judgment on matters that impact human health and the environment. Although many organizations were involved in addressing air

quality concerns resulting from the WTC collapse, subsequent events have demonstrated that, ultimately, the public, Congress, and others expect EPA to monitor and resolve environmental issues. This is the case even when EPA may not have the overall responsibility to resolve these issues or the necessary resources to address them.

EPA has initiated many actions as a result of its own internal lessons learned exercises. Based on our review, we our making a number of recommendations to improve EPA's emergency response capabilities in three areas: (1) contingency planning, (2) risk assessment and characterization, and (3) risk communication.

Agency and New York City Comments and OIG Evaluation

In her August 8, 2003 response to the draft report, the EPA Acting Administrator stated that she was proud of the men and women of EPA and that the Agency's response was extraordinary. Although she generally agreed with the recommendations of our draft report (with the exception of Chapter 6), she responded that our report lacked sufficient acknowledgment of EPA's efforts in several areas. For example, she noted that our report focused too heavily on the Agency's press releases and did not sufficiently consider the Agency's other forms of communication or the Agency's "lessons learned" efforts. She provided several specific comments outlining the Agency's disagreement with some of the report's findings and conclusions. A detailed summary of the Agency response and our evaluation is included at the end of each chapter. The Agency's complete response and our evaluation of that response are included as Appendices Q and R, respectively.

New York City officials responded to excerpts from the draft report and provided us with specific comments and clarifications which we incorporated into the final report, as appropriate. New York City's response is attached as Appendix S and our evaluation of that response is attached as Appendix T.

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Chapter 1
Introduction

Purpose

The September 11, 2001, terrorist attacks on this country and their environmental aftermath were unprecedented. Unfortunately, further terrorist attacks on this country remain likely and a response to such a tragedy could be needed again. Accordingly, the Office of Inspector General (OIG) initiated this evaluation, in consultation with the Environmental Protection Agency (EPA) Deputy Administrator, to evaluate EPA's response to the collapse of the World Trade Center (WTC) towers on September 11. The objectives of our evaluation were to answer the following:

- Did the available monitoring data and analyses of that data support EPA's major public communications regarding air quality and associated health risks resulting from the collapse of the WTC towers?
- Were EPA actions and decisions in regard to evaluating, mitigating, and controlling risks to human health from exposure to indoor air pollutants in the WTC area consistent with applicable statutes, regulations, policies, guidance, and practice?
- Were asbestos demolition and renovation work practice standards followed during WTC cleanup and recovery operations and, if not, why not?
- To what extent were EPA and government communications regarding air quality and associated health risks: (a) received by the public; (b) understood by the public; and (c) effective in getting people to take the desired actions to reduce their potential health risks?
- What additional actions, if any, should EPA take to improve its response and recovery efforts in the WTC area related to ambient and indoor air quality?
- Should EPA revise its preparation and contingency planning for dealing with air pollution resulting from future catastrophes?

Background

On the morning of Tuesday, September 11, 2001, terrorists flew two hijacked commercial jets into the WTC towers. Both towers collapsed within 2 hours of impact, killing almost 2,800 people, including 343 firefighters and 60 New York City and Port Authority police officers. In addition to the devastating loss of life,

the dust and debris emanating from the collapse and the ensuing fires created environmental concerns for the public that have persisted more than a year after the disaster.

Airborne dust from the collapse of the towers blanketed Lower Manhattan and was blown or dispersed into many of the surrounding office buildings, schools, and residences. One person described the aftermath in Lower Manhattan as "looking like a blizzard" had hit. However, this blizzard did not deposit snow, but instead a complex mixture of building debris and combustion by-products. This mixture included, among other substances, asbestos, lead, glass fibers, and concrete dust.



Dust cloud from the WTC collapse. Source: NYPD



Street level conditions in Lower Manhattan after collapse.
Source: wtcphotos by flagsoncars.com

In addition to the initial dispersion of dust and debris, fires at the site created various emissions of potentially harmful pollutants. These fires were not officially declared extinguished until December 19, 2001, and debris continued to smolder and fires flared up for weeks after that. Emissions resulting from these fires included particulate matter, various metals, polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and dioxin.

On September 11, 2001, the President signed a major disaster declaration for the five counties of New York City to provide assistance to New York State, thus activating the Federal Response Plan (FRP). The FRP establishes the process and structure for the Federal Government to provide assistance to local agencies when responding to the consequences of any major disaster or emergency declared under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (42 U.S.C. § 5121, et seq.). The FRP employs an operational

structure based on the principles of the Incident Command System,[1] a system adopted by the fire and rescue community.

The Federal Emergency Management Agency (FEMA) is responsible for administering the FRP. This plan includes 12 Emergency Support Functions, which describe the types of support provided to local authorities and identify the Federal agencies responsible for leading and assisting in providing that support. To obtain assistance under the FRP, a State requests assistance from FEMA, which in turn issues a mission assignment to the appropriate Federal lead agency as outlined in the Emergency Support Functions.

EPA is the designated lead agency for Emergency Support Function No. 10, "Hazardous Materials Annex." The intent of this function is to provide support to State and local governments in responding to an actual or potential discharge and/or release of hazardous materials following a major disaster or emergency, including the release of airborne contaminants. To ensure the most efficient and effective use of resources in responding to an actual or potential release of hazardous materials, this function also places the response mechanisms of the National Contingency Plan within the FRP coordination structure. The National Contingency Plan is the implementing regulation for EPA's Superfund program, and provides guidelines and procedures for responding to releases and threatened releases of hazardous substances, pollutants, or contaminants, including releases that threaten air quality.

Early Response

Various circumstances complicated the Government's and EPA's ability to respond to environmental concerns in what was an unprecedented and extremely difficult situation. The New York City Office of Emergency Management's Emergency Operations Center was destroyed in the attacks. EPA's Region 2 office, about a half-mile from the WTC site, was evacuated and not re-opened until 2 weeks after the attacks. Electrical power was lost in Lower Manhattan, as well as radio and telephone communications. Further, transportation to Lower Manhattan was halted, as well as commercial air travel nationwide.

As with most disasters, local authorities were the first responders. "Ground Zero," as the seven-building WTC area site would become known, was initially a search and rescue effort under the direction of the Fire Department of New York and, subsequently, a recovery operation under the jurisdiction of the New York City Department of Design and Construction (NYCDDC) and the Fire Department of New York. According to New York City's Deputy Assistant Chief

[1] Incident Command System Principles include use of common terminology, modular organization, integrated communications, unified command structure, action planning, manageable span of control, pre-designated facilities, and comprehensive resource management.

of the Fire Department, "the complexity of the activity performed at one site – rescue, recovery, demolition, and construction – at one time is unprecedented." The New York City Office of Emergency Management was responsible for coordinating the response efforts of approximately 150 governmental agencies and non-governmental organizations. Further complicating the situation was the fact that the area was treated as a crime scene, with law enforcement authorities strictly limiting access for agencies such as EPA, particularly in the first 48 hours.

Nonetheless, EPA officials immediately recognized the need to monitor environmental conditions after the attacks occurred. After the collapse, EPA on-scene coordinators collected bulk dust samples that were analyzed for asbestos and lead. EPA's Edison, New Jersey, location provided workspace for essential Region 2 personnel while EPA's New York City office was closed. The Environmental Response Team in Edison also collected ambient air samples in New Jersey and Brooklyn on September 11, which were analyzed for the presence of asbestos, lead, and VOCs. On September 12, nine ambient (outdoor) air samples were collected from Ground Zero.

As the first week progressed, the assessment of environmental conditions became a primary emphasis for EPA and other Federal, State, and local government organizations. An EPA air monitoring specialist in Research Triangle Park, North Carolina, took a team to New York and helped develop a monitoring network to assess the ambient air conditions for the general public around Lower Manhattan. In addition, a multi-agency task force was established to address environmental concerns, with EPA eventually being designated the lead agency for managing all of the ambient air data collected by the various government agencies.

In addition to responding to the air quality issues, which are the focus of this report, EPA conducted many other response activities. These included overseeing the removal of hazardous wastes, monitoring and assessing water quality, monitoring environmental conditions at the landfills, and establishing and operating personal and truck washing stations at the disaster site and landfills. Hazardous material removed from the site included an estimated 236 batteries, 802 containers, and 3,049 cylinders that had potential to cause environmental and human health damage. Further, approximately 639,465 gallons of fuel oil and/or oily water mixture were pumped from basements, manholes, trenches, and underground storage tanks. A NYCDDC official told us that EPA's response was "phenomenal" in his opinion and that EPA's response crews were on top of every issue.

Other Federal agencies in addition to EPA were involved in providing support to local authorities regarding environmental quality and safety. For example:

- FEMA was in charge of coordinating the FRP.

- The Occupational Safety and Health Administration (OSHA), within the Department of Labor, conducted ambient and bulk dust sampling within the immediate Ground Zero work zone and provided guidance to Ground Zero workers regarding the use of personal protective equipment.

- Within the Department of Health and Human Services:

  - The National Institute for Occupational Safety and Health (NIOSH) assisted in ensuring worker health and safety.

  - The Agency for Toxic Substances and Disease Registry (ATSDR) provided technical assistance to the New York City Department of Health by conducting an indoor residential sampling and assessment project.

  - The Public Health Service provided assistance to the New York City Department of Health.

Appendix A provides further details on the various tasks performed by these and other Federal Agencies.

Scope and Methodology

Our evaluation focused on EPA's response to air quality concerns – both ambient and indoor – for the period September 2001 through April 2003. Our work was performed at various EPA offices and the offices of several other Federal agencies, such as FEMA, OSHA, and ATSDR. We also performed work at various New York City offices. Further, we visited and consulted selected health research, air quality testing, academic, and environmental organizations.

Our approach included the independent review and verification of WTC air monitoring and bulk dust data. For example, we randomly selected monitoring results posted on EPA's web site and traced the test results back to the raw data to verify the accuracy of the information posted. Further, we selected certain data from EPA's "NYC Response" database and determined whether it was included on EPA's public web site.

Our approach included a synthesis of WTC-related research reports, independent legal interpretation of applicable statutes and regulations, and independent analysis of EPA technical decisions used in interpreting and presenting air quality information. We interviewed key officials within and outside of EPA who collected, analyzed, interpreted, or made decisions with WTC air monitoring and bulk dust data, as well as environmental and medical external experts. We conducted our field work during the period June 2002 through July 2003. We

conducted this review in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States.

A detailed description of our scope and methodology is in Appendix B.

Chapter 2
EPA Statements About Air Quality Not Adequately Qualified

EPA's early statements reassured the public regarding the safety of the air outside the Ground Zero perimeter area. However, when EPA made a September 18 announcement that the air was "safe" to breathe, the Agency did not have sufficient data and analyses to make the statement. The White House Council on Environmental Quality (CEQ) influenced, through the collaboration process, the information that EPA communicated to the public through its early press releases when it convinced EPA to add reassuring statements and delete cautionary ones. Conclusions from an EPA draft risk evaluation completed over a year after the attacks have tended to support EPA's statements about long-term health effects when all necessary qualifications are considered. However, EPA's statements about air quality did not contain these qualifications. (Details on indoor air are in Chapter 3.)

Communicating Information to the Public Critical

Communicating the potential health risks resulting from an environmental hazard is a key mechanism for warning the public to mitigate potential exposures and take other precautions to avoid unnecessary health risks. However, an emergency situation often presents significant challenges.

EPA has many years of experience in communicating environmental risks to the public, especially through its Superfund program. The Agency has issued numerous guidance documents on how to effectively communicate risks to the public, including EPA's "Seven Cardinal Rules of Risk Communication" (see box). EPA and the New York City Department of Health were significantly involved in communicating information on the air quality in Lower Manhattan after the WTC disaster.

Seven Cardinal Rules of Risk Communication

1. Accept and involve the public as a legitimate partner.
2. Plan carefully and evaluate your efforts.
3. Listen to the public's specific concerns.
4. Be honest, frank, and open.
5. Coordinate and collaborate with other credible sources.
6. Meet the needs of the media.
7. Speak clearly and with compassion.

What EPA Said in Its Major Public Communications

EPA used various methods to inform the public after September 11, including attending public forums; having interviews with newspaper, television, and radio reporters; and posting information on its public web site. Our analysis focused primarily on the information provided through press releases since the Agency develops its position through a deliberative process that represents the Agency's official position.

EPA issued five press releases within 10 days after September 11, 2001, four more through the end of December, and another four through the end of May 2002. EPA's WTC press releases from September through December 2001 reassured the public about air quality. Although EPA's press releases generally recommended that rescue and cleanup workers take precautions to reduce their exposure to pollutants, EPA's basic overriding message was that the public did not need to be concerned about airborne contaminants caused by the WTC collapse. This reassurance appeared to apply to both indoor and outdoor air.

For example, EPA Region 2 officials told us that the September 18 statement made by the EPA Administrator (see Appendix C) that the air was "safe" to breathe only applied to:

- long-term health effects – not short-term or acute health effects;
- the general public – not Ground Zero workers;
- outdoor air – not indoor air;
- healthy adults – not sensitive sub-populations such as children and the elderly; and
- asbestos – not other air pollutants.

However, except for the second point, the statements issued by EPA in press releases throughout 2001 generally did not contain the above qualifications. For the general public, EPA's overriding message was that there was no significant threat to human health.

Key air quality related statements from EPA press releases issued during 2001 following the WTC collapse are in Table 2-1. The full text of each of these press releases are available at our web site.[2]

[2] www.epa.gov/oig

Table 2-1: Key Air Quality Statements from 2001 Press Releases

Date	Key Statement
09-13-01	"Monitoring and sampling conducted on Tuesday and Wednesday have been very reassuring about potential exposure of rescue crews and the public to environmental contaminants. . . . EPA and OSHA will work closely with rescue and cleanup crews to minimize their potential exposure, but the general public should be very reassured by initial sampling."
09-16-01	"Our tests show that it is safe for New Yorkers to go back to work in New York's financial district" (quoting Assistant Secretary of Labor for OSHA). "The Agency is recommending that businesses in the area planning to reopen next week take precautions including cleaning air conditioning filters and using vacuums with appropriate filters to collect dust."
09-18-01	"I am glad to reassure the people of New York and Washington, D.C. that their air is safe to breath [sic] . . . " (quoting EPA Administrator).
09-21-01	"NYC Monitoring Efforts Continue to Show Safe Drinking Water & Air" (press release heading).
10-03-01	"Data Confirms No Significant Public Health Risks; Rescue Crews and Nearby Residents Should Take Appropriate Precautions. . . " (press release sub-heading).
10-30-01	"While we have fortunately not found levels of contaminants that pose a significant health risk to the general public, our efforts to monitor the area and keep the public informed of our findings have not waned. "

Agency officials stressed that press releases were only one of many forms of communication used to provide air quality information to the public, and that public forums and media interviews were also important. Further, EPA provided public access to its monitoring data through its public web site, which included interactive maps that could be used to identify monitoring results. In regard to the monitoring data, we found no evidence that EPA attempted to conceal data results from the public.

Data Available at the Time Did Not Fully Support EPA Press Releases

Information and the analyses of available data did not fully support the statement made in the September 18, 2001, release, which quoted the EPA Administrator as saying the air was "safe" to breathe. Four factors in particular posed limitations on the conclusions that could be made at that time about air quality:

- A lack of data results for many pollutants,
- An absence of health benchmarks for asbestos and other pollutants,
- Imprecise optical asbestos sampling methodologies, and
- Over 25 percent of the bulk dust samples collected before September 18 showed the presence of asbestos above the 1 percent benchmark.

EPA did not have monitoring data to support reassurances made in press releases up to September 18 because it lacked monitoring data for several contaminants, particularly PCBs, particulate matter, dioxin, and PAHs.

According to a draft evaluation entitled *Exposure and Human Health Evaluation of Airborne Pollution from the World Trade Center Disaster*, by EPA's Office of Research and Development, that Office was not able to make health risk evaluations for exposures in the first couple of days because of the lack of monitoring data. For several pollutants of concern, sampling did not begin until September 16, and in many cases the results were not known until after the September 18 press release was issued. EPA was not able to obtain samples and monitor air due to difficulties in access and security, power supply sources, equipment availability, and analytical capacity. As a result, data available before September 18 for making conclusions about air quality for pollutants other than asbestos was limited.

Table 2-2 shows when air monitoring began and when the data results first became available for each pollutant of concern.

Table 2-2: Outdoor Sampling Timeline for Pollutants of Concern

Pollutant	Sampling Source	Sampling Started	Results Available[1]
Lead	Dust	September 11	September 12
Asbestos	Bulk Dust Ambient Air	September 11 September 12	September 12 September 13
Benzene **[2]**	Air Grab Samples	September 16	September 17
Mercury	Ambient Air Dust	September 16 September 16	September 18 September 20
Lead	Ambient Air	September 16	September 20 **[3]**
PAHs Cadmium Chromium Manganese	Ambient Air	September 16	September 20
PAHs	Dust	September 16	September 22
Dioxin	Dust Ambient Air	September 16 September 16	September 24 **[4]** September 28
PCBs	Ambient Air	September 16	September 28
$PM_{2.5}$ PM_{10} **[5]**	Ambient Air	September 21	October 4
TSP **[5]**	Ambient Air	No Monitoring	No Monitoring

Notes:
[1] = Based on Daily Summaries of monitoring results prepared by Region 2 staff in Edison, New Jersey, which were used to brief management on data results.
[2] = EPA sampled for additional VOCs on this date as well.
[3] = EPA's Health Risk Evaluation reported lead results were known on September 18.
[4] = EPA's Health Risk Evaluation reported dioxin results were known on September 23.
[5] = "PM" stands for "Particulate Matter." $PM_{2.5}$ represents "fine" particulate matter less than or equal to 2.5 micrometers in diameter. PM_{10} refers to particulate matter less than or equal to 10 micrometers, with the fraction between 2.5 and 10 micrometers known as "coarse." "TSP" stands for "Total Suspended Particulates," and includes all sizes of particles.

Health-based benchmarks for short-term and acute exposures did not exist for pollutants of concern resulting from the collapse of the WTC. For asbestos, EPA used benchmarks originally designed for other purposes to assess potential health risks from breathing the air following the WTC collapse. Because health-based benchmarks for short-term exposures did not exist for most of the other pollutants, EPA revised benchmarks for lifetime (30-year) exposures to develop screening levels for short-term (1-year) exposures. Further, health-based benchmarks did not exist for assessing the risk to human health from exposure to the combination of air pollutants that were emitted.

EPA did not have health-based benchmarks for airborne asbestos nor for asbestos in bulk dust. Consequently, EPA used criteria from two programs originally developed for other purposes.

- ***Asbestos Hazard Emergency Response Act (AHERA):*** Criteria for this program were developed for air monitoring inside schools following an asbestos abatement program, to clear those schools for re-entry. For the WTC testing, EPA used AHERA criteria to evaluate the ambient (outdoor) air quality for asbestos. However, this is not a health-based standard. The AHERA standard for re-entering schools was established at 70 structures per millimeter squared (s/mm2) in 1987 because this was considered to be the amount of background contamination found on the filters used to collect air samples when the AHERA standard was issued. Due to filter improvements over the years, the amount of background contamination today is considerably less, but the AHERA standard has not been revised.

- ***Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP):*** Criteria for this program were developed to identify asbestos-containing material subject to demolition and renovation work practices. This criteria states that material containing at least 1 percent asbestos, by volume, is considered asbestos-containing material and subject to EPA's NESHAP regulations. The 1 percent threshold, based on the smallest amount that can be measured using Polarized Light Microscopy, is not a health-based standard. This was emphasized in a September 19 e-mail from an EPA Branch Chief, who has testified as an Agency expert at an asbestos penalty hearing that: "Additionally, 1% asbestos in a material **is not a safe level** of asbestos [*emphasis in original quotation*] . . . one-half percent asbestos-containing material (ACM) could be just as hazardous as 20% ACM depending on the condition of the material and how it is handled." New York City also recommended that building owners use this 1 percent benchmark in determining whether the interior of buildings should be cleaned for asbestos (see Chapter 3).

Guidelines were not available to assess the impact of acute (up to 8 hours) exposures. People caught in the initial debris and dust cloud on September 11 were potentially exposed to high levels of various pollutants for a short duration. EPA has been funding a program to develop Acute Exposure Guideline Levels (AEGLs), but none of these levels had been finalized at the time of the WTC disaster. The program had developed several draft AEGL's but these draft AEGLs were not applicable to the pollutants of concern at the WTC site.

In general, EPA did not have benchmarks to evaluate short-term exposures such as those experienced from the WTC collapse. For the WTC situation, EPA adjusted the Superfund 30-year exposure benchmarks to 1-year (short-term) exposure benchmarks. (See Appendix D for a list of benchmarks used by EPA in

assessing WTC ambient data.) Since this was done very quickly during an emergency situation, these benchmarks were not subjected to peer review.

In addition to not knowing the health impacts of certain individual pollutants, information was not available on the cumulative or synergistic impacts of being exposed to several pollutants at once. For example, one medical expert suggested there may be a synergistic effect between PAHs and asbestos, since PAHs resemble cigarette tar. Studies have shown the lung cancer risk from exposure to asbestos is increased exponentially for cigarette smokers. In addition, this expert noted that the combination of high pH and the small shards of glass found in WTC dust could have had a synergistic impact on the acute respiratory symptoms that many people experienced.

There were limitations with all three methods used to analyze asbestos concentrations in the ambient air and bulk dust in Lower Manhattan. These limitations, which were not noted in EPA's press releases, restricted EPA's ability to make definitive assessments about the health risks posed by asbestos. However, even with these limitations, sufficient data existed to identify the presence of asbestos in the dust and ambient air, and to warrant that persons working around the dust take necessary precautions to not inhale the dust. The three methods used and their limitations follow:

- Transmission Electron Microscopy (TEM) is a sensitive method generally used to analyze air samples collected from a relatively clean indoor environment. At the WTC site, many samples could not be analyzed because the filters being used to collect asbestos were overloaded with particulates. For example, 24 of the 69 samples collected as of September 17 could not be analyzed because the filters were overloaded.

- Phase Contrast Microscopy (PCM), which was used to analyze asbestos concentrations in ambient air beginning September 18, can only count fibers in the filter greater than 5 micrometers in length. A study at the WTC site found that the majority of the asbestos fibers at the site were less than 5 micrometers in length.

- Polarized Light Microscopy (PLM) was used to measure asbestos in bulk dust. This method is primarily an estimation method that is not very precise, and has a detection limit of 1 percent. Therefore, using this method against a strict benchmark is not reliable.

According to EPA, essentially all outdoor areas at the WTC site were vacuumed, and the detection methods did not impact the action actually taken to remove the dust from outdoor areas. See Appendix E for a summary of EPA's outdoor air asbestos sampling results.

Some Asbestos Readings Exceeded Levels of Concern

Over 25 percent of the bulk dust samples that EPA had collected and analyzed by September 18 showed the presence of asbestos above the 1 percent threshold used by EPA to indicate significant risk. In addition, New York City used the 1 percent threshold to determine whether the removal of indoor dust was subject to its Asbestos Control Program regulation. The level of asbestos in dust was a concern because of the potential for the dust to be disturbed and become airborne, and thus inhaled. As noted above, this level is not a health-based standard and dust that contains less than 1 percent could pose a health risk. See Appendix F for results of EPA outdoor asbestos bulk testing.

EPA and the New York City Department of Environmental Protection (NYCDEP) conducted extensive ambient air monitoring for asbestos around Ground Zero and Lower Manhattan after September 11. This sampling was conducted at up to 60 sites and a total of almost 10,000 samples were analyzed using TEM. During the month of September 2001, EPA and New York City monitoring recorded 30 exceedences of the AHERA standard of 70 s/mm2. However, after September 2001 the number of AHERA exceedences decreased significantly. For the period October 2001 through May 2002, seven exceedences of the AHERA standard were recorded, as shown in Table 2-3.

Table 2-3. Ambient Asbestos Readings in Lower Manhattan In Excess of 70 s/mm2

Date	Reading (s/mm2)	Location [1]
10/09/01	104.99	Chambers Street
11/28/01	124.44	North Side of Stuyvesant High School
12/27/01	204.44	Albany and Greenwich
01/14/02	72.00	Pier 6 bus sign
02/05/02	88.00	Liberty and Trinity
02/11/02	213.33	Church and Dey
05/25/02	336.00	West Street (near Stuyvesant H.S.)

[1] Excludes four exceedences at worker wash tent.

Council on Environmental Quality Influenced EPA Press Releases

Coordination and collaboration impacted the completeness of the information and the substance of the message EPA communicated to the public through its press releases. As a result of the White House CEQ's influence, guidance for cleaning indoor spaces and information about the potential health effects from WTC debris were not included in EPA's issued press releases. In addition, based on CEQ's influence, reassuring information was added to at least one press release and cautionary information was deleted from EPA's draft version of that press release.

EPA officials told us that EPA's WTC press releases issued during the weeks following September 11 were discussed in conference calls that included EPA officials, OSHA, and CEQ. Accordingly, the content of an EPA press release issued during this period could come from several different sources.

Few written records were available on the process used to prepare WTC press releases. We found draft versions for two of the press releases. However, the White House's role in EPA's public communications about WTC environmental conditions was described in a September 12, 2001, e-mail from the EPA Deputy Administrator's Chief of Staff to senior EPA officials:

> *All statements to the media should be cleared through the NSC [National Security Council] before they are released.*

According to the EPA Chief of Staff, one particular CEQ official was designated to work with EPA to ensure that clearance was obtained through NSC. The Associate Administrator for the EPA Office of Communications, Education, and Media Relations (OCEMR)[3] said that no press release could be issued for a 3- to 4-week period after September 11 without approval from the CEQ contact.

Although EPA's position has been that WTC area residents should obtain "professional cleaning,"[4] EPA's press releases did not instruct residents to do so. Instead they instructed residents to follow recommended and proper cleaning procedures and referred the public to the New York City Department of Health (NYCDOH) for recommended cleaning procedures. We asked the OCEMR Associate Administrator whether her office had considered advising the public through a press release that they needed to obtain professional cleaning for their indoor spaces. The Associate Administrator stated: "It was in a press release: it was removed by. . . [the CEQ contact]."

OCEMR's records contained a document, entitled "PM FACT SHEET," that discussed the health risk to "sensitive populations" from exposure to particulate matter. We asked the Associate Administrator whether she had considered putting any of this information in a press release. She said she had, but the CEQ official discouraged her from doing so. Her recollection was that he told her health effects information should not be included in EPA's press releases, and that anything dealing with health effects should come from New York because they were on the ground and they were already dealing with it.

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[3] EPA's Office of Communication, Education and Media Relations (OCEMR) issued the press releases. The OCEMR Associate Administrator left the Agency in December 2001 and OCEMR was renamed the Office of Public Affairs in July 2002.

[4] In this context, professional cleaning refers to the use of a certified asbestos cleaner trained in the proper use of personal protective equipment and procedures to prevent re-contamination.

The extent of the CEQ official's influence on EPA's WTC press releases was most clearly illustrated by the changes that were made to a draft press release dated September 14, 2001, that was issued on September 16, 2001. Every change that was suggested by the CEQ contact was made. The CEQ official's suggested changes added reassuring statements and deleted cautionary statements.

Details on these various revisions based on the CEQ contact's input, including comparisons of draft and issued versions, are in Table 2-4, while the actual press release is in Appendix G. It should be noted that our analysis of CEQ's input was limited because CEQ officials chose not to meet with us. Details on this limitation are in Appendix B.

Table 2-4: Impact of CEQ Instruction on September 16 EPA Press Release

Statement Deleted From the Draft and Not Replaced	
The concern raised by these samples would be for the workers at the cleanup site and for those workers who might be returning to their offices on or near Water Street on Monday, September 17, 2001.	
Statements Significantly Revised	
Draft Press Release	***Issued Press Release***
Recent samples of dust gathered by OSHA on Water Street show higher levels of asbestos in EPA tests.	The new samples confirm previous reports that ambient air quality meets OSHA standards and consequently is not a cause for public concern. New OSHA data also indicates that indoor air quality in downtown buildings will meet standards. EPA has found variable asbestos levels in bulk debris and dust on the ground, but EPA continue [sic] to believe that there is no significant health risk to the general public in the coming days. Appropriate steps are being taken to clean up this dust and debris.
Seven debris and dust samples taken Thursday, showed levels of asbestos ranging from 2.1 percent to 3.3 percent. EPA views a 1 percent level of asbestos as the definition for asbestos-containing material.	Debris samples collected outside buildings on cars and other surfaces contained small percentages of asbestors, [sic] ranging from 2.1 to 3.3 - slightly above the 1 percent trigger for defining asbestos material.
Statements Added to the Issued Press Release Based on CEQ Instructions	
CEQ Instructions	***Statements Added to Issued Press Release***
"Add sentence about OSHA monitors walking the streets yesterday and wearing personal monitors and coming up clean."	OSHA staff walked through New York's financial district on September 13th, wearing personal air monitors and collected data on potential asbestos exposure levels. All but two samples contained no asbestos. Two samples contained very low levels of an unknown fiber, which is still being analyzed.
"INSERT HENSHAW quote somewhere around here"	"Our tests show that it is safe for New Yorkers to go back to work in New York's financial district," said John L. Henshaw, Assistant Secretary of Labor for OSHA.
"Add OSHA indoor air sampling data sentence."	Air Samples taken on Sept. 13th inside buildings in New York's financial district were negative for asbestos.

We were unable to identify any EPA official who claimed ownership of EPA's WTC press releases issued in September and early October 2001. When we asked the EPA Chief of Staff whether she could claim ownership of EPA's early WTC press releases, she replied that she was not able to do so "because the ownership was joint ownership between EPA and the White House," and that "final approval came from the White House." She also told us that other considerations, such as the desire to reopen Wall Street and national security concerns, were considered when preparing EPA's early press releases. The OCEMR Associate Administrator said of the September 16 release: "I did not feel like it was my press release."

September 13 Press Release Also Revised to Eliminate Cautionary Statements

Cautionary statements in a draft version of the September 13, 2001, press release (see Appendix H) were removed and replaced with more reassuring statements. For example, the second clause of the caption to the draft press release, which noted that EPA was testing for environmental hazards, was replaced with a statement reassuring the public about environmental hazards. Further, the press release did not contain a statement in the draft version that EPA considered asbestos hazardous in this situation. We were unable to locate any record that explained why the changes were made, and the OCEMR Associate Administrator did not recall ever having seen the draft. The major differences between the draft and the issued press release are shown in Table 2-5.

Table 2-5: Significant Changes to the September 13 EPA Press Release

Draft Press Release	*Issued Press Release*
Caption to press release: EPA Initiating Emergency Response Activities, Testing Terrorized Sites For Environmental Hazards	**Revised caption to press release:** EPA Initiating Emergency Response Activities, Reassures Public About Environmental Hazards
Preliminary results of EPA's sampling activities indicate no or very low levels of asbestos. However, even at low levels, EPA considers asbestos hazardous in this situation and will continue to monitor and sample for elevated levels of asbestos and work with the appropriate officials to ensure awareness and proper handling, transportation and disposal of potentially contaminated debris or materials.	EPA is greatly relieved to have learned that there appears to be no significant levels of asbestos dust in the air in New York City," said Administrator Whitman. "We are working closely with rescue crews to ensure that all appropriate precautions are taken. We will continue to monitor closely." Public health concerns about asbestos contamination are primarily related to long-term exposure. Short-term, low-level exposure of the type that might have been produced by the collapse of the World Trade Center buildings is unlikely to cause significant health effects. EPA and OSHA will work closely with rescue and cleanup crews to minimize their potential exposure, but the general public should be very reassured by initial sampling.

Recent Conclusions About WTC Air Quality

The only formal risk evaluation of the health effects from exposure to the outdoor air in Lower Manhattan following the WTC collapse was performed by EPA's Office of Research and Development. This evaluation, still in draft form as of July 2003, concluded that, except for the rescue and cleanup workers at Ground Zero who were not wearing respirators, as well as unknown exposures to the public during the first few days, persons in the area were unlikely to suffer adverse heath effects from the outdoor air.

The report also had a caveat for the conclusions drawn in the report relative to human health risks. The draft report stated:

> *This report should be viewed as the first phase of an ongoing analysis, and the conclusions and findings cited below should not be considered the final EPA judgment. At this point, the available data and analysis are still too preliminary to support reliable quantitative predictions of potential human health risks.*

We spoke to a number of experts in the field of environmental monitoring, including physicians, industrial hygienists, and researchers These experts generally agreed that the levels of airborne asbestos detected in the air outside the perimeter of Ground Zero in Lower Manhattan did not present a significant increase in long-term health risk to the public. Appendix I lists the experts we interviewed during this evaluation.

We noted that several health studies pointed to potential problems for firefighters, rescue workers, and other persons working within the confines of Ground Zero who did not wear respirators:

- A study of firefighters with "World Trade Center Cough" concluded that "intense, short-term exposure to materials generated during the collapse of the World Trade Center was associated with bronchial responsiveness and the development of cough."[5]
- The preliminary results of a Mount Sinai School of Medicine study on workers directly involved in rescue and recovery found that 78 percent of those sampled had suffered lung ailments and 88 percent had experienced ear, nose, and throat problems in the months immediately following the attack.

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[5] "Cough and Bronchial Responsiveness in Firefighters at the World Trade Center Site," David J. Prezant et al, New England Journal of Medicine, Vol. 347, No. 11, September 12, 2002.

At the time we completed our report, no studies of the health effects of the WTC collapse on the general public had been completed, although we noted studies[6] were underway to determine the effects of the WTC collapse on pregnant women and their children. Further, in January 2003, New York City and Federal health officials announced a plan to study residents and employees in Lower Manhattan to identify whether there will be long-term pulmonary effects associated with exposure to WTC dust and air.

Recent Developments

EPA has initiated actions to strengthen its risk communication procedures for emergency situations. For example, EPA's Office of Public Affairs has prepared a draft "Plan for Incident Communication" that establishes basic incident procedures and assigns responsibilities and authorities. Further, the Agency intends to use this plan as the basis for more inclusive best-practices emergency communications guidance.

Conclusions

EPA's early statement that the air was safe to breathe was incomplete in that it lacked necessary qualifications and thus was not supported by the data available at the time. CEQ influenced the final message in EPA's air quality statements. Competing considerations, such as national security concerns and the desire to reopen Wall Street, also played a role in EPA's air quality statements. The "safety" of the air in Lower Manhattan after the collapse of the WTC towers is still being debated and studied. However, given the current lack of health-based benchmarks, the lack of research data on synergistic effects, and the lack of reliable information on the extent of the public's exposure to these pollutants, the answer to whether the outdoor air around WTC was "safe" to breathe may not be settled for years to come.

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[6] "Prospective Study of Pregnant Women and Infants Exposed in Utero to WTC Air Pollution," Columbia University; and "Study of Pregnant Women and Children Near WTC," Mt. Sinai School of Medicine.

Recommendation

We recommend that the EPA Administrator:

2-1. Develop procedures for emergency risk communication to ensure that EPA's public pronouncements regarding health risks and environmental quality are adequately supported with available data and analysis.

Additional recommendations regarding contingency planning, risk characterization and assessment, and risk communication are presented in Chapter 7.

Agency Comments and OIG Evaluation

In her August 8, 2003 response to our draft report, the EPA Acting Administrator stated that the report placed too much emphasis on EPA's press releases and did not sufficiently acknowledge EPA's many other communications. She further noted that EPA's early statement that the air was safe to breathe was made in direct response to the public's concern about asbestos contamination following the WTC collapse, and that the press release detailed the monitoring that led to the statement and made it clear that further monitoring would take place. The Acting Administrator also pointed out that EPA never withheld data from the public and made its extensive monitoring data available on its interactive web site. With respect to CEQ's involvement in the preparation of EPA's press releases, the Acting Administrator stated that the Agency coordinated with CEQ and that this coordination was neither unusual nor unexpected during a catastrophic disaster on the scale of the WTC attacks. Further, she noted that EPA acknowledges that mistakes were made and things could have been done better, and that there are lessons to be learned in the difficult area of risk communication. Improving risk communications is an Agency priority as it implements its "lessons learned."

In our opinion, Agency press releases are a very important form of communication. As detailed in our draft report, EPA press releases result from a deliberative process that should reflect the Agency's official position on significant issues. Press releases are made available to essentially all news media and may be quoted or paraphrased in radio, television, and other forms of communication. In our opinion, the Agency could have provided more complete and useful information in the press releases. Further, we reviewed other agency forms of communication including all communication-related documents provided by the Agency. These documents included videotaped interviews, newspaper articles, briefing notes, and other forms of communication. With respect to the Agency's early statement about the air quality, we fully recognize the extraordinary circumstances that existed at the time the statement was made about the air being safe to breathe. It continues to be our opinion that there was insufficient information to support the statement.

The Agency's complete written response to our draft report and our detailed evaluation of that response are contained in Appendices Q and R, respectively.

Chapter 3
EPA's Response to Indoor Environment Consistent With Statutes and Regulations But May Have Delayed Needed Health Protection

EPA's actions to evaluate, mitigate, and control risks to human health from exposure to indoor air pollutants in the WTC area were consistent with applicable statutes and regulations. EPA is not obligated to respond to a given emergency, and New York City exercised a lead role regarding indoor air. Nonetheless, we believe EPA could have taken a more proactive approach regarding indoor air cleanup. EPA began to assume a lead role in February 2002, when the Agency initiated a multi-agency task force to address concerns about the indoor environment. Prior to initiation of the EPA-led cleanup, many WTC area residents had returned to their homes, and a study indicated most of them had not followed recommended cleaning practices. The full extent of public exposure to indoor contaminants resulting from the WTC collapse is unknown.

Concerns Expressed Regarding Indoor Contamination Response

The public and elected officials began raising concerns about the extent that indoor spaces were contaminated with asbestos and other contaminants shortly after the WTC collapse. New York City, which initially took lead responsibility for addressing indoor air, was criticized for:

- Delegating testing and remediation efforts to building owners and residents.
- Not enforcing proper procedures for cleaning asbestos.
- Giving improper advice to the public on testing and cleaning procedures.

EPA was criticized for not initially taking a greater role in indoor testing and cleaning. U.S. Congressman Jerrold Nadler (D-NY), whose district includes Lower Manhattan, contended that EPA violated the law by allowing New York City to handle indoor air quality and not exercising oversight authority pursuant to the National Contingency Plan (NCP). EPA maintained that the NCP does not create a right to a Federal response and its approach to indoor air was a "proper and legal exercise of our discretion" under the NCP.

In the immediate aftermath of the disaster, EPA undertook several activities to address various issues related to indoor air. However, according to EPA documentation, New York City officials stated on September 30, 2001, that the City would not be requesting assistance from EPA regarding residential sampling or reoccupation issues, or roof debris cleanup.



Indoor dust contamination from WTC debris. Source: EPA/ORD - - photo courtesy of Dr. Lung Chi Chen - NYU

Responses to Indoor Contamination

Initially, building owners were held responsible for cleaning up their own buildings, including interiors and exteriors. According to New York City officials, the issue of funding the cleanup of privately owned buildings was discussed with FEMA and EPA; and the initial federal position was that the Stafford Act (the implementing statute for the FRP) did not provide direct funding to New York City for this cleanup. New York City officials said that during this discussion they informed the federal agencies that building owners would be responsible for funding the cleanup of their buildings and the federal agencies agreed with this position. Under this arrangement, owners of rental units were responsible for cleaning apartment walls, ceilings, and floors; common areas, such as hallways and lobbies; and heating, ventilation, and air conditioning (HVAC) systems, when deemed necessary as explained in guidance provided by New York City. Renters were responsible for cleaning personal belongings. In resident-owned condominiums, residents were responsible for cleaning their units, while building owners were responsible for cleaning common areas and HVAC systems.

Table 3-1 notes key instructions New York City provided to building owners and residents regarding the potential for indoor contamination resulting from the collapse of the WTC towers and steps for cleaning the indoor contamination. Copies of the instructions are available on our web site.

Table 3-1: Actions by New York City

Date	Key Statement
09-14-01	NYCDEP provided a notice to building owners entitled "Clean-up of Asbestos Containing Material." For "minimal dust accumulations (light coating)" the notice recommended using wet methods and/or vacuums equipped with HEPA (high efficiency particulate air) filters. For "accumulations of dust that included pieces of debris" the procedures provided for two options. Building owners could assume that the material was asbestos-containing material and have it cleaned in accordance with NYCDEP Asbestos Abatement Program removal procedures, or have the material sampled by a NYCDEP certified investigator or New York State Department of Labor inspector to determine whether the material was asbestos-containing material and subject to New York City's Asbestos Abatement Program removal procedures. Asbestos-containing material was identified as any material containing more than one percent asbestos.
09-16-01	The NYCDEP issued a "Public Notice" flyer to building owners that discussed building maintenance issues. The notice stated that building owners/managers should have possible contamination problems reviewed by competent professionals.
09-17-01	NYCDOH issued a press release that recommended that individuals reentering their residences and places of work remove dust by using a wet rag or wet mop, and vacuum with a HEPA filtration vacuum. If a HEPA vacuum was not available, the press release recommended using HEPA bags or dust allergen bags with a regular vacuum cleaner. EPA's web site also linked to these instructions.
09-26-01	NYCDEP issued a notice to building owners entitled "Clean-up of Debris inside Buildings" which was identical to the notice issued on 9-14-01 except for three items. First, the notice did not say "accumulations of dust that include pieces of debris . . may be assumed to be ACM (asbestos-containing material)." Second, the notice stated that such accumulations "can be sampled" (rather than "must be sampled") by a NYCDEP certified investigator or New York State Department of Labor inspector. Third, the notice stated that EPA had studied the situation and reported "that the potential presence of ACM in dust and debris is minimal."
10-25-01	NYCDEP described benchmarks and guidelines used to evaluate environmental conditions in a letter to Lower Manhattan residents dated October 25. In regard to cleaning indoor spaces the letter stated: "If more than 1 percent asbestos was found and testing and cleaning was necessary, it had to be performed by certified personnel." In addition, the statement indicated landlords should not reopen any building until a competent professional had properly inspected their building. The City's Asbestos Abatement Program requires that building owners file a written notification with the NYCDEP for asbestos abatement projects that do not require plan or permit approval from the City's Buildings Department. NYCDEP officials told us this notification applied to buildings owners who found more than 1 percent asbestos in bulk dust in their buildings (see Appendix J for a copy of the instructions).

NYCDEP officials told us that in September 2001 they began visually inspecting the exteriors of over 1,000 buildings and identified 323 with visible dust. NYCDEP documentation indicated that 102 of these 323 building exteriors were subsequently cleaned by the building owners. NYCDEP officials told us that the remaining owners stated they could not afford to clean their buildings, and these buildings were cleaned by NYCDEP with funding provided by FEMA.
To determine the extent of indoor contamination in Lower Manhattan residences,

the NYCDOH and ATSDR initiated an indoor air study in November 2001. The sampling phase was completed in December 2001, preliminary results released to the public in February 2002, and the final report issued by ATSDR in September 2002. The results of this study are discussed later in this chapter.



Indoor dust contamination from WTC debris. Source: EPA/ORD - Photo courtesy of Dr. Lung Chi Chen - NYU

In the weeks following the disaster, EPA was involved in testing various indoor spaces. EPA worked with the U.S. Coast Guard[7] to monitor offices in the Wall Street area so that employees could enter their offices and obtain needed files. On September 13, 2001, EPA tested for asbestos in its building located at 290 Broadway. Further, on September 17, 2001, EPA sampled dust in the Jacob Javits Convention Center complex, and on October 23, 2001, tested in the Department of Justice offices on 100 Church Street.

Details on the results of EPA's indoor testing, as well as General Services Administration testing of Federal buildings and three significant non-EPA studies, are in Appendix K.

Also, EPA conducted preliminary indoor assessments of 11 buildings at the request of the Ground Zero Elected Officials Task Force. These preliminary assessments included inspecting the interiors of the buildings, discussing cleanup plans with building owners/managers, and collecting dust samples from four of the buildings – three schools and one apartment building. An EPA Situation

[7] The U.S. Coast Guard maintains strike teams that typically deploy for responses to oil and hazardous chemical spills and were deployed in response to the WTC attacks.

Report for September 27-29, 2001, noted that a projected future action was to "finalize sampling plan for residential buildings." However, EPA's Situation Report for September 30 noted:

> *Residential sampling/reoccupation: On 9/30/01, EPA spoke to US Public Health Service and NYSDOH (New York State Department of Health) who have been discussing issue with NYCDOH. NYC will not be requesting State or Federal assistance for residential sampling or reoccupation issues. The Federal Response Plan assigns responsibility to the U.S. Public Health Service under ESF-8, Health and Medical Services, when state and local resources request Federal assistance for medical and public health assistance.*

In addition, correspondence from the Region 2 Regional Administrator indicated that in an October 9, 2001, meeting between FEMA, EPA, and New York City officials, City officials stated that they would not be requesting EPA's assistance for residential sampling or reoccupation issues. The September 30 report also indicated that New York City would not be requesting Federal assistance for cleaning roof debris. New York City officials disagreed with the characterizations of their statements presented in these documents and told us that they repeatedly expressed the position that the City welcomed any authorized federal assistance at that time.

Though EPA press releases through 2001 generally addressed outdoor air and not indoor contamination, the September 16 and October 3 releases discussed cleaning procedures that business owners and residents should take in cleaning indoor spaces. The press releases advised residents and business owners they could clean their own spaces if they used "appropriate" vacuum filters, and followed "recommended" and "proper" procedures. These press releases did not define what "appropriate," "recommended," and "proper" procedures meant.

Initially, EPA deferred to New York City to provide guidance for cleaning indoor spaces. As noted in Chapter 2, EPA was prepared to include recommendations in its press releases that residents obtain professional cleaning of their residences. The absence of instructions recommending that residents obtain professional cleaning in the initial weeks following the disaster may have increased the long-term health risks for those who cleaned WTC dust without using respirators and other professional cleaning equipment.

EPA's web site and press releases deferred to the NYCDOH guidance even though EPA's position on indoor cleaning was different than the City's. EPA's basis for deferring to New York City was summarized by the testimony of the Region 2 Administrator before the U.S. Senate Committee on Environment and Public Works on February 11, 2002. The Administrator, when asked if the

NYCDOH provided adequate cleanup directions to residents, answered as follows:

> *Consistent with their responsibility for the indoor environment, the City DOH, working with ATSDR and the Centers for Disease Control and Prevention (CDC) took the lead on the development and dissemination of public health recommendations related to building cleanups. DOH statements emphasizing wet wiping, moping and use of HEPA vacuums were reasonable. EPA's advice has been more conservative and suggested that people encountering more than minimal amounts of dust should consider this as a "worst case" and likely to be contaminated with asbestos. Under these circumstances, they should hire a certified asbestos cleanup contractor. . . "*

Asbestos medical experts we consulted agreed that professional cleaning was preferred for the asbestos contamination found. Further, the experts stated that, at a minimum, if members of the public were to clean residences themselves, they should have been instructed to wear respirators. A study by NYCDOH found that most residents did not follow the City's recommended cleaning practices. Although not specifically mentioned in the study, this conclusion would suggest that these residents did not obtain professional asbestos abatement contractors to clean their residences. The increased risk that residents placed themselves in by cleaning residences themselves is not known.

Although Agency press releases did not recommend professional cleaning of residences, EPA officials told us that they consistently recommended that residents obtain professional cleaning during interviews, public forums, and other communications. We were unable to determine when EPA first told the public that they should obtain professional cleaning for WTC-contaminated indoor spaces. The earliest instance we could locate was on October 26, 2001, when the EPA Administrator recommended professional cleaning in a televised interview on MSNBC:

> *However, again, as we said from the beginning, if you live there and you have any kind of breach - a window open, a broken window, anything like that in your apartment - or you have a heavy amount of dust - you should get a professional cleaner to clean it out . . . but just wiping it down, using your regular vacuum cleaner, that's not good enough. But - you know - we provided that information and it is up to the City Health Department and OSHA and others to follow-up. . .*

EPA also posted information on its public web site that recommended that indoor spaces with "more than a minimal amount of dust" be cleaned by a "professional asbestos contractor." We could not identify the exact date this information was posted, but determined that it was on EPA's web site by December 11, 2001.

In February 2002, EPA initiated a multi-agency task force on indoor contamination. The former EPA Chief of Staff told us that EPA initiated this effort because "Over time, we saw that New York City was not prepared to handle all the issues related to indoor air and offered to support them." The task force developed a plan in which EPA assumed the lead role for overseeing a FEMA-funded cleanup of residences in Lower Manhattan. EPA, New York City, and FEMA officials announced this plan to the public on May 8, 2002. Residents of Lower Manhattan living south of Canal Street could request testing and cleaning of their residences, or just testing. Public registration for the indoor testing and cleaning program ended December 28, 2002. This residential cleanup program is discussed in more detail in Chapter 6.

EPA Statutory and Regulatory Authority for Indoor Environment

EPA does not have clear statutory authority to establish and enforce health-based regulatory standards for indoor air. EPA is provided the authority to respond to releases of hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, or Superfund). Specifically, under Section 104(a) of CERCLA, EPA is authorized, consistent with the NCP, to remove or remediate any hazardous substance that is released into the environment, or any pollutant or contaminant that may present an imminent and substantial danger to the public health or welfare. Asbestos is a hazardous substance under CERCLA.

Neither CERCLA nor the implementing regulations under the NCP obligate EPA to undertake response actions. As provided in the NCP, "activities by the Federal and State governments in implementing this subpart are discretionary governmental functions" that do not create "a right to federal response" nor "any duty of the Federal government to take any response action at any particular time" (40 CFR § 300.404(h)(3)). Moreover, CERCLA contemplates State participation in response actions (42 U.S.C. 9621(h)), and the NCP allows for States to assume the lead agency role.

CERCLA only applies to the release of hazardous substances "into the environment." CERCLA defines "environment" as "the navigable waters ... and ... any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States." Courts have held the emissions of dust within enclosed buildings are not releases "into the environment" and therefore are not CERCLA releases. However, in the WTC case, the contamination of indoor spaces was caused by an external event – the collapse of the WTC. The collapse itself caused a release of hazardous substances

into the "environment" when a huge dust plume was released into the ambient air. Matter from the dust plume then entered buildings in the surrounding area. In such a case, when the release "into the environment" ends up contaminating enclosed structures, CERCLA provides EPA the authority to take any actions necessary to eliminate or mitigate the threat to public health from the release.

A 1998 Presidential Decision Directive[8] (PDD 62) tasked EPA with the leadership role in cleaning up buildings and other sites contaminated by chemical or biological agents as a result of an act of terrorism. This leadership role was discussed in the EPA Administrator's November 28, 2001, testimony before a Congressional Subcommittee of the Committee on Appropriations, wherein she noted that:

> *Under the provisions of PDD 62, signed by President Clinton in 1998, the EPA is assigned lead responsibility for cleaning up buildings and other sites contaminated by chemical or biological agents as a result of an act of terrorism. This responsibility draws on our decades of experience in cleaning up sites contaminated by toxins through prior practices or accidents.*

The expectation that EPA should be the lead agency for responding to indoor contamination has been clarified since September 11, 2001. The July 2002 *National Strategy for Homeland Security* issued by the Department of Homeland Security states that:

> "*After a major incident, the Environmental Protection Agency will be responsible for decontamination of affected buildings and neighborhoods and providing advice and assistance to public health authorities in determining when it is safe to return to these areas.*"

Prior Responses to Releases of Hazardous Substances

Due to the magnitude of the WTC collapse, it is difficult to compare the WTC response with responses to other emergencies. However, we noted other emergencies involving indoor contamination in which EPA's and other government entities' response to those emergencies appeared more proactive or comprehensive than the response to the WTC incident.

- In 1989, a relevant emergency response occurred in Gramercy Park in New York City. A steam pipe exploded, disbursing asbestos-contaminated mud into nearby buildings. The NYCDOH declared a public health emergency and evacuated residents until their apartments were decontaminated. An EPA

[8] Presidential Decision Directive (PDD) 62, "Protection Against Unconventional Threats to the Homeland and Americans Overseas," May 22, 1998.

guidance document that addresses the applicability of the Asbestos NESHAP to emergency situations discussed the Gramercy Park incident and concluded that a Federal response under CERCLA could have been undertaken if deemed necessary. However, in this case a Federal response was not needed in light of the City's response.

- In 1999, under its CERCLA authority and in cooperation with local health authorities, EPA started testing homes in Libby, Montana, and conducting other emergency removal activities. Asbestos contamination in Libby and EPA's response to that incident have been compared to the WTC situation. The contamination in Libby resulted from many years of mining activity, as well as extensive community use of by-products from the mine. Cleaning of residences and businesses in Libby, which was designated a Superfund site on November 25, 2002, is projected to be completed in 2005.[9]

Conclusions

For indoor environment concerns resulting from the collapse of the WTC towers, EPA had the authority to act under CERCLA but was not obligated to do so. Guidelines exist for determining whether an emergency response is warranted; however, these guidelines are not definitive. Under the NCP, it was within EPA's discretion to defer to New York City the responsibility for responding to indoor contamination concerns. EPA's action was consistent with the FRP, which is intended to supplement local government response.

Although EPA acted within its discretion, a 1998 Presidential directive and the more recent National Strategy for Homeland Security task EPA with taking the leadership role in cleaning up buildings and other sites contaminated by chemical or biological agents as a result of an act of terrorism. EPA needs to work with the Department of Homeland Security and other agencies to determine the nature and form with which the Federal government should assume a more direct role in addressing indoor environment concerns, under what circumstances this direct role should occur, and the oversight mechanisms to be employed when local agencies undertake such responses. In the WTC case, the delay in providing a government-organized and adequately monitored cleanup in Lower Manhattan may have contributed to unnecessary exposures to asbestos and other pollutants by unprotected workers and residents.

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[9] The indoor air clearance memorandum for Libby had not been finalized at the time we drafted this report. A preliminary clearance level of non-detect for asbestos was being used; based on the method detection limit used in Libby, the clearance level being used is similar to the clearance level being used for residences in Lower Manhattan.

Recommendations

We recommend that the EPA Administrator coordinate with the Department of Homeland Security, FEMA, other appropriate Federal agencies, and those State and local governments having jurisdiction over potential terrorist targets to:

3-1. Develop protocols for determining how indoor environmental concerns will be handled in large-scale disasters, to include addressing:

- The agency or agencies responsible for testing and/or overseeing testing of indoor spaces;
- Sampling methods to be used in analyzing indoor contamination;
- Benchmarks to be used in assessing whether the indoor contamination poses a threat;
- Under what circumstances government-assisted cleanups are warranted;
- How these cleanups will be funded; and
- The agency or agencies responsible for communicating testing results and appropriate cleaning instructions.

3-2. Develop and publish oversight criteria and State and local agency reporting requirements for those agencies involved in cleaning up buildings and other sites contaminated by pollutants resulting from terrorist attacks or other disasters.

Additional recommendations related to responding to indoor environmental concerns are in Chapters 6 and 7.

Agency and New York City Comments and OIG Evaluation

The Agency disagreed that unprotected workers and residents may have experienced unnecessary exposures to asbestos or other pollutants as a result of the delay in providing a government-organized and monitored cleanup, because (1) their recommended cleaning instructions (use of wet mops and HEPA vacuums) were proven effective in EPA studies, and (2) the Agency recommended professional cleaning when residents encountered more than minimal dust. The Agency generally agreed with the recommendations.

EPA's study of cleaning effectiveness concluded that 1 to 3 cleanings were needed to achieve the health-related benchmarks and did not address the exposure experienced by an unprotected person who may be performing these recommended cleaning procedures. Also, a NYCDOH study conducted in October 2001 concluded that the majority of households polled did not follow the recommended procedures of wet mopping and HEPA vacuuming. Also, a study of immigrant workers used to clean indoor spaces in Lower Manhattan around

Ground Zero reported that the workers often did not wear respiratory protection and experienced numerous respiratory symptoms. With respect to professional cleaning, EPA's press releases did not recommend this approach. Therefore, we continue to believe delays in implementing a government organized cleanup resulted in unnecessary exposure to asbestos and other contaminants. The Agency's full written response to our draft report and our detailed evaluation of that response are contained in Appendices Q and R, respectively.

New York City officials disagreed with some of the draft report's characterizations of its position on the indoor response and offered clarifications which we incorporated into the final report. New York City's response to draft report excerpts and our evaluation of that response are contained in Appendices S and T, respectively.

Chapter 4
Asbestos Emission Control Work Practices Inconsistent

Since asbestos is a known human carcinogen, EPA has established stringent work practices to control emissions of asbestos resulting from demolition and renovation projects. Evidence indicated that a significant requirement in emergency demolitions – wetting damaged buildings before demolition and keeping the waste material wet after demolition – was followed at the WTC site. However, work practices applicable to the transport of debris from the site were employed inconsistently. The specific impact on air quality of any variance from EPA's asbestos emergency work practices is unknown, although outdoor air monitoring showed seven asbestos readings above the AHERA standard after September 2001.

Application of NESHAP Demolition and Renovation Regulations to the WTC Disaster

The applicability of the Asbestos NESHAP regulations to the demolition of damaged WTC Complex buildings and the removal of WTC building debris was discussed by EPA officials as early as September 12, 2001. An EPA official told us that EPA did not want to insist on any NESHAP requirement that would impede or deter the WTC search and rescue operation. An EPA Office of Enforcement and Compliance Assurance official involved in these early discussions told us that, in theory, NESHAP would apply to all dust and debris from the WTC disaster and subsequent demolition and removal efforts if that material contained more than 1 percent asbestos. However, in his opinion, a literal interpretation of the requirements was not realistic under the circumstances. The Regional Counsel for EPA Region 2 told us that he concluded the Asbestos NESHAP was not applicable to the transport of steel from the towers since the collapse did not meet the definition of a NESHAP demolition. However, he did not render an opinion on the applicability of the NESHAP to the demolition and removal of the three buildings that had not fully collapsed.

The Asbestos NESHAP regulations (40 CFR Part 61 Subpart M) prescribe requirements for industries and operators of certain activities to reduce the emissions of asbestos, including the demolition and renovation of buildings that contain asbestos. Generally known as the asbestos NESHAP work practice standards, many of these are applicable to emergency situations involving asbestos, as explained in EPA's "Guidelines For Catastrophic Emergency

Situations Involving Asbestos"[10] issued in February 1992. For example, asbestos-containing buildings that are in danger of imminent collapse and are ordered by the government to be demolished must be wetted down to reduce emissions. Further, asbestos-containing waste must be adequately wetted at all times after demolition and kept wet during the handling and loading for transport to a disposal site.

Additionally, in response to questions about the proper handling of WTC dust and debris from a law firm representing Local 78, Asbestos, Lead and Hazardous Waste Laborers, OSHA issued an "interpretive letter" in January 2002 stating that the WTC dust was presumed to contain asbestos and the WTC demolition and salvage was subject to the Construction Asbestos Standard.

Asbestos Work Practices Used in the WTC Complex Demolition

The NESHAP emergency requirement – wetting damaged buildings before demolition and continuous wetting of the debris after demolition – appeared to have been followed. However, implementation of work practices to reduce asbestos emissions during transport of asbestos-containing debris appeared to be inconsistent.

The New York State Department of Labor is delegated responsibility for implementing all Federal regulations under the NESHAP program. NYCDEP is responsible for the asbestos abatement program in New York City. Even though authority to run the program in New York was delegated to the State and local agencies, EPA retains the authority to oversee agency performance and to enforce NESHAP regulations as appropriate.

NYCDDC was responsible for demolition and debris removal at the site. NYCDDC retained four construction companies to perform the demolition and debris removal. In addition, wetting and misting operations at the site were arranged by one of the four companies. According to New York City officials, because of the unprecedented nature of the situation, formal written contracts with detailed statements of the work were not prepared. Instead, daily meetings were held to plan the day's activities and address any special work practices that may be required to reduce possible emissions of asbestos.

EPA and New York State asbestos NESHAP regulations require that a notification be filed by building owners even in emergency situations. The process provides an opportunity for government officials to discuss and agree to preferred work practices to be used in demolition and renovation operations.

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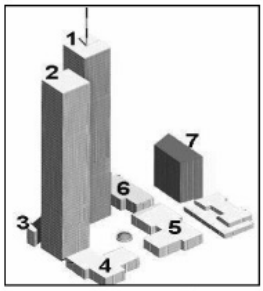
[10] This guidance was issued to assist EPA regional offices and State and local agencies in managing potential asbestos hazards resulting from a catastrophic accident or disaster after three emergencies involving asbestos occurred in 1989.

Notification of a NESHAP demolition and removal operation was not filed for the WTC. City officials stated that a written notification was not filed for WTC buildings 4, 5, and 6 because they were advised by the property owners that there was no asbestos-containing material in the above-ground structures. NYCDDC officials told us that they were advised by the Port Authority that subsequent to the WTC bombing in 1993, they initiated a program to remove asbestos-containing materials from the WTC complex. In regard to the WTC towers, the Port Authority advised the NYCDDC that one tower contained asbestos fire-proofing up to approximately the 40th floor while the other tower did not use asbestos-containing fire-proofing. An EPA On-Scene Coordinator's understanding was that only accessible asbestos-containing material was removed from WTC buildings 4, 5, and 6.

Although a formal notification was not filed, New York City officials told us that proper planning was ensured through the use of daily health and safety meetings. These meeting included representatives from a number of City, State, and Federal agencies, including EPA. New York City officials maintained that EPA had functional notice of NESHAP related activities through its participation at these meetings and that it was doubtful that notification would have changed the manner in which these activities were conducted.

Demolition of Damaged Buildings

In addition to WTC 1 and 2 (North and South Towers, respectively), WTC 3 (Marriott Hotel) collapsed from tower debris and WTC 7 also collapsed after burning for approximately 7 hours. The remaining three buildings in the WTC Complex – WTC 4 (South Plaza), WTC 5 (North Plaza), and WTC 6 (U.S. Customs) – were all significantly damaged. According to an EPA On-Scene Coordinator, the damaged buildings were considered in danger of collapse.



WTC complex. Source: New York Times

The demolition of all WTC complex buildings to ground level was completed by late December 2001. WTC 4 and WTC 5 were brought down by a weight that was suspended by a cable. Use of this wrecking device required a special approval from the New York City Department of Buildings, which was granted. WTC 6 was brought down with mechanical grapplers and cutting shears.

Both NYCDDC and OSHA officials told us that the WTC site was under continuous dust suppression, and the latter said this dust suppression was very successful. An EPA On-Scene Coordinator told us that once dust suppression began, water was sprayed wherever there was dust and, to the best of his knowledge, this practice was successful. OSHA officials further stated that it would have been too dangerous to send abatement contractors into WTC 4, WTC 5, or WTC 6 to remove asbestos-containing material before demolition.

Both NYCDDC and EPA officials told us that when asbestos-containing material (e.g., pipe wrapping, steel insulation) was encountered during the removal, it was tested and treated in accordance with asbestos abatement procedures. According to the NYCDDC official, the majority of the asbestos-containing material was encountered when removing the remnants of the basement levels of WTC 6.

EPA Situation Reports confirmed statements about asbestos abatements and recorded instances where asbestos was found during debris removal and asbestos abatements performed. For example, the EPA May 23, 2002, Situation Report noted that:

> *Twelve (12) bulk asbestos samples were taken in the B1, B2, B3, levels of (WTC) Building 6. The samples were taken from sprayed on insulation at the request of NYC DOI. Of the twelve samples, nine (9) should (sic) results were in excess of 1% Chrysotile asbestos, the results ranged from 1.30% to 30.80%. The three samples that were not above 1% were detect for Chrysotile asbestos.*

According to the April 5, 2002, Situation Report, bulk testing showed that one sample of the pipe wrap that was being removed as part of this abatement contained 66 percent amosite[11] asbestos.

Work Practices Related to Transporting Waste Not Always Followed

To minimize dust emissions, City, State, and Federal officials established procedures for trucks hauling debris from the site. These procedures included the use of tarps (nylon mesh) to cover debris and procedures for wetting down the trucks before they left the site. The truck wetting operation was performed by contractors for EPA. The large volume of traffic made ensuring compliance with procedures difficult. Particularly in the weeks immediately following the disaster, trucks hauling debris from the site did not consistently stop to be wetted down before leaving the site. As a result, New York City obtained assistance from the New York State Department of Environmental Conservation Police and the National Guard to ensure that trucks stopped at the wash stations before leaving

[11] Amosite is a form of amphibole asbestos. Several studies suggest that amphibole asbestos may be more harmful than chrysotile asbestos, particularly for mesothelioma. Test results from the site showed that the asbestos was predominantly chrysotile, not amphibole.

the site. Even after getting assistance, EPA Situation Reports indicated that the trucks were not stopping long enough to get completely wetted down.

Similar observations were reported in an October 6, 2001, report funded by the National Institute of Environmental Health Sciences, which discussed worker safety issues at WTC. The report noted that:

> *Vehicles leaving the site with debris, either dumps or lowboys with large sections of steel beams, are not deconned* (decontaminated)[12] *and the dumps do not have covers over the loads. As a consequence, potentially hazardous dust and debris is tracked off site or is blown from the loads during transit.*

EPA Situation Reports indicated that as late as October 13, 2001, this was still a problem. However, around this time period, New York City officials began issuing summonses to truck operators and their employers for failure to secure loads and to stop and be wetted down. City officials told us that approximately 300 summonses were issued and that compliance with the requirement for trucks to get wetted down before leaving the site was almost 100 percent by late October to early November 2001.

However, certain requirements for transporting debris from the site were suspended by the Governor of New York in an Executive Order dated October 9, 2001. This Order temporarily suspended regulations regarding the transportation and handling of certain solid waste resulting from the WTC disaster. The Order applied to persons working at the site under the supervision of New York State or the New York City government officials and suspended requirements to:

- Obtain permits for collection, transportation, and delivery of regulated waste to staging areas or disposal locations owned or operated by the City.
- Comply with hazardous waste management standards at the site, during the transportation of waste from the disaster site to staging areas or disposal locations owned by the City of New York, and in connection with the temporary storage of such waste at these staging area or disposal locations.

Once debris was loaded onto trucks at Ground Zero it was transported to piers and unloaded on barges that carried the debris to landfills. The manner in which these trucking and barge operations were conducted was discussed at hearings held by

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12 New York City officials disagreed with the report's characterization of the debris removal operation. They stated that the requirement for dump trucks to be covered started September 12, and that this requirement was enforced. They also said that the vehicles did not require decontamination since they were not transporting hazardous waste as defined by EPA under 40 CFR Part 260-280; and while decontamination procedures were not required, wash down procedures were mandated.

the EPA Superfund Ombudsman, Congress, New York City Council, and New York State Assembly. Concerned citizens and local elected officials testified at these hearings that trucks hauling debris from Ground Zero were not marked as carrying hazardous material, nor were they covered in such a manner to prevent dust from escaping. In addition, people testified that the wetting of debris at the barge operation at Pier 25, which was located north of Ground Zero and near Stuyvesant High School and residences, was inconsistent and resulted in the release of dust into the air. Parents of children at Stuyvesant High School and other members of the public raised concerns that these barge operations were re-contaminating Stuyvesant High School and other buildings in that area.

EPA officials told us they asked New York City to consider alternatives for the placement of the barge, and while New York City officials were understanding of the concerns of the residential and school communities located nearby, viable alternatives were not available. Thus, emphasis was placed on ensuring use of appropriate work practices during unloading of debris-carrying trucks and transfer to barges. Further, the EPA Region 2 Regional Administrator advised us that EPA sampled for the potential air quality impact of these barge operations from September 22, 2001, through May 31, 2002, and found that "99.83% of samples were below the screening level." She further noted that the New York City Department of Education collected daily air samples at Stuyvesant and other nearby schools from October 4, 2001, to the end of June 2002, and found that "the overwhelming majority of daily sampling has resulted in no structures detected."

We contacted the president of a consulting firm hired by the Stuyvesant High School Parents' Association to review environmental test results for Stuyvesant High School. He told us that ambient asbestos testing at the school was conducted in accordance with AHERA standards and elevated levels of airborne asbestos were not found. However, he said that elevated levels of particulate matter were recorded that could have come from the debris off-loading operation or diesel fuel emissions from the trucks transporting the debris.

Asbestos Still in Many U.S. Buildings

Asbestos is present in many buildings across the country and is still used in some building materials. For example, a 1984 building study by EPA found that, on average, 20 percent of all buildings in the United Stated contained asbestos. These averages were higher for some cities. A 1988 building survey found that, overall, 68 percent of the buildings in New York City contained asbestos. Further, although the use of asbestos-containing material has been banned from some products, it is still used in others. For example, asbestos-containing material is still allowed in pipeline wrap, asbestos-cement corrugated sheet, asbestos-cement flat sheet, roofing felt, millboard, vinyl-asbestos floor tile, asbestos-cement shingle, and roof coatings.

Conclusions

Although many steps were taken to reduce asbestos emissions from the WTC site, problems were encountered in fully implementing the applicable NESHAP requirements for emergency situations, such as ensuring that trucks transporting debris were adequately wetted down before leaving the WTC site. Further, the placement of a WTC debris unloading and transfer operation near schools and residences compounded the potential impact of not implementing normally required NESHAP requirements. Given the likelihood that many buildings across the country may contain asbestos, EPA and State and local agencies need to establish improved monitoring and oversight procedures for ensuring that appropriate NESHAP work practices are followed in responding to situations that cause widespread building damage.

Recommendations

We recommend that the EPA Administrator:

4-1. Ensure that EPA Regional and Headquarters personnel are aware of the "Guidelines For Catastrophic Emergency Situations Involving Asbestos," including its application in the event of future terrorist attacks or other disasters.

4-2. Develop specific monitoring, reporting, and oversight procedures for ensuring that Federal, State, and local responders follow the appropriate Asbestos NESHAP work practices, including initiating enforcement actions when EPA observes violations of NESHAP work practices.

Agency and New York City Comments and OIG Evaluation

The Agency noted in its response that ensuring compliance with NESHAP work practices in the immediate aftermath of the WTC collapse and fires was "extremely difficult" not because of a lack of knowledge about what was required, but because of the practicality of implementing these practices under the extreme conditions of duress. Further, the Agency noted that over time, these problems were eliminated to the maximum extent possible. The Agency agreed with the recommendations. The Agency's full written response to our draft report and our detailed evaluation of that response are contained in Appendices Q and R, respectively.

New York City offered additional information and clarification as to how NESHAP work practices were discussed and implemented at the site. We added this information to the final report. New York City officials objected to the inclusion of testimony from the EPA Superfund Ombudsman hearing on the basis of it being unsubstantiated and to the discussion of lead levels at Stuyvesant High School on the basis of not being relevant to the Chapter. We disagree and have retained that information in the final report. New York City's response to draft report excerpts and our evaluation of that response are contained in Appendices S and T, respectively.

Chapter 5
Air Quality-Related Communications Not Effective in Getting Public and Workers to Take Recommended Precautions

A critical component in helping the public minimize exposure to potential health hazards resulting from a terrorist attack or other disasters involves communicating risk information to the public. Armed with such information, the public can take positive steps to mitigate potential exposures as well as other precautions to avoid unnecessary health risks. After the terrorist attack on WTC, government communications were criticized for not providing timely and accurate information to the public. Evidence gathered through studies and various governmental hearings indicates that the public and Ground Zero workers did not receive sufficient air quality information, wanted more information on the associated health risks, and did not consistently take precautions recommended by government communications to minimize their health risk. Because of these concerns, the OIG conducted a survey of New York City residents regarding government communications. These results will be reported separately.

NYCDOH Survey Found Residents Wanted More Air Quality Information and Did Not Use Recommended Cleaning Procedures

From October 25 through November 1, 2001, NYCDOH conducted a door-to-door survey of residents in Lower Manhattan's Battery Park City, Southbridge Towers, and Independence Plaza. All of these neighborhoods were in close proximity to the WTC towers. A representative sample of apartments from each of these three areas was selected and a total of 414 interviews were conducted. The survey reached two conclusions related to air quality:

- Residents of Lower Manhattan were worried about their health and safety. There was a tremendous concern about the air quality and its potential effects on health. The high proportion of the population experiencing symptoms likely to be related to respiratory irritants contributed to this concern.

- The majority of households had not been cleaned according to recommendations, possibly increasing the exposure to respiratory irritants.

Specifically, in regard to air quality information, the report noted that:

> *The topics of most interest to this population related to air quality, its safety and its effect on the physical health of both adults and children (70% said they wanted more information about air quality). There is a*

need for more information regarding the potential risks from exposure to the dust and debris that continues to be emitted from the WTC site. Related to this topic, 35% of the respondents reported that they needed more information regarding cleaning.

The report noted that only 40 percent of the residents said they cleaned their homes according to the recommended methods of wet moping hard surfaces and using HEPA vacuums on carpeting. The report noted two limitations on its results. First, the survey only included three selected neighborhoods in Lower Manhattan and did not include residents who had not re-occupied their apartments at the time of the survey. Second, the report noted that normally respiratory symptoms (e.g., symptoms related to allergies) increase during the time of year the survey was conducted.

Hearings held by a Congressional Subcommittee, the EPA Superfund Ombudsman, New York City Council, and New York State Assembly included testimony indicating that the public desired more information regarding air quality. Further, several reports detailing lessons learned from the WTC response noted problems with government communications regarding air quality. These reports and their conclusions are discussed in Chapter 7.

Telephone Poll Indicated Public Did Not Believe Air Was Safe

A telephone poll[13] conducted in March 2002, after many news articles were published questioning the air quality information that the government had issued, found that 70 percent of those surveyed did not believe environmental protection and other government agencies when they said the air quality around the WTC site was safe. The poll surveyed 511 randomly dialed residences from the five boroughs of New York City. We contacted one of the principals of the polling organization, who told us the answers to the lone question asked about air quality were consistent among all groups polled.

Unprotected Workers Cleaned Contaminated Offices and Residences

Preliminary results of an independent study[14] of the health of day laborers who cleaned indoor spaces near Ground Zero noted that these workers were generally not provided with respirators or any personal protective equipment. Further, the workers were not informed about the contents of the dust they removed from offices and apartments, nor were they informed of any environmental test results

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[13] Blum and Weprin Associates, New York Daily News, March 2002, margin of error plus or minus 4.5 percent.

[14] "Assessing the Health of Immigrant Workers Near Ground Zero: Preliminary Results of the World Trade Center Day Laborer Medical Monitoring Project"; Ekaterina Malievskaya, M.D., Nora Rosenberg, Steven Markowitz, M.D.; American Journal of Industrial Medicine; December 2002.

on the dust and debris that they removed. Moreover, most of these workers reported health symptoms that first appeared or worsened after September 11, 2001. These symptoms included coughing, sore throat, nasal congestion, chest tightness, headaches, fatigue, dizziness, and sleep disturbances. The results were based on examinations of 418 workers from January 15 through February 28, 2002.

Ground Zero Workers May Not Have Received Sufficient Information

A widely publicized aspect of the WTC response was the lack of respirator use by rescue and construction crews. It was beyond the scope of this review to determine the extent that respirators were not used and why this occurred. However, we reviewed EPA's efforts to provide respirators, reviewed accounts of respirator use in various articles and reports, and inquired about respirator use and availability during our interviews with EPA, other Federal agency, New York City, and non-government officials. Our limited work in this area indicated that respirators were generally available but were not worn for a number of reasons. A significant factor was the desire to save lives without regard for personal safety in the immediate aftermath of the disaster. Other reasons appeared to include the respirators' interference with the ability of emergency workers to communicate, lack of training, lack of enforcement of safety measures at the site, and conflicting messages about the air quality at Ground Zero.

A detailed discussion on the use of respirators by rescue and construction crews at Ground Zero, including EPA activities to encourage respirator use as well as the health impacts of the lack of respirator use, are in Appendix L.

A January 2002 report[15] concluded that respirator use was compromised, in part, due to mixed messages that workers received about the importance of respiratory protection. For example, the report noted that air monitoring information was often within OSHA permissible limits or below the analytical method limit of detection. Thus, on one hand workers had information suggesting that the air quality was not bad, but a message to wear respirators on the other. This report also noted the poor example set by political figures, celebrities, and even supervisors who visited the site but did not wear respirators.

The experiences of the Laboratory Director of an environmental testing firm hired to conduct testing for one of the companies conducting the site clean-up was consistent with information presented in the report on respiratory usage at the WTC site. This individual, with many years experience in asbestos toxicology and applied environmental hygiene, told us that he interpreted EPA's statement that the air was safe to breathe to apply to Ground Zero. The Laboratory Director

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15 "Respiratory Protection at the World Trade Center: Lessons From the Other Disaster," Bruce Lippy, CIH, CSP, January 15, 2002.

said that the construction company that hired him also interpreted EPA's statement to apply to Ground Zero, and on the basis of EPA's statements about air quality, company officials questioned the Laboratory Director's recommendations that workers wear respirators. Although he was able to convince his client that respirators were needed, he told us that it was difficult to convince workers to wear respirators.

A November 2001 report[16] prepared for the National Council of Structural Engineers Associations - Structural Engineering Emergency Response Plan Committee similarly noted that structural engineers at the site had concerns about environmental contamination at Ground Zero but proceeded with their work given the urgency of the situation. The report noted that although structural engineers assumed the air quality was being monitored by government agencies, specific information on the results of this monitoring did not filter down to the structural engineering teams. Further, structural engineers did not know if they were wearing the correct respirators. The report cited the following joint EPA and OSHA statement as an example of information that the authors concluded did not provide sufficient information on air quality or the proper respirators needed:

> *. . . EPA and OSHA are providing real-time analysis in the immediate vicinity of the debris pile at Ground Zero. . . . . This information helps response workers on the scene determine what level of respiratory protection is appropriate to use (U.S. Dept. of Labor Press Release 01-339)*

Recent Developments

EPA has initiated several actions to improve its risk communications to the public. These actions are discussed in Chapters 2 and 7. In regard to worker safety, EPA is participating in a FEMA-led Interagency Health and Safety Coordinating Committee to provide unified safety and occupational health leadership, guidance, and policy development for all Federal agencies under the Federal Response Plan. In particular, the Committee plans to develop an Emergency Support Function for Safety and Occupational Health.

Conclusions

The public wanted better information about air quality than they received from government sources. A NYCDOH study, other lessons learned reports, and testimony provided at various hearings suggest that the public did not receive adequate air quality information and that individuals cleaned their residences without using proper procedures and personal protection. In addition, workers at

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16 "World Trade Center Disaster: *Structural Engineers at Ground Zero,"* August Domel, Jr., Ph.D., S.E., P.E., November 2001.

Ground Zero may not have used respirators due, in part, to inadequate EPA and other government communication.

EPA was one of many governmental and non-governmental agencies that communicated health risk information to workers and the public. The levels of non-adherence to the risk communications of these governmental agencies suggests that all the participating levels of government need to re-examine their policies, procedures, and practices for ensuring that necessary precautions are consistently followed to reduce human exposure to contaminants.

Recommendation

We recommend that the EPA Administrator:

5-1. Coordinate with FEMA and other applicable Federal agencies to clearly establish Federal agency responsibilities, roles, and procedures during an emergency response that ensure that:

- Workers responding to emergencies are adequately protected by the development and strict enforcement of health and safety plans.
- Health hazard information is effectively communicated to emergency response crews.
- Sufficiently detailed health risk information is effectively communicated to the public, including actions that the public should take to reduce their potential exposure to harmful pollutants.

Additional recommendations relevant to the issues discussed in this chapter are included in Chapters 2, 3, and 7. Also, additional recommendations may be presented in our subsequent report on the results of our public survey.

Agency and New York City Comments and OIG Evaluation

EPA agreed with the recommendation but noted that it and other Agencies provided the public with the most comprehensive and up-to-date information available. In regard to worker safety, EPA noted that it supported OSHA in many ways, including a long-term effort to educate workers about the need to wear respirators. The Agency's complete written response to our draft report and our detailed evaluation of that response are contained Appendices Q and R, respectively.

New York City officials responded that our report should not discuss respiratory issues related to Ground Zero since this was OSHA's responsibility and not EPA's. New York City offered several revisions to this section if we were to retain it in our report. We incorporated New York City's suggested changes where appropriate but have retained our discussion of respiratory issues as Appendix L since EPA supported OSHA in this activity. New York City's response to draft report excerpts and our evaluation of that response are contained in Appendices S and T, respectively.

Chapter 6
Further Actions Needed to Address Current WTC Response

Monitoring data showed that ambient air levels in Lower Manhattan had generally returned to pre-September 11 levels in mid-2002 or earlier, and as such, EPA ceased outdoor monitoring in June 2002. Further, all debris had been removed from the site by June 2002. However, concerns about indoor contamination resulting from the collapse remained at the time we completed our review in April 2003, even though EPA, FEMA, and New York City had initiated a multi-million dollar Indoor Air Residential Assistance program that included testing and cleaning of residences in Lower Manhattan. Additional measures can be taken to ensure cleanup provides reasonable assurance that the public's exposure to asbestos and other contaminants in residences and workspaces in Lower Manhattan is within the acceptable risk guidelines.

WTC Outdoor Monitoring Ended June 2002

EPA ceased all WTC-related outdoor air monitoring in Lower Manhattan on June 20, 2002, with EPA concluding that, for the most part, outdoor ambient air pollution levels had returned to pre-September 11 levels. Generally, ambient pollutant levels in Lower Manhattan noticeably decreased in January 2002, once the fires at Ground Zero were essentially extinguished. Some spikes in benzene were recorded in January and February 2002, as a result of fires that flared up during removal operations. From March 2002 through June 20, 2002, the only elevated readings recorded were for asbestos. The elevated readings occurred in March and April 2002 at the worker wash station and in May 2002 at the monitoring site near the barge operation.

Our review of monitoring data as well as discussions with EPA, other Federal agencies, New York City, and selected external health research, air quality testing, academic, and environmental organization officials supported EPA's view that the outdoor ambient air pollution levels in Lower Manhattan had, for the most part, returned to pre-September 11 levels for those pollutants where pre-September 11 monitoring data existed.

Indoor Residential Cleanup Program

The testing and cleaning of residences was one of several activities included in an overall Indoor Air Residential Assistance Program funded by FEMA at an estimated cost of $60 to $80 million. In addition to testing and cleaning of residences, the program included:

- identifying contaminants of potential concern resulting from the WTC attack.
- conducting a confirmation cleaning study to evaluate the effectiveness of various cleaning techniques in achieving health-based benchmarks.
- conducting a study of Upper Manhattan to determine background (normal) levels of contaminants.
- inspecting and cleaning building exteriors in Lower Manhattan.
- cleaning two unoccupied residential buildings.

The indoor residential cleanup program was administered by EPA and New York City. FEMA officials told us that they normally do not fund indoor cleanups of private spaces related to a disaster unless an immediate hazard is declared. FEMA officials told us that New York City officials indicated a formal cleanup program was not needed. Therefore, in May 2002, the EPA Region 2 Administrator provided FEMA with a memorandum that furnished the necessary justification to authorize funding.

Public registration for the testing and cleaning program ended on December 28, 2002. As of July 17, 2003, EPA had reported the following test results.

Table 6-1: Test Results for Indoor Asbestos Testing as of July 17, 2003

Type of Request	Total Requests	Tests Completed	Residences Cleared[1]	Residences Not Cleared[2]	Not Determined[3]	Test Results Pending[4]
Test Only	730	729	691	8	30	1
Clean and Test	3,436	3,425	3,256	36	133	11

Notes
1 = Ambient levels were below the clearance standard of .0009 fibers per cubic centimeter (f/cc).
2 = Ambient levels were above the clearance standard of .0009 f/cc.
3 = Samples could not be analyzed because of overloaded filters or other reasons. Re-testing to be performed.
4 = Testing not begun or results not yet analyzed.

Residents could choose to have "testing only" of their residence or they could choose to have "cleaning and post-cleaning testing" of their residence. Residents requesting to only have their residence tested could choose between one of two sampling options: aggressive sampling or modified aggressive sampling. Aggressive sampling used a leafblower to stir up any settled dust by blowing air against walls, ceilings, floors, and other surfaces prior to collection of air samples. Modified aggressive sampling did not use leaf blowers. For either sampling option, the air samples were to be analyzed for asbestos only. In addition to testing indoor air for asbestos, EPA planned to collect pre- and post-cleaning wipe samples for a limited number of residences (approximately 250) and test these samples for dioxin, total metals, and mercury.

For residents requesting "cleaning and post-cleaning testing," two approaches were used to clean the residences. The cleaning approach was based on the extent

of dust contamination as determined through visual inspection. If a visual inspection of the residence and the building's common spaces (including elevator shafts) revealed minimal dust accumulations (light coating), "Scope of Work A" applied. If visual inspection indicated large or significant accumulations of dust or debris from the WTC collapse in residences, portions of the residence, or the building's common spaces, "Scope of Work B" applied. In general, "Scope of Work B" included additional cleaning of surfaces not included in "Scope of Work A." Appendix M describes the two approaches available for residents requesting cleaning and post-cleaning testing.

A significant issue with respect to developing health-related benchmarks (or clearance standards) is the extent of prior or background contamination, particularly in urban areas. This information is needed to determine the impact of a disaster on the indoor environment. Studies have shown that these background levels can exceed concentrations that may present a greater than 1-in-1,000,000 excess lifetime cancer risk (the desired cleanup goal for the Superfund program). In the WTC case, EPA's background study of Upper Manhattan suggests that the background concentrations for asbestos in indoor air and dioxin in settled dust were at levels that presented a greater than 1-in-1,000,000 excess cancer risk.

Concurrent with the start of the indoor cleanup, a multi-agency workgroup of Federal, State and city officials identified contaminants of potential concern (COPC) related to the WTC collapse and developed health-related benchmarks for these COPCs, including asbestos, lead, dioxin, PAHs, fibrous glass, and crystalline silica. Three of these COPCs are considered cancer causing: asbestos, dioxin, and PAHs. For each of the three carcinogens, the workgroup established a health-related benchmark that equated to an increased lifetime cancer risk of 1-in-10,000. This means that if 10,000 people are exposed to a single COPC at the established benchmark level for 30 years, there may be one more case of cancer than if the group had not been exposed.

In September 2002, the multi-agency workgroup published these COPCs in a peer review draft entitled "World Trade Center Indoor Air Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks," which was peer reviewed by the Toxicology Excellence for Risk Assessment (TERA) organization in October 2002. TERA's peer review report was issued on February 7, 2003. The group's suggestions included:

- Expanding the list of COPCs as appropriate,
- More clearly explaining the methodology for selecting the COPCs,
- Adding criteria to account for potential exposures through contact with dust in the risk-based screening for COPC selection,
- Adding parameters for children's exposure, and
- More fully describing the approach for considering the health effects of mixtures of COPC.

The workgroup issued a revised COPC document in May 2003 that included responses to the peer review panel's comments. Given the significance of the panel's comments, the fact that additional information has been developed since the peer review was conducted, and the potential for this document to be used as a basis for future indoor cleanups, we believe the revised COPC document should be submitted for a second peer review as suggested by the TERA panel.

Actions Can Be Taken to Provide Additional Assurance That Indoor Cleanup Is Protective of Human Health

The residential cleanup effort represents a significant undertaking by EPA, FEMA, and New York City. Nonetheless, it has been criticized by some groups. The geographical coverage of the cleanup, limited to residences south of Canal Street, has been questioned. The testing and cleanup procedures have been criticized, particularly the fact that EPA has not required all apartments within a building to be cleaned. In addition, not requiring the cleaning of all HVAC systems was criticized as a limitation that could lead to re-contamination of clean residences.

Additional actions can be taken to provide greater assurances that the program is fully protective of human health. These actions include:

- Ensuring that the cleanup meets minimum Superfund site cleanup goals,
- Treating impacted buildings as a system,
- Employing sampling methods (i.e., aggressive) to ensure that asbestos is at or below acceptable levels,
- Including workspaces as well as residential buildings, and
- Including all geographic areas impacted by WTC dust.

Discussions on each of these actions follow.

Indoor Cleanup Level Does Not Meet Minimum Superfund Levels

Although the indoor cleanup in Lower Manhattan was not being conducted as a Superfund cleanup, Superfund regulations and guidelines provide useful criteria for evaluating the health protectiveness of the Lower Manhattan cleanup and whether it provides reasonable assurance that the public's risk of exposure to asbestos and other contaminants had been minimized.

The NCP describes specific criteria for determining the cleanup goals for contaminated sites placed on the National Priorities List. The NCP requires that for known or suspected carcinogens, acceptable exposure levels are generally concentration levels that represent between a 1-in-10,000 and 1-in-1,000,000 increased lifetime cancer risk. The NCP lists nine factors, including cost,

exposure, uncertainty, and technical limitations, that may justify a cleanup remedy that departs from the 1-in-1,000,000 cleanup goal.

In contrast to the above criteria, EPA's Lower Manhattan indoor cleanup established a 1-in-10,000 risk as the goal of the cleanup for asbestos. The program does not include monitoring for the presence of the other COPCs, including dioxin and PAHs, which are known carcinogens. The COPC document established benchmarks for these two pollutants that also correspond to a 1-in-10,000 increased risk. Although the assumption is that the cleaning methods prescribed for asbestos will clean the residence of other pollutants as well, the post-cleaning testing does not provide assurance that these other pollutants were removed. However, under Superfund guidance, the risk from exposure to multiple carcinogens is considered additive. Thus, if all three pollutants were cleaned up to levels that equate to a 1-in-10,000 risk for each pollutant, the combined risk would be considered greater than 1-in-10,000.

The TERA peer review addressed the risk level established for the COPCs. The panel suggested that the document more clearly explain how the impact of being exposed to mixtures of the COPCs was considered in developing the benchmarks. Further, panel members disagreed with the rationale for using an upper level excess lifetime cancer risk of 1-in-10,000. The workgroup's response to the peer review panel stated the risk level was appropriate because of practical sampling limitations for asbestos, noting a sampling time of 800 hours would be required to achieve the air monitoring results needed to support a 1-in-1,000,000 increased lifetime risk level. The workgroup acknowledged that running multiple pumps concurrently could reduce total sample time, but did not judge this practical since more than 6,000 individual residences signed up for the cleaning program.

Need to Treat Impacted Buildings as a System

Tests of indoor asbestos contamination have shown that the distribution of asbestos within indoor spaces is not consistent. Selective cleaning of apartments does not ensure that uncleaned residences or uncleaned objects in apartments are free of asbestos contamination. In the case of centralized HVAC systems, selective cleaning does not ensure that cleaned apartments will not be re-contaminated by uncleaned apartments through the HVAC system. Consequently, the cleaning of contaminated buildings should proceed by treating the building as a system.

This systematic approach to cleaning would require that the exterior of the building be cleaned first before the building is re-occupied. All possible entrances for outside air should be sealed off and the building HVAC shut down during exterior cleaning. Once the exterior is cleaned, interior cleaning can begin. For buildings with centralized air and heating, the interior surfaces of supply ducts and return air plenums, fan housings, and filter housings should be cleaned. Filters should be removed, filter tracks cleaned, and new filters installed. The above

actions are necessary to prevent uncleaned sub-parts of the HVAC system from re-contaminating the system. When cleaning individual rooms, each air supply or return register should be sealed to prevent re-entrainment of toxicants into the HVAC system.

According to EPA officials, as of July 2003, 143 buildings had been cleaned, including 28 HVAC systems.

Non-Aggressive Sampling Does Not Provide Assurance Residents Will Not be Exposed to Potentially Harmful Levels of Asbestos

The non-aggressive sampling option available to residents does not provide assurances that residents will not be exposed to potentially harmful levels of asbestos. AHERA protocols for building clearance after abatement require aggressive sampling to re-entrain (stir) settled dust before air samples are taken. The modified aggressive option available to residents may not re-suspend asbestos particles clinging to surfaces within the residence.

Comprehensive Health Protection Would Also Include Workspaces

EPA, FEMA, and New York City implemented a cleaning and testing program for residences but not workspaces. Some have complained about this limitation, noting that a program of comprehensive health protection would address indoor contamination in workspaces. The EPA Region 2 Assistant Administrator for WTC Recovery Operations told us that EPA had discussed this issue with OSHA, and that workers or employers could contact OSHA if they had concerns about possible asbestos contamination in their work places. Further, EPA indicated that OSHA was prepared to address any workplace issues brought to its attention.

Cleanup Boundary Not Scientifically Developed

The northern boundary of the cleanup area (Canal Street), coincides with the initial exclusion zone developed on September 11. However, this boundary was not based on systematic and representative sampling to determine the likely outer boundary of WTC contamination. Several indoor sampling efforts were conducted after September 11, but none were designed to determine the geographic extent of WTC dust contamination. Consequently, it has not been determined whether buildings north of Canal Street or east of Lower Manhattan, in Brooklyn, were contaminated.

EPA officials told us that the Canal Street boundary represented a conservative one based on visual inspection of how far dust and debris from the collapse traveled as well as their interpretation of various data, including images obtained by overhead flights. We also discussed the path of the dust and smoke plume with an Office of Research and Development researcher. He told us that his modeling demonstration as well as satellite images taken by the U.S. Geological Survey

indicated that dust from the collapse did not extend beyond Canal Street. Environmental experts told us that ideally a sampling plan should have been implemented that collected and analyzed samples starting at Ground Zero and radiating outward in concentric circles until the boundary of WTC contamination was determined.

Conclusions

Extensive ambient monitoring data collected after September 11 demonstrated that outdoor air quality levels around Lower Manhattan eventually returned to pre-September 11 levels. As such, EPA does not need to take additional actions to address outdoor ambient air quality concerns specifically related to the collapse of the WTC towers.

EPA, in cooperation with FEMA and New York City, initiated a large-scale indoor cleanup. In our opinion, this cleanup should meet the minimum criteria for protecting human health that EPA has established for Superfund cleanups. Also, the indoor cleaning and testing program should employ aggressive testing in all residences and treat buildings as a system. Additionally, EPA should evaluate the potential health risks for pollutants of concern in workspaces and for geographic areas north of Canal Street, in Brooklyn, and any other areas where meteorological data show pollutants of concern may have been deposited.

Recommendations

We recommend that the EPA Administrator ensure that EPA Region 2:

6-1. Submit the revised "World Trade Center Indoor Air Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks" document to TERA for a second peer review.

6-2. Implement a post-cleaning testing program to ensure that, in addition to asbestos, the indoor cleanup program has reduced residents' risk of exposure from all of the identified COPCs to acceptable limits.

6-3. Due to concerns over possible re-contamination of residences cleaned under the Indoor Air Residential Assistance program, EPA should treat buildings as a system and implement a post-cleaning verification program to ensure that residences cleaned by the program have not been re-contaminated.

6-4. Work with FEMA and OSHA to assess whether the ongoing residential testing and cleaning program should be expanded to address potential contamination in workspaces in Lower Manhattan, or whether other measures need to be taken to ensure that workspaces are not contaminated with WTC dust.

Agency and New York City Comments and OIG Evaluation

The Agency disagreed with the recommendations presented in this Chapter. The Agency responded that EPA's indoor cleanup program was sufficient and that EPA studies and data indicated a more widespread cleanup program is not warranted. Because asbestos is a carcinogen with no commonly accepted safe level of exposure, and approximately 18,000 residential units in Lower Manhattan have not been tested or cleaned through the indoor residential program, we continue to believe our recommendations are warranted to assure adequate health protection for residents in Lower Manhattan. The Agency's complete written response to our draft report and our detailed evaluation of that response are contained in Appendices Q and R, respectively.

New York City's response provided some technical clarifications which we made. New York City's response to our draft report excerpts is provided in Appendix S.

Chapter 7
EPA Should Continue Efforts to Improve Contingency Planning

The events of September 11 represented an attack on the U.S. mainland not previously experienced in this country's history. The response to this tragedy was trying and difficult for all parties involved, including environmental professionals. Many of the persons we interviewed spoke highly of the response of EPA and its employees. Still, lessons were learned from the September 11 response that can be used to improve the Agency's ability to respond to future disasters. The primary lessons learned from our evaluation relate to:

- Contingency planning
- Risk assessment and characterization
- Risk communication

An overriding lesson learned was that EPA needs to be prepared to assert its opinion and judgment on matters that impact human health and the environment. Although many organizations were involved in addressing air quality concerns resulting from the WTC collapse, subsequent events have demonstrated that, ultimately, the public, Congress, and others expect EPA to monitor and resolve environmental issues. This is the case even when EPA may not have the overall responsibility to resolve these issues or the necessary resources to address them.

Various Actions Initiated

EPA and several non-EPA groups and individuals prepared "lessons learned" reports on the government's response to environmental issues resulting from September 11. We generally agree with the recommendations made in these reports. A summary on the previous lessons learned areas follows in Table 7-1. Further details on the lessons learned as part of both EPA and non-EPA reviews are in Appendix N.

Table 7-1: Previous Lessons Learned Reviews

Type of Review	Lessons Learned Areas
EPA Office of Solid Waste and Emergency Response, per request by EPA Administrator, determined lessons learned between September 11, 2001, and October 19, 2001. Results were summarized in a final report dated February 1, 2002.	• Decision making and communication • Emergency response structure and plans • Data analysis and information management infrastructure • Public information dissemination • Resources • Safety and security • Environmental vulnerabilities
EPA Region 2 conducted a region-specific lessons learned analysis. The Region held an "after action session" in Edison, New Jersey, on January 9-10, 2002, and issued a final report dated January 8, 2003.	Overarching Recommendation Areas • Planning • Coordination • Resources Specific Recommendation Areas • Public risk communication • Data management • Regional crisis management structure
EPA Office of Research and Development held a data-oriented lessons learned workshop in November 2002. The report was still in draft as of our review.	• Quality assurance project plan • Mechanism for tracking monitoring tasks • Improved health-related benchmarks for asbestos and short-term exposures of pollutants in general • Identification of technical expertise teams that could be called on to assist with technical decisions
Environmental experts and others prepared lessons learned reports from September 2002 to December 2002.	• Better risk communication • Health-related benchmarks assessing exposure • Clearer lines of authority between government agencies in responding to environmental issues

In September 2002, EPA issued its "Strategic Plan for Homeland Security," which outlines the Agency's plan for meeting its homeland security responsibilities. This Strategic Plan includes many proposed actions recommended in EPA's February 2002 Lessons Learned report. The goals of the plan are grouped under four major mission areas:

- Critical Infrastructure Protection
- Preparedness, Response, and Recovery
- Communication and Information
- Protection of EPA Personnel and Infrastructure

The second and third mission areas – "Preparedness, Response, and Recovery" and "Communication and Information" – are particularly relevant to the issues

discussed in this report.[17] Within these two major areas, the Homeland Security plan lists several actions that were recommended in the February 2002 Lessons Learned Report as well as issues identified in this report.

OIG Observations for Improving Emergency Response

Observations developed by our evaluation, as well as any Agency actions already underway to address these observations, are summarized in Table 7-2, and discussed in detail in the sections that follow.

Table 7-2: Summary of OIG Observations

Contingency Planning
• Environmental Threats from Potential Terrorist Attacks Need to Be Assessed
• Roles and Responsibilities Within EPA Need to Be Delineated
• Roles and Responsibilities With Outside Agencies Need to Be Delineated
Risk Assessment and Characterization
• Health-Based Benchmarks Needed
• Sampling and Data Collection Protocols Needed
• Monitoring Capabilities Need to Be Increased
Risk Communication
• Better Communication Policies, Procedures, and Guidance Needed
• Risk Communications Need to Acknowledge Uncertainties
• Procedures Needed to Ensure Consistency in Communications
• Communications Need to Identify External Influences
• Environmental Data from Sources Outside EPA Need to Be Addressed

Contingency Planning

EPA has many years experience in responding to environmental emergencies and has established policies and procedures to deal with such emergencies. EPA's Lessons Learned Report identified issues related to contingency planning and made recommendations for improvements in this area. Additionally, EPA's Homeland Security strategy includes actions to address this area. Notably, the Agency has started efforts to upgrade the National Incident Coordination Team, which coordinates EPA's response to large-scale emergencies. The events of September 11 demonstrate the following areas where the Agency's emergency response mechanisms can be improved.

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[17] OIG has ongoing and planned work to evaluate EPA's efforts related to the other major homeland security missions not addressed in this report.

Environmental Threats from Potential Terrorist Attacks Need to Be Assessed

It is understandable that the government and others were not fully prepared for what happened on September 11. Now that the country has experienced such an attack and lives under the threat of future attacks, it is important that the Agency anticipate and plan for different disaster scenarios. To the extent that EPA can anticipate various scenarios and plan for the type of environmental response needed before a disaster strikes, the Agency's response efforts can be more focused on appropriate implementation and avoid making interpretative, technical, and policy-setting decisions with potential public health implications during the stressful and time-demanding circumstances created by an emergency.

The experience of September 11 has provided the Agency with considerable information on what to expect of a large-scale disaster involving office and multi-family residential buildings in a densely populated urban environment. However, disasters involving other scenarios, other types of targets, and other locations may present different challenges. For example, New York City has significant emergency response and environmental resources - other cities may not and may require more assistance from EPA. In addition, EPA Region 2's office was located within New York City and close to the disaster site, and EPA's national Environmental Response Team was located in nearby Edison, New Jersey, approximately 30 miles away. This was important, because air travel was curtailed for several days after the attacks. EPA may not be as closely located to the next disaster.

Disasters in different parts of the country could present different, perhaps greater, environmental exposures than at WTC. EPA researchers told us the tall buildings in New York City combined to create a "chimney effect" that helped to push air and pollutants upward and away from street level. Winds also helped disperse and dilute WTC airborne emissions, and rain during the first week helped alleviate dusty conditions. If a similar disaster were to strike in a city with different geography and weather patterns, a more serious exposure scenario could develop.

Accordingly, EPA should work with the Department of Homeland Security and other agencies to share information on high-risk targets and areas, and develop plans for responding to an emergency situation in those areas. These plans should address the different scenarios anticipated from a disaster involving these targets and how EPA, other Federal, and the appropriate State and local agencies should respond to these different scenarios.

Roles and Responsibilities Within EPA Need to Be Delineated

EPA needs to delineate roles and responsibilities for its various programs offices when responding to emergencies, including how these roles and responsibilities fit within the incident command structure. Despite the commendable actions of many EPA personnel, the Agency should outline roles and responsibilities for its program offices beforehand to provide a more efficient and coordinated response to future disasters.

For example, within 3 days of the disaster, EPA officials within the Office of Radiation and Indoor Air and the Office of Air Quality and Planning Standards had developed a web site with such captions as "Protecting Yourself from Asbestos Exposure," "Health Effects of Dust and Smoke," and "Strategies for Clean Up Inside Residences and Businesses." However, this web site was not activated and made available to the general public. One EPA official told us there was an overwhelming amount of activity going on and that this information probably "got lost in the fray." EPA Region 2 officials could not recall why the web site was not activated.

Also, although EPA's National Exposure Research Laboratory team made it to New York on September 16 to help implement an ambient monitoring network, they were unable to gain access to the site and start monitoring until September 21. The Laboratory's monitoring team's abilities were especially needed since they had air monitoring equipment that could run on both electrical and battery power, and they had airborne particulate matter monitors.

In its lessons learned report, EPA Region 2 recommended that the Region identify a team of dedicated people who will respond in the event of a new crisis. In our opinion, other EPA regions should follow Region 2's lead and identify specific areas of expertise that may be needed in the event of an emergency, and assemble teams of experts that can be mobilized to quickly provide this support. These areas may include specialized sampling techniques, exposure modeling and assessment, and risk assessment. Also, EPA Headquarters should develop national teams to support or augment Regional response when needed, including guidelines for determining when a response should be elevated to a national level.

Roles and Responsibilities With Outside Agencies Need to Be Delineated

A response to an event the size of the WTC incident requires the efforts and coordination of numerous government organizations, including Federal, State, and local governments. Our discussions with EPA and non-EPA officials, as well as WTC "lessons learned" reports from other organizations, indicated that there were overlapping and sometimes confusing roles and responsibilities for the various responding organizations. For example, early in the response, various agencies were conducting numerous sampling efforts. Particularly for asbestos, different

sampling methods were being used with the results being reported in different metrics, which made the results more difficult to interpret. A senior New York City Office of Emergency Management official told us that roles and responsibilities of the Federal, State, and local agencies in responding to a disaster were unclear on September 11, 2001, and were still unclear when we met with him during the summer of 2002.

EPA has addressed coordination with other organizations in both its Headquarters and Region 2 lessons learned reports. For example, the Headquarters Report recommended that EPA collaborate with OSHA and the Department of Health and Human Services to clarify the Agency's role in protecting the health and safety of responders, and that EPA coordinate with Department of Homeland Security to develop a coordination strategy for all responders during national emergencies. Region 2 management and staff recommended that their Region clearly identify scope and boundaries of their work in an emergency; and educate EPA and other Federal and State officials about the scope, boundaries and authorities of the various emergency response plans and systems. We agree with these recommendations. These coordination efforts should also take place in all EPA regions and include FEMA, and should address likely sources of funding for these activities.

Risk Assessment and Characterization

The WTC disaster pointed to the need for better risk assessment and characterization procedures and tools for addressing the types of environmental concerns resulting from large-scale disasters. A significant challenge encountered by EPA and other organizations was how to characterize health risks to the public in the absence of health-based benchmarks. The need for consistent sampling protocols and special monitoring requirements was also demonstrated.

Health-Based Benchmarks Needed

Government entities, such as EPA, OSHA, ATSDR, and NIOSH, have developed guidelines for many of the contaminants found in Lower Manhattan. However, existing health benchmarks were not applicable to exposures experienced by the general public in Lower Manhattan. Many of the benchmarks available at that time to assess the exposure risks for contaminants found in the ambient air were: occupational standards based on an 8-hour-per-day exposure; guidelines based on long-term exposures; or standards, such as those for asbestos, that were not health based. Details on some of these issues are in Chapter 2.

OSHA and NIOSH have developed occupational standards to protect industrial workers from pollutant exposures, but these standards are based on an 8-hour-a-day exposure. In general, these standards were not applicable to characterizing risks for residents who experienced exposures greater than 8 hours a day in indoor

and outdoor settings. Some of the screening levels developed to assess the sub-chronic risks from the contaminants created by the WTC collapse were developed by adjusting emergency removal guidelines listed in EPA's Hazard Evaluation Handbook to take into account shorter exposure periods. These guidelines are based on a 30-year exposure period and correspond to a 1-in-10,000 increased lifetime cancer risk for carcinogens.

Further, some of the benchmarks used to assess air quality and bulk dust in Lower Manhattan were criteria- or condition-based standards and not health-based standards. For example, the benchmark used to assess asbestos risk from WTC dust was developed to determine when asbestos containing material was subject to demolition and renovation regulations. For future disasters, health benchmarks are needed to address the types of exposures experienced at the WTC site, which included:

- acute or high concentration exposures up to 8 hours
- sub-chronic (2 weeks to 1 year) exposures
- indoor air exposures
- exposure to asbestos
- synergistic or multiple pollutant exposures

Details on each of the above benchmarks are in Appendix O.

We recognize that it is not possible to anticipate all the scenarios and develop standards that address all possible pollutants that may result from a disaster. Thus, we believe an agreed-upon framework for quickly developing additional guidelines and benchmarks in an emergency situation is needed. This process could include a panel of scientific experts that would be available in an emergency to analyze the available risk data and establish appropriate health-based benchmarks for the pollutants of concern

As discussed above, a multi-agency workgroup developed health-related benchmarks for six pollutants of concern related to indoor environment contamination from the WTC collapse that underwent peer review in October 2002. We believe the Agency should expand on these efforts to identify benchmarks for other pollutants of concern and for outdoor and indoor exposures based on threat assessments discussed earlier in this chapter. Related to this effort, EPA should collect information on background levels (i.e., pollutant concentrations under normal conditions), to properly assess the impact that a disaster has on the concentration of these pollutants of concern in the environment.

Sampling and Data Collection Protocols Needed

EPA, other government organizations, and non-governmental organizations undertook extensive monitoring efforts in the months following September 11. Extensive sampling was done around the work zone to monitor conditions for first responders. To assess ambient conditions for the general public, EPA established an ambient monitoring network in coordination with New York City and New York State officials. EPA also developed a draft Quality Assurance Project Plan for the WTC ambient monitoring network; however, the plan was not finalized.

A comprehensive Quality Assurance Project Plan outlines the objectives of the monitoring, identifies the monitoring and sampling methodologies, identifies the siting of monitors, and outlines monitoring exit strategies. In essence, the Plan helps to ensure that sufficient data is collected of adequate quality for the decisions to be made.

The Quality Assurance Project Plan should also address the format and means of transmitting data. In the WTC response, various government agencies collected a large amount of environmental data for Lower Manhattan in the months following September 11. The Office of Environmental Information maintains the New York City Response Monitoring Data Retrieval database, which stores the monitoring data collected by the various Federal, State, and City environmental agencies involved in the response. According to a report prepared by an EPA contractor that analyzed trends in the data, the database contained 263,000 monitoring results for 605 contaminants through April 24, 2002. Because the data came in different formats, consistent sampling, monitoring, and quality assurance information was not provided for each of the pollutants monitored, and in many instances this data was not provided. Our review of information in the database confirmed the trends noted by the contractor.

Providing standardized guidance for the organizations reporting data to EPA would improve the consistency of the data. A complete data set would make future assessments of the data easier to complete. Both EPA Region 2 and EPA Headquarters' Lessons Learned reports made recommendations to improve data collection. The Region 2 Lessons Learned report recommended that all organizations submit data in an electronic format, and standardized formats should be used as much as possible. The report also recommended that easy-to-understand context and explanations be provided for the data, to allow data and risk assessments to be released to the public more quickly.

EPA's Office of Environmental Information has created a standardized template for future responses by making a generic shell of the New York City Monitoring Database. This Office is also exploring longer-term improvements. With regard to WTC data, Region 2 officials have been working to improve the data in the "NYC Response" database by requesting that organizations perform a quality assurance review of the data they submitted to EPA. Once this process is

completed, the data will become available to the public on a CD-ROM. We agree that EPA should continue to explore long-term improvements for data collection.

Monitoring Capabilities Need to Be Increased

The amount of monitoring data for pollutants other than asbestos was limited in the first few weeks following September 11. In the beginning, monitoring efforts were hampered by several factors. There were difficulties associated with getting access and security, power supply sources, equipment availability, and analytical capacity. One environmental monitoring expert who participated in environmental sampling and analysis after the WTC collapse suggested that emergency response monitors must be improved and recommended that lightweight and manageable battery operated air samplers be developed that are able to measure a wide range of particles and gaseous substances.

In the case of a major disaster that causes a significant dispersion of particulates, the levels of TSP can be a concern, particularly in regard to acute respiratory symptoms. However, in the WTC response, these particles were not monitored because of a lack of TSP monitors. The availability of TSP monitors has decreased over time as EPA's National Ambient Air Quality Standards program has shifted its focus from measuring TSP to measuring smaller particles. While health studies support measuring smaller particles from the standpoint of the National Ambient Air Quality Standards program, experts told us that it is useful to measure the levels of TSP in a disaster to determine potential short-term or acute health effects.

EPA Headquarters' Lessons Learned Report addressed equipment needs and recommended that EPA clearly identify such needs. In addition, the Office of Air Quality and Planning Standards acquired funding for a Mobile Rapid Response Laboratory to collect data quickly in emergency situations and transmit data to a central database via satellite. The Office of Air Quality and Planning Standards plans to establish two such mobile laboratories.

Risk Communication

The collapse of the WTC towers disrupted normal communication infrastructures, yet required that difficult decisions about the condition of the environment be made quickly and under extreme stress. Under these conditions, EPA made extraordinary efforts to successfully assemble an extensive amount of information on its web site and otherwise communicate to the public. Despite these efforts, the information EPA communicated was in some cases inconsistent with prior Agency positions, inconsistent with other communications regarding the WTC disaster, or incomplete. Some of these communication problems may have been avoided if the Agency had updated policies and procedures in place for communicating to the public and had followed existing risk communication

guidelines established for the Superfund program. Based on its experience with the WTC response and the subsequent anthrax contamination responses, EPA has initiated various actions to improve its communication practices.

Better Communication Policies, Procedures, and Guidance Needed

Officials from EPA's OCEMR and its successor office, the Office of Public Affairs, in Washington, D.C., were not able to provide us with current written policies or procedures for communicating with the public. Although not established as official Agency communication policy, EPA's Superfund program has issued several guidance documents regarding risk communication. EPA's risk communication principles and recommended practices are contained in EPA's *Superfund Community Involvement Handbook*. This Handbook identifies the "Seven Cardinal Rules of Risk Communication," presented in Chapter 2. As explained in the following, EPA's risk communications did not consistently adhere to the principles and guidelines discussed in its Superfund guidance.

Risk Communications Need to Acknowledge Uncertainties

EPA's *Superfund Community Involvement Handbook* specifically discusses uncertainties ("Be willing to discuss uncertainties"), and the fourth rule states:

> *If you do not know an answer or are uncertain, acknowledge it and respond with the answer as soon as possible. Do not hesitate to admit mistakes or disclose risk information. Try to share more information not less; otherwise, people may think you are hiding something.*

As detailed previously in this report, EPA's statement that the air was safe to breathe was not qualified (except for rescue and cleanup personnel at Ground Zero). Further, EPA's press releases did not discuss any of the uncertainties associated with this statement.

Dr. Peter Sandman, founder of the Environmental Communication Research Program at Rutgers University, provided 26 recommendations for risk communication. These include that one should "acknowledge uncertainty" and urged "never using the word 'safe' without qualifying it."

Procedures Needed to Ensure Consistency in Communications

EPA communications after the WTC catastrophe sometimes gave conflicting information in regard to the same issue or were inconsistent with prior Agency positions. Specifically, information provided orally about cleaning of indoor spaces was not consistent with the messages given in Agency press releases.

Also, EPA communications about the risk from asbestos were not entirely consistent with prior Agency public positions regarding asbestos risk.

EPA's communications during the WTC crisis – that the general public did not need to be concerned about short-term exposure to WTC asbestos – were inconsistent with the Agency's prior position that all asbestos exposure is hazardous to human health. EPA's historical position, as detailed in the Federal Register, has been that:

> *. . . short-term occupational exposures, have also been shown to increase the risk of lung cancer and mesothelioma. In addition, there are many documented cases of mesothelioma linked to extremely brief exposure to high concentrations of asbestos or long-term exposure to low concentrations. . . . EPA has concluded that it is prudent to treat all fiber types as having equivalent biological activity...Available evidence supports the conclusion that there is no safe level of exposure to asbestos.* (April 25, 1986 Federal Register Volume 51, page 15722)

However, EPA's position in its September 13, 2001, press release was that the public did not need to be concerned about short-term exposure to WTC asbestos. The confusion of some residents may have been reflected at a May 8, 2002, press conference, when the questioner quoted EPA's 1986 position and asked the Region 2 Administrator:

> *Available evidence supports the conclusion that there is no safe level for exposure to asbestos. So what science are you citing that there is a safe level?*

The EPA Region 2 Administrator replied:

> *We are talking about very short term exposure to quantities of [unintelligible word] that - we know exactly that these buildings came down and they contained asbestos. There are other places in the country perhaps where people have been exposed over long periods of time - based on using substances containing asbestos - and breathing them - as part of their household. We know this was a one time - you know buildings came down, and that is what needs to be cleaned up so there is not that risk of long term exposure.*

The research community has not reached consensus on the relative risk to human health from exposure to different types and sizes of asbestos, and EPA's approach has been to not distinguish between fiber types and sizes when characterizing the risk from asbestos exposure. Many experts and studies support the general message EPA conveyed about asbestos exposure and risk after the WTC

catastrophe, and research may ultimately prove these statements correct. However, this position was different from prior Agency pronouncements, and can create doubts in the public's mind about EPA's statements.

Communications Need to Disclose External Participation

As discussed previously in this report, EPA officials were not the sole determiners of the information that was included in its press releases, nor the information that was excluded. This was demonstrated by the EPA OCEMR Associate Administrator's statement that residential cleaning instructions were deleted from a draft press release by the CEQ contact official. The extent of outside influence was further illustrated by the statement from the EPA Administrator's Chief of Staff that she could not claim ownership of EPA's early WTC press releases because "the ownership was joint ownership between EPA and the White House."

In a time of disaster, EPA officials should be careful to ensure that EPA's press releases reflect EPA's professional judgment based on sound science, acknowledge the participation of outside parties, and provide accurate information about the environment to the public in accordance with EPA's mission.

Environmental Data from Sources Outside EPA Need to Be Addressed

In the aftermath of the WTC collapse, several entities were involved in collecting data on environmental conditions. This included private firms; research organizations; Federal agencies; and State, local, and city governments. Several days after the attacks, EPA was designated as the lead agency for collecting and storing all of the WTC monitoring data. This designation did not include being the sole spokesperson for communicating the results of this monitoring data.

EPA was subsequently criticized for not including other organizations' monitoring results in its public communications. For example, EPA was criticized for not putting the results of sampling done by the U.S. Geological Survey on EPA's web site, or at least discussing this data. The U.S. Geological Survey monitoring had found high pH levels in the WTC dust, which reportedly contributed to the burning of respiratory pathways experienced by first responders and others who breathed WTC dust. An EPA spokesperson stated that EPA had not intended to keep the information from the public, and EPA thought the information had been posted on the U.S. Geological Survey's web site. EPA officials also told us that the high levels of pH found in the dust was to be expected because of the pulverized concrete.

Another monitoring study was highly publicized by the media, but was not discussed in EPA communications. This study was conducted by a collaborative association of aerosol scientists that specialize in fine particulate ambient monitoring techniques. This group found that the air around Lower Manhattan contained high levels of fine particulates and metals, particularly in readings taken on October 3, 2001. We spoke to the author of this study who told us that he had tried to work with EPA regarding his group's test results before releasing it to the press, but was unsuccessful. EPA correspondence indicated the EPA officials were invited to the press release for this study, but were not aware of the study prior to that invitation.

EPA needs to develop a policy, in conjunction with other Federal agencies, outlining how organization(s) will coordinate the reporting of environmental data after a disaster. This policy should address the State and local government role in these communications, as well as how to address data collected by research or academic organizations.

EPA Actions to Improve Its Communications

Both EPA's Headquarters and Region 2 Lessons Learned Reports address communication issues and provide recommendations to improve the Agency's response in this area. EPA's Headquarters report recommended that EPA develop policies and procedures for disseminating public information during national emergencies within the established emergency response plans and structures. The report also recommended that EPA coordinate with other organizations outside to identify and address obstacles to timely and consistent presentation of environmental information during national emergencies. In regard to releasing monitoring data, the report recommended that EPA clearly define a process for approving and coordinating the release of information to other agencies and the public. Also, EPA's Lessons Learned report recommended that EPA work with the Department of Homeland Security to have EPA designated the lead agency for environmental data during national emergencies when both EPA and other agencies are conducting environmental analyses.

Region 2's lesson learned report recommended that Region 2 develop a comprehensive approach to handling crisis communications, and that this approach include other Federal and State partners. In addition, mechanisms should be in place for resolving differences about the interpretation of risk and the appropriate response.

These recommendations, if properly implemented, should help ensure technical consistency and accuracy in the Agency's public information, and accountability for press release content.

Recent Developments

In May 2003, EPA participated in a Department of Homeland Security-administered Top Officials exercise with other Federal, State, local, and Canadian government organizations. This exercise simulated weapons of mass destruction incidents with the goals of: (1) improving the nation's capacity to manage extreme events; (2) creating broader frameworks for the operation of expert crisis and consequence management systems; (3) validating authorities, strategies, plans, policies, procedures, and protocols; and (4) building a sustainable, systematic national exercise program to support the national strategy for homeland security.

Further, on June 27, 2003, EPA issued the *EPA National Approach to Response Policy* to implement a new approach to responding to Nationally Significant Incidents. The Policy calls for a multi-faceted and coordinated approach to managing EPA's emergency response assets during a Nationally Significant Incident. A key aspect of the policy is that it requires EPA to operate under an Incident Command System approach based on the National Interagency Incident Management System. EPA plans to supplement the Policy with guidance to fully characterize roles and responsibilities within the Agency to manage a Nationally Significant Incident. As noted in the Policy, Homeland Security Presidential Directive-5 calls for the development of a new National Response Plan and a single, comprehensive National Incident Management System. As standards, guidelines, and protocols are developed to implement the national system, EPA will modify its *National Approach to Response Policy* as necessary.

Conclusions

Although many organizations were involved in addressing air quality concerns resulting from the WTC collapse, subsequent events have demonstrated that, ultimately, the public and others expect EPA to monitor and resolve environmental issues, even though EPA may not have the overall responsibility to resolve these issues or the necessary resources to address them. These issues range from collecting, interpreting, and communicating environmental information to cleaning up any environmental contamination. EPA must be prepared to take a leadership role, within the evolving framework established by the Department of Homeland Security and existing statutes, in fulfilling its mission of "protecting human health and the environment," if another large-scale disaster occurs.

Recommendations

This chapter summarizes observations based on work conducted to answer the objectives discussed in Chapters 2 through 6. These prior chapters contain recommendations that address specific issues related to those objectives. Recommendations to address observations not covered in the prior chapters are included in this chapter.

We recommend that the EPA Administrator:

7-1. Work with the Department of Homeland Security and other agencies to share information on likely targets and threats and collaboratively develop approaches to address these threats. Such approaches should include, at a minimum:

a. Identifying the pollutants expected to be emitted from such targets,
b. Assessing the pathways of human exposure to those pollutants,
c. Developing approaches to monitoring and assessing environmental contamination from those targets, and
d. Establishing plans of action for reducing human exposure from these pollutants.

7-2. Define and clarify internal EPA organizational roles and responsibilities in responding to large-scale disasters. This should include designating teams of Agency experts – at both the National and Regional level – that can be mobilized to quickly provide needed technical support during a response. These areas may include specialized sampling techniques, exposure modeling and assessment, and risk assessment.

7-3. Develop and improve health-related benchmarks that can be used to assess health risk in emergencies. Specifically:

a. Continue agency work on Acute Exposure Guideline Levels,
b. Develop sub-chronic exposure guidelines for pollutants determined to be a high priority as a result of terrorist attacks or other large-scale disasters,
c. Develop health-related benchmarks for asbestos in air,
d. Develop benchmarks for assessing potential exposure from contaminant levels in dust,
e. Continue to develop and refine benchmarks for COPCs in indoor environments,
f. Conduct research to determine the synergistic impact of exposure to multiple pollutants, and
g. Develop expert panels that can be used to quickly develop health-related benchmarks in emergency situations.

7-4. Develop an emergency quality assurance sampling plan to be used as a guidance for monitoring environmental conditions after a large-scale disaster. This plan should address:

a. Monitoring objectives,
b. Preferred sampling and analytic methods for high-priority pollutants,
c. Siting of monitors,
d. Quality control, and
e. Data reporting formats

7-5. Improve monitoring capabilities by:

a. Making TSP monitors available for use in emergency situations, and acquiring other monitors as determined,
b. Continuing the mobile monitoring laboratory project, and
c. Exploring new technologies for monitoring in extremely dusty conditions

7-6. Require that the Office of Public Affairs develop emergency communications policy and procedures consistent with the principles of risk communication provided in EPA's "Seven Cardinal Rules of Risk Communication."

Agency Comments and OIG Evaluation

The Agency generally agreed with the recommendations in this Chapter. With respect to the conclusion, the Agency emphasized that it exercised its opinions and judgments on matters impacting human health and the environment and will continue to do so within the context of its authorities and its role under the Federal Response Plan. The Agency's complete written response to our draft report and our detailed evaluation of that response are contained in Appendices Q and R, respectively.

Appendix A

Federal Agencies Responding to the WTC Collapse

Agency	Role
Federal Emergency Management Agency	Managed and coordinated Federal Government response. Provided funding for response including cleaning of building exteriors and cleaning of indoor residential spaces.
U.S. Department of Health and Human Services National Institute for Occupational Safety and Health	Performed various activities related to worker health and safety, which included: • Assessing jobs and work locations for health potential hazards. • Helping site managers select appropriate equipment for sampling, use it properly, and institute procedures for analyzing data. • Helping select appropriate personal protective equipment and coordinate deployment of respirators. • Developing procedures for cleaning and sanitizing respirators. • Developing and disseminating written guidelines for worker safety and health. • Conducting health hazard evaluations to assess worker health. • Providing technical assistance to NYCDOH to develop voluntary registry of individuals who worked at, lived near, or responded to the WTC attack.
U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry	Provided various types of monitoring and health assessment support, including: • Assisting EPA and other agencies in sampling dust and air at Ground Zero and evaluating data to assess health risks. • Providing technical assistance to NYCDOH on environmental medicine, • Participating in the World Trade Center Environmental Assessment Workgroup, which was made up of representatives from ATSDR and other Federal agencies. • Using geographic information systems to map environmental sampling results and other data for Lower Manhattan.
U.S. Department of Health and Human Services National Institute of Environmental Health Sciences	Funded research and training to address health concerns resulting from the WTC collapse.

Agency	Role
U.S. Department of Labor Occupational Safety and Health Administration	Conducted various risk assessment and monitoring activities related to worker protection at the Ground Zero Site. This included: • Taking air and bulk samples to date for asbestos, silica, lead, and other heavy metals, carbon monoxide, noise, and numerous organic and inorganic compounds. • Providing 24-hour laboratory support to analyze air and bulk samples taken at the site. • Distributing sampling results to workers and other safety and health representatives at the site, and posting the sampling results on the agency's web site, and • Providing guidance on appropriate personal protection equipment and feasible control measures based on monitoring results. Distributed respirators and conducted fit testing for the Fire Department of New York and other rescue workers. Conducted initial safety assessment of the site within 24 hours of the attack to identify hazards and potential health and safety risks to workers involved in the recovery, and provided around-the-clock monitoring of the site to identify and alert workers to safety and health hazards. Provided various safety and health support functions such as helping develop an environmental, safety, and health plan; distributing personal protective equipment to workers; and conducting job hazard analyses. Provided support to promote site safety and health, which included sponsoring weekly meeting regarding safety and health issues.
United States Coast Guard	Operated Incident Command Center in Edison, New Jersey. Conducted air-monitoring operations in buildings in Manhattan's financial district.

Appendix B

Details on Scope and Methodology

Objective 1. Did the available monitoring data and analyses of that data support EPA's major public communications regarding air quality and associated health risks resulting from the collapse of the WTC towers?

We requested all data and correspondence used to support "major" EPA pronouncements regarding air quality. We defined "major" as press releases, testimony, television, and other public appearances. This effort primarily focused on, but was not limited to, data collected and pronouncements made during the period September 2001 through December 2001. The data we reviewed included "Daily Summary Sheets" prepared by EPA staff, and the raw data sheets that showed the results of air and dust samples and were the basis for the daily summaries. In addition, we obtained access to the "New York City Response" database maintained by EPA's Office of Environmental Information and downloaded selected data from the database and compared it to the raw data sheets. We also reviewed monitoring results from other organizations, including:

- New York State Department of Conservation
- New York City Department of Environmental Protection
- National Institute for Occupational Safety and Health
- New York City Board of Education
- Operating Engineers National Hazmat Program
- New York State Public Employees Safety and Health Bureau
- U.S. Geological Survey
- Occupational Safety and Health Administration
- DELTA Group
- New York University
- Environmental and Occupational Health Sciences Institute
- ConEd
- Turner Construction

We interviewed Region 2 officials to determine their views on what monitoring data showed and the messages conveyed by EPA press releases. In addition, we interviewed EPA officials within the Office of Research and Development, Office of Air and Radiation, and Office of Solid Waste and Emergency Response. We also interviewed officials outside EPA to obtain their views on EPA's statements about air quality and the support for these statements. These interviews included officials and researchers from OSHA, FEMA, NYCDOH, NYCDEP, the Mount Sinai School of Medicine, New York University, the Environmental and Occupational Health Sciences Institute, and the DELTA Group.

We also reviewed available correspondence and documentation related to the preparation of the EPA press releases. Further, we interviewed principal EPA officials involved in the preparation of press releases, including the EPA Associate Administrator for OCEMR, the Associate Administrator for the Office of Public Affairs (formerly OCEMR), the EPA Administrator's former Chief of Staff, and the Region 2 Communications Division Director.

Limitations: Our review of the process and the support for information in EPA press releases on air quality was limited since CEQ officials declined to meet with us to discuss their role in the preparation of press releases. Our written request for an interview was declined by a White House legal counselor, who noted there were "institutional concerns about interviewing White House employees." Further, there was a lack of documentation in general regarding preparation of press releases. We only found documentation regarding the preparation of two of six press releases issued during the period September 12, 2001, through October 3, 2001. This documentation included a draft copy of the EPA press release issued on September 16; a single e-mail about this draft press release from CEQ; and a draft copy of the September 13 EPA press release.

Objective 2. Were EPA actions and decisions in regard to evaluating, mitigating, and controlling risks to human health from exposure to indoor air pollutants in the WTC area consistent with applicable statutes, regulations, policies, guidance, and practice?

We reviewed applicable laws, regulations, and guidance related to emergency responses, including CERCLA (Superfund) and implementing regulations, and the FRP. We also reviewed EPA's authority to test and clean indoor spaces, and the applicability of this authority to the WTC response. We interviewed EPA and FEMA officials about the applicability and requirements of these statutes. We also identified EPA and other government actions taken in response to other disasters to compare prior indoor responses to the WTC indoor response.

We identified and reviewed reports of indoor testing conducted by both government and non-government entities. This included indoor air and dust testing conducted by EPA, ATSDR, contractors for the General Services Administration, consultants for the Ground Zero Task Force, and an environmental firm hired by one of the debris removal construction companies.

We also interviewed officials both within and outside the government to determine their views regarding the extent of indoor contamination and the adequacy of the government's response.

Objective 3. Were asbestos demolition and renovation work practice standards followed during WTC cleanup and recovery operations and, if not, why not?

To determine the requirement applicable to emergency situations, we reviewed the Asbestos National Emissions Standard for Hazardous Air Pollutants (40 CFR Part 61 Subpart M), EPA's "Guidelines For Catastrophic Emergency Situations Involving Asbestos," and other EPA background documents on NESHAP. We also reviewed New York City's "Asbestos Control Program" rules and New York State's Industrial Code Rule 56, which governs asbestos emission in the State.

We interviewed EPA and New York City officials to discuss the applicability of NESHAP rules to the WTC response. This included the EPA Region 2 Counsel, officials from the EPA Office of Enforcement and Compliance Assurance and the Office of Air Quality Planning and Standards, and officials from NYCDEP and NYCDDC. To determine the extent that NESHAP work practices were followed in demolishing damaged buildings and removing debris from the WTC site, we interviewed officials who were present at the site during these operations including EPA on-scene coordinators, and officials from New York City and OSHA. We also reviewed transcripts of EPA Superfund Ombudsman, United States Senate Subcommittee, New York State Assembly, and New York City Council hearings on this issue. Further, we reviewed reports from persons present at the site, EPA situation reports, and other reports of activities at the site.

Limitations: Information on which we based conclusions includes personal accounts of the work activities obtained from interviews and hearings, and reports describing work practices at the site. Further, it was beyond the scope of our review to determine whether all NESHAP regulations applicable to emergency situations were followed or the extent to which they may have been followed. We also did not evaluate compliance with worker protection requirements.

Objective 4. To what extent were EPA and government communications regarding air quality and associated health risks: (a) received by the public; (b) understood by the public; and (c) effective in getting people to take the desired actions to reduce their potential health risks?

To obtain information on the impact EPA pronouncements had on the actions of area residents and workers, we reviewed testimony at hearings before a United States Senate Subcommittee, EPA's Superfund Ombudsman, the New York State Assembly, and the New York City Council. In addition, we reviewed the results of surveys of people's actions and opinions, and reviewed reports prepared by officials present during the WTC response. At the time this report was prepared, we were in the process of conducting a random survey of New York City residents to obtain information on the public's satisfaction with the air quality information provided by the government after the WTC response, how the public interpreted

this information, and actions taken by the public to reduce their exposure to potential contaminants. The results of this survey will be presented in a separate OIG report.

Limitations: Except for a survey by NYCDOH and a random telephone poll of New York residents, the information we reviewed was not collected by statistical sampling methods and may not be representative of the public's and emergency crews' actions with respect to government communications.

Objective 5. What additional actions, if any, should EPA take to improve its response and recovery efforts in the WTC area related to ambient and indoor air quality?

This objective primarily focused on the indoor residential cleanup – the only significant EPA WTC recovery activity ongoing at the time we completed our review. We did not audit the results of the cleaning and testing to determine compliance with the prescribed procedures of the program or to determine the actual effectiveness of cleaning conducted. Our analysis was based on a review of the procedures for the testing and cleanup by our certified industrial hygienist, a comparison of those procedures to commonly accepted asbestos abatement procedures, and a comparison of the cleanup goals to remediation goals that would have been required if this were a designated Superfund site. We also reviewed a peer review report of COPCs developed by EPA for indoor cleanup.

Objective 6. Should EPA revise its preparation and contingency planning for dealing with air pollution resulting from environmental catastrophes?

To answer this question, we summarized lessons learned from the work we conducted to complete our other objectives. We also interviewed EPA officials, other government officials, and non-government environmental experts to obtain their suggestions for improving EPA's capability to respond to similar disasters in the future. We also reviewed EPA and non-EPA "lessons learned" reports.

Prior Audit Coverage

The OIG has not conducted any prior evaluations of EPA responses to large-scale disasters. However, our report on EPA's actions related to asbestos contamination in Libby Montana (*EPA's Actions Concerning Asbestos-Contaminated Vermiculite in Libby, Montana*; 2001-S-7; March 31, 2001) discussed several issues related to the regulation and analysis of health risks from asbestos that were relevant to this evaluation.

Appendix C

EPA September 18, 2001 Press Release

September 18, 2001

Whitman Details Ongoing Agency Efforts to Monitor Disaster Sites, Contribute to Cleanup Efforts
[En Español]

EPA Administrator Christie Whitman announced today that results from the Agency's air and drinking water monitoring near the World Trade Center and Pentagon disaster sites indicate that these vital resources are safe. Whitman also announced that EPA has been given up to $83 million from the Federal Emergency Management Agency (FEMA) to support EPA's involvement in cleanup activities and ongoing monitoring of environmental conditions in both the New York City and Washington metropolitan areas following last week's terrorist attacks on the World Trade Center and the Pentagon.

"We are very encouraged that the results from our monitoring of air quality and drinking water conditions in both New York and near the Pentagon show that the public in these areas is not being exposed to excessive levels of asbestos or other harmful substances," Whitman said. "Given the scope of the tragedy from last week, I am glad to reassure the people of New York and Washington, D.C. that their air is safe to breath and their water is safe to drink," she added.

In the aftermath of last Tuesday's attacks, EPA has worked closely with state, federal and local authorities to provide expertise on cleanup methods for hazardous materials, as well as to detect whether any contaminants are found in ambient air quality monitoring, sampling of drinking water sources and sampling of runoff near the disaster sites.

At the request of FEMA, EPA has been involved in the cleanup and site monitoring efforts, working closely with the U.S. Coast Guard, the Centers for Disease Control (CDC), the Occupational Safety and Health Administration (OSHA) and state and local organizations.

EPA has conducted repeated monitoring of ambient air at the site of the World Trade Center and in the general Wall Street district of Manhattan, as well as in Brooklyn. The Agency is planning to perform air monitoring in the surrounding New York metropolitan area. EPA has established 10 continuous (stationary) air monitoring stations near the WTC site. Thus far, from 50 air samples taken, the vast majority of results are either non-detectable or below established levels of concern for asbestos, lead and volatile organic compounds. The highest levels of asbestos have been detected within one-half block of ground zero, where rescuers have been provided with appropriate protective equipment.

In lower Manhattan, the City of New York has also been involved in efforts to clean anything coated with debris dust resulting from Tuesday's destruction. This involves spraying water over buildings, streets and sidewalks to wash the accumulated dust off the building and eliminate the possibility that materials would become airborne. To complement this clean up effort, EPA has performed 62 dust sample analyses for the presence of asbestos and other substances. Most dust samples fall below EPA's definition of "asbestos containing material" (one percent asbestos). Where samples have shown greater than one percent asbestos, EPA has operated its 10 High Efficiency Particulate Arresting, HEPA, vacuum trucks to clean the area and then resample. EPA also used the 10 HEPA vac trucks to clean streets and sidewalks in the Financial District in preparation for Monday's return to business. The Agency plans to use HEPA vac trucks to clean the lobbies of the five federal buildings near the World Trade Center site, and to clean the streets outside of New York's City Hall.

Drinking water in Manhattan was tested at 13 sampling points, in addition to one test at the Newtown Sewage Treatment plant and pump station. Initial results of this drinking water sampling show that levels of asbestos are well below EPA's levels of concern.

While FEMA has provided EPA with a Total Project Ceiling cost of slightly more than $83 million for the Agency's cleanup efforts in New York City and in at the Pentagon site, EPA currently is working with emergency funding of $23.7 million. If costs exceed this level, FEMA will authorize EPA to tap additional funding in increments of $15 million. As part of the additional funding to be provided by FEMA, EPA will be responsible for any hazardous waste disposal, general site safety and providing sanitation facilities for many of the search and rescue workers to wash the dust off following their shifts. EPA is coordinating with both the U.S. Air Force Center for Environmental Excellence and the U.S. Coast Guard to quickly

implement these additional responsibilities to ensure that search and rescue personnel are provided with the maximum support and protection from hazardous materials that may be found during their mission.

At the Pentagon explosion site in Arlington Va., EPA has also been involved in a variety of monitoring of air and water quality. All ambient air monitoring results, both close to the crash site and in the general vicinity, have shown either no detection of asbestos or levels that fall well below the Agency's level of concern. Testing of runoff water from the disaster site does not show elevated levels of contaminants. Given the large numbers of Department of Defense (DOD) employees returning to work this week, EPA has worked closely with officials from DOD and from the Occupational Safety and Health Administration (OSHA) to evaluate air and drinking water quality and to be certain that the workplace environment will be safe.

While careful not to impede the search, rescue and cleanup efforts at either the World Trade Center or the Pentagon disaster sites, EPA's primary concern has been to ensure that rescue workers and the public are not being exposed to elevated levels of potentially hazardous contaminants in the dust and debris, especially where practical solutions are available to reduce exposure. EPA has assisted efforts to provide dust masks to rescue workers to minimize inhalation of dust. EPA also recommends that the blast site debris continue to be kept wet, which helps to significantly reduce the amount of airborne dust which can aggravate respiratory ailments such as asthma. On-site facilities are being made available for rescue workers to clean themselves, change their clothing and to have dust-laden clothes cleaned separately from normal household wash.

Appendix D

Screening Levels Used by EPA to Assess Outdoor Air Quality

Pollutant	Screening Level	Source
Asbestos (Ambient Air)	70 s/m2	AHERA clearance level to re-enter school after asbestos abatement. Represents minimum detection limit of method in use at time standard set.
Asbestos (Bulk Dust)	1% asbestos	The Asbestos NESHAP (40 CFR Part 61) level at which a material is considered asbestos-containing and subject to NESHAP removal regulations.
Benzene	0.02 ppm **[1]**	California-EPA toxicity studies.
	.21 ppm **[3]**	Region 2 **[2]**
PCBs	.73 ug/m3 **[1]**	Region 2 **[2]**
	9 ug/m3 **[3]**	Region 2 **[2]**
Chromium	.6 ug/m3 **[3]**	Region 2 **[2]**. Based on risk for Chromium Hexavalent (the most toxic form of Chromium).
Cadmium	.2 ug/m3 **[1]**	California-EPA toxicity studies
	3 ug/m3 **[3]**	Region 2 **[2]**
Manganese	.5 ug/m3 **[1]**	Region 2 **[2]**
Particulate Matter 2.5	40 ug/m3	Air Quality Index. Represents caution level for sensitive populations for 24-hour average exposure.
	65 ug/m3 (24 hr avg)	National Ambient Air Quality Standard
Particulate Matter 10	150 ug/m3	Air Quality Index and National Ambient Air Quality Standard
Lead	1.5 ug/m3 (3 mo avg)	National Ambient Air Quality Standard
	.1 ug/m3	Default value in EPA's Integrated Exposure Uptake/ Bio-kinetic Model for Lead in Children.
PAHs	6 ug/m3 **[3]**	Region 2 developed from EPA's "Hazard Evaluation Handbook: A Guide to Removal Actions," and EPA National Center for Environmental Assessment provisional inhalation Slope Factor for Benzo(a)pyrene.
Dioxin	.162 ng/m3 **[3]**	Region 2 **[2]**
Sulfur Dioxide	.14 ppm (24 hr avg)	National Ambient Air Quality Standard
Acetone	1.5 ppm **[1]**	Region 2 **[2]**
Benzaldehyde	860 ppm	Not identified
1,3 Butadiene	.01 ppm **[1] [3]**	Region 2 developed using EPA's "Hazard Evaluation Handbook: A Guide to Removal Actions," and proposed reference concentration.

Pollutant	Screening Level	Source
Chloro-methane	.4 ppm **[1]**	Region 2 **[2]**
	2.6 ppm **[3]**	Region 2 **[2]**
1,4 Dioxane	.5 ppm **[3]**	Region 2 **[2]**
Ethanol	45 ppm	American Conference of Government Industrial Hygienists Threshold Limit
Ethyl-benzene	2.5 ppm **[1]**	Region 2 **[2]**
Freon 22	140 ppm	Not Identified
Propylene	simple asyphyxiant	
Styrene	2.3 ppm **[1]**	Region 2 **[2]**
Alpha methyl styrene	.1ppm **[1]**	Region 2 **[2]**
Tetrahydro-furan	.9 ppm **[3]**	Region 2 **[2]**
Toluene	1.1 ppm **[1]**	Region 2 **[2]**
Xylenes	1 ppm	ATSDR Minimum Risk Level x 10. Represents screening level for chronic (over 365 days) exposure. Used to identify contaminants of potential concern.
Acetaldehyde	.05 ppm **[1]**	Region 2 **[2]**
	1.3 ppm **[3]**	Region 2 **[2]**
Formaldehyde	.04 ppm	ATSDR Minimum Risk Level for acute exposure. Represents screening level for acute (1- to 14-day) exposure to identify a potential concern.
	.35 ppm **[3]**	Region 2 **[2]**
Acrolein	.0001 ppm **[1]**	Region 2 **[2]**

Notes:

[1] = Represents risk of non-cancer disease based on a 1-year continuous exposure at screening level. The hazard quotient represents the ratio of the potential exposure to the substance and the level at which no adverse health effects are expected. If the quotient is greater than 1, then adverse health effects are possible. For WTC's response, the screening level established equals a hazard quotient of 10.

[2] = Region 2 developed the screening level using EPA's "Hazard Evaluation Handbook: A Guide to Removal Actions," and toxicity criteria from EPA's Integrated Risk Information System database.

[3] = Represents a 1-in-10,000 increased lifetime risk of cancer based on a 1-year continuous exposure at the screening level.

Appendix E

EPA Outdoor Air Asbestos Sampling for September 2001

Date Sample Collected	No. of Samples Collected	Sampling Location	No. of Samples Exceeding 70s/mm2	No. of Samples Not Analyzed [1]	Date Results Available
9/11	4	Brooklyn	[2]		9/12
9/11	4	New Jersey	[2]		9/12
9/12	9	Ground Zero	[2]		9/13
9/13	1	Lower Manhattan	[2]		9/14
9/15	16	Lower Manhattan	2 [3]	7	9/16
9/16	20	Lower Manhattan	1 [4]	9	9/17
9/17	23	Lower Manhattan	0	8	9/18
9/18	12	Lower Manhattan	0		9/19
9/18	13	Lower Manhattan	0	3	9/20
9/18	4	New Jersey	0	1	9/20
9/18	2	New Jersey	0		9/22
9/19	12	Lower Manhattan	0 [5]		9/20
9/19	11	Lower Manhattan	0		9/21
9/19	13	Lower Manhattan	0		9/23
9/19	3	New Jersey	0		9/22
9/20	18	Lower Manhattan	0		9/21
9/20	2	New Jersey	0		9/22
9/20	4	New Jersey	0		9/23
9/21	13	Lower Manhattan	0		9/22
9/21	4	New Jersey	0		9/24
9/22	13	Lower Manhattan	0		9/23
9/22	15	Lower Manhattan	1 [6]	1	9/24
9/22	4	New Jersey	0		9/26
9/23	29	Lower Manhattan	1 [7]	3	9/25
9/23	4	New Jersey	0		9/27
9/24	16	Lower Manhattan	0		9/25
9/24	16	Lower Manhattan	0		9/26
9/24	4	New Jersey	0		9/27
9/25	17	Lower Manhattan	0		9/28
9/25	4	New Jersey	0		9/28
9/26	17	Lower Manhattan	0		9/28
9/26	16	Lower Manhattan	3 [8]		9/29
9/26	4	New Jersey	0		9/29
9/27	18	Lower Manhattan	0		9/29
9/27	17	Lower Manhattan	0		9/30
9/28	17	Lower Manhattan	0		9/29

Date Sample Collected	No. of Samples Collected	Sampling Location	No. of Samples Exceeding 70s/mm2	No. of Samples Not Analyzed [1]	Date Results Available
9/28	17	Lower Manhattan	0		10/01
9/28	4	New Jersey	0		9/30
9/29	16	Lower Manhattan	0		10/01
9/29	17	Lower Manhattan	1 [9]		10/02
9/29	4	New Jersey	0		10/01
9/30	17	Lower Manhattan	2		10/02
TOTALS	**474**		**11**	**32**	

Notes:

[1] = Not analyzed due to filter overloading or other sampling problems.
[2] = No sample results reported for this method.
[3] = Results were 128 and 160 s/mm2.
[4] = Result was 90 s/mm2.
[5] = TEM results were reported in fibers per cubic centimeter. Results in s/mm2 not reported on daily summary sheet.
[6] = Result was 80 s/mm2.
[7] = Result was 88.89 s/mm2.
[8] = Results were 177.78, 97.78, and 71.11 s/mm2.
[9] = Result was 80 s/mm2.

Appendix F

EPA Outdoor Bulk Dust Asbestos Test Results for September 2001 [1]

Date Sample Collected	No. of Samples Collected	Location	No. of Results > 1% Asbestos	Date Results Reported in Daily Summary
9/11	4	Ground Zero	1	9/12
9/12	7	Ground Zero	0	
9/12	5	Brooklyn	0	9/13
9/13	0			
9/14	12	Financial District	0	9/15
9/15	29	West of Broadway	13	9/16
9/16	5	South of Ground Zero	5	9/17 and 9/18
9/17	13	Perimeter of Ground Zero	0	9/18
9/18	11	Perimeter of Ground Zero	6	9/20
9/19	16	Various Lower Manhattan locations	12	9/21
9/20	7	Various Lower Manhattan locations	0	9/21
9/21	11	Around WTC	0	9/22
9/21	1	Beam from South Tower	0	9/23
9/22	0			
9/23	11	Around Ground Zero	0	9/25
9/24	0			
9/25	13	Various Lower Manhattan locations	0	9/28
9/26	0			
9/27	0			
9/28	0			
9/29	0			
9/30	0			
Totals	**145**		**37**	

1 = Excludes bulk testing at landfill.

Appendix G

EPA September 16, 2001 Press Release

September 16, 2001

EPA, OSHA Update Asbestos Data, Continue to Reassure Public about Contamination Fears [En Español]

The U.S. Environmental Protection Agency and the Department of Labor's Occupational Health and Safety Administration today announced that the majority of air and dust samples monitored at the crash site and in lower Manhattan do not indicate levels of concern for asbestos. The new samples confirm previous reports that ambient air quality meets OSHA standards and consequently is not a cause for public concern. New OSHA data also indicates that indoor air quality in downtown buildings will meet standards.

EPA has found variable asbestos levels in bulk debris and dust on the ground, but EPA continues to believe that there is no significant health risk to the general public in the coming days. Appropriate steps are being taken to clean up this dust and debris.

"Our tests show that it is safe for New Yorkers to go back to work in New York's financial district," said John L. Henshaw, Assistant Secretary of Labor for OSHA. "Keeping the streets clean and being careful not to track dust into buildings will help protect workers from remaining debris."

OSHA staff walked through New York's financial district on September 13th, wearing personal air monitors and collected data on potential asbestos exposure levels. All but two samples contained no asbestos. Two samples contained very low levels of an unknown fiber, which is still being analyzed.

Air Samples taken on Sept. 13th inside buildings in New York's financial district were negative for asbestos. Debris samples collected outside buildings on cars and other surfaces contained small percentages of asbestors, ranging from 2.1 to 3.3 - slightly above the 1 percent trigger for defining asbestos material.

"EPA will be deploying 16 vacuum trucks this weekend in an effort to remove as much of the dust and debris as possible from the site where the samples were obtained," said EPA Administrator Christie Whitman. "In addition we will be moving six continuous air monitoring stations into the area. We will put five near ground zero and one on Canal Street. The good news continues to be that the air samples we have taken have all been at levels that cause us no concern."

The continuous monitoring stations will augment the ambient air quality monitoring located in Brooklyn. EPA and OSHA will remain on site and continue to monitor for levels of asbestos, PCBs, lead and polycyclic aromatic hydrocarbons (PAHs) in the area throughout the long weeks of cleanup ahead. In addition, EPA will move in a bus that has the equipment to do instant analysis of volatile organic compound samples from air at the site. It is called a Total Atmospheric Gas Analyzer and is similar to a unit used during the Gulf War to sample emissions from the oil fires in Kuwait.

The Agency is recommending that businesses in the area planning to reopen next week take precautions including cleaning air conditioning filters and using vacuums with appropriate filters to collect dust. Vacuuming will reduce the chance of re-entering workers tracking dust into the buildings. This work is already underway by city agencies.

The U.S. Coast Guard will be assisting EPA in monitoring impacts, if any, of today's rainstorms on the water quality. However, most of the rainflow is expected to be handled by the City's waste water treatment facility, since there will be only limited sewage in the combined sewer system. EPA has a vessel on site in New York to handle any necessary testing.

Additional technical support has been offered to EPA in New York from the U.S. Air Force Surgeon General's Office of Environmental and Occupational Health. That support would involve five engineers and/or environmental technicians and equipment if needed.

Appendix H

EPA September 13, 2001 Press Release

September 13, 2001

EPA Initiates Emergency Response Activities, Reassures Public About Environmental Hazards [En Español]

U.S. Environmental Protection Agency Administrator Christie Whitman today announced that EPA is taking steps to ensure the safety of rescue workers and the public at the World Trade Center and the Pentagon disaster sites, and to protect the environment. EPA is working with state, federal, and local agencies to monitor and respond to potential environmental hazards and minimize any environmental effects of the disasters and their aftermath.

At the request of the New York City Department of Health, EPA and the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) have been on the scene at the World Trade Center monitoring exposure to potentially contaminated dust and debris. Monitoring and sampling conducted on Tuesday and Wednesday have been very reassuring about potential exposure of rescue crews and the public to environmental contaminants.

EPA's primary concern is to ensure that rescue workers and the public are not exposed to elevated levels of asbestos, acidic gases or other contaminants from the debris. Sampling of ambient air quality found either no asbestos or very low levels of asbestos. Sampling of bulk materials and dust found generally low levels of asbestos.

The levels of lead, asbestos and volatile organic compounds in air samples taken on Tuesday in Brooklyn, downwind from the World Trade Center site, were not detectable or not of concern.

Additional sampling of both ambient air quality and dust particles was conducted Wednesday night in lower Manhattan and Brooklyn, and results were uniformly acceptable.

"EPA is greatly relieved to have learned that there appears to be no significant levels of asbestos dust in the air in New York City," said Administrator Whitman. "We are working closely with rescue crews to ensure that all appropriate precautions are taken. We will continue to monitor closely."

Public health concerns about asbestos contamination are primarily related to long-term exposure. Short-term, low-level exposure of the type that might have been produced by the collapse of the World Trade Center buildings is unlikely to cause significant health effects. EPA and OSHA will work closely with rescue and cleanup crews to minimize their potential exposure, but the general public should be very reassured by initial sampling.

EPA and OSHA will continue to monitor and sample for asbestos, and will work with the appropriate officials to ensure that rescue workers, cleanup crews and the general public are properly informed about appropriate steps that should be taken to ensure proper handling, transportation and disposal of potentially contaminated debris or materials.

EPA is taking steps to ensure that response units implement appropriate engineering controls to minimize environmental hazards, such as water sprays and rinsing to prevent or minimize potential exposure and limit releases of potential contaminants beyond the debris site.

EPA is also conducting downwind sampling for potential chemical and asbestos releases from the World Trade Center debris site. In addition, EPA has deployed federal On-Scene Coordinators to the Washington, D.C. Emergency Operations Center, Fort Meade, and FEMA's alternate Regional Operations Center in Pennsylvania, and has deployed an On-Scene Coordinator to the Virginia Emergency Operations Center.

Under its response authority, EPA will use all available resources and staff experts to facilitate a safe emergency response and cleanup.

EPA will work with other involved agencies as needed to:

- procure and distribute respiratory and eye protection equipment in cooperation with the Dept. of

Health and Human Services;
- provide health and safety training upon request;
- design and implement a site monitoring plan;
- provide technical assistance for site control and decontamination; and
- provide some 3000 asbestos respirators, 60 self-contained breathing apparatuses and 10,000 protective clothing suits to the two disaster sites.

New York Governor George E. Pataki has promised to provide emergency electric generators to New York City in efforts to restore lost power caused by Tuesday's tragedy, and EPA will work with State authorities to expedite any necessary permits for those generators.

OSHA is also working with Consolidated Edison regarding safety standards for employees who are digging trenches because of leaking gas lines underground. OSHA has advised Con Edison to provide its employees with appropriate respirators so they can proceed with emergency work, shutting off gas leaks in the city.

Appendix I

Non-Governmental Environmental Experts Interviewed

Philip Landrigan, M.D.	Director/Attending, The Mount Sinai Hospital Chairman & Professor, Mount Sinai School of Medicine
Stephen Levin, M.D.,	Assistant Attending, The Mount Sinai Hospital Associate Professor, Mount Sinai School of Medicine
George Thurston, Sc.D.	Associate Professor of Environmental Medicine, New York University School of Medicine
Paul Lioy, Ph.D.	Director, Exposure Measurement and Assessment Division, Environmental and Occupational Health Sciences Institute
Hugh Granger, Ph.D., CIH	Toxicologist and Laboratory Director, HP Environmental, Inc.
Piotr Chmielinski, M.S., CIH	Director of Industrial Hygiene, HP Environmental, Inc.
Thomas Cahill	Professor of Atmospheric Science/Physics, University of California–Davis, Director, DELTA Group
Michael Beard	Research Environmental Chemist, Center for Environmental Measurements, Research Triangle Institute
Michael Gallo, PhD.,	Director, Toxicology Division, Environmental and Occupational Health Sciences Institute
Howard Bader, P.E.	President, H.A. Bader Consultants, Inc.

Appendix J

NYCDEP October 25, 2001 Instructions to Residents

Department of Environmental Protection
Executive Offices
59-17 Junction Boulevard-19th floor
Corona, New York 11368-5107
www.nyc.gov/dep

Joel A. Miele Sr., P.E., Commissioner
(718) 595-6565 Fax #: (718) 595-3525
E-mail: jmiele@nysnet.net

October 25, 2001

Dear Residents of Lower Manhattan:

Since September 11th, the U.S. Environmental Protection Agency (EPA), NYC Department of Environmental Protection (DEP), NYC Department of Health (DOH), and the Occupational Safety and Health Administration (OSHA), have been taking samples of the air, dust, water, river sediments and drinking water and analyzing them for the presence of pollutants. The samples are evaluated against a variety of benchmarks, standards and guidelines established to protect public health under various conditions. These agencies consider the amount of time a person is exposed to a particular pollutant and where—a school, workplace or home—in creating these criteria.

The following is a description of some of the benchmarks, standards and guidelines these agencies are using to evaluate environmental conditions in the aftermath of the World Trade Center disaster.

Asbestos in the Air / in Open Spaces

EPA is requiring the strictest protective standard under AHERA, the Asbestos Hazard Emergency Response Act, for asbestos in outdoor and indoor areas. (This standard is used to determine whether children may reenter a school building after asbestos has been removed or abated.) To be as protective as possible, EPA, together with NYCDEP and all the other health and environmental agencies, are requiring school reentry standards in tests around the World Trade Center site. NYCDEP, USEPA, and NYC Department of Sanitation worked to perform cleanups of all dust in exterior areas with HEPA vacuums and wetwashing. **NYCDEP and EPA have both conducted tests in exterior spaces and all exterior areas of Lower Manhattan that were closed passed their strict protective standards before being opened again to the public.**

Asbestos in Dust in Buildings

If a substance contains more than 1% asbestos, it is considered to be an "asbestos-containing material." There are Federal, State, and City regulations in place to ensure the proper handling and disposal of asbestos-containing material. If a substance contains 1% or less asbestos, these regulations do not apply.

EPA is using the 1% definition in evaluating exterior dust samples in the Lower Manhattan area near the World Trade Center. All affected landlords have been instructed to test dust samples within their buildings utilizing this standard. **Landlords were notified that they should not reopen any *building until a competent professional had properly inspected their premise. If more than* 1% asbestos was found and testing and cleaning was necessary, it had to be performed by certified personnel.**

Drinking Water

NYC DEP continuously tests drinking water every day for multiple parameters. After the World Trade Center disaster, DEP expanded the number of tests taken and the parameters of testing. EPA *also conducted separate tests. **Before and after the event, New York City drinking water has*** **met and continues to meet all Federal, State, and City standards. Testing at a heightened level is continuing.**

NYC Department of Health

The New York City Health Commissioner Neal L. Cohen, M.D. has reviewed the findings of the various testing agencies and issued the following statements to residents. He said "despite *the smoky conditions in areas of lower Manhattan that are close to the World Trade Center* site, test results from the ongoing monitoring of airborne contaminants indicate that the levels continue to be below the level of concern to public health. Nonetheless, while debris continues to be disturbed, and while flare-ups of smoke continue to permeate the downtown area, air-testing results will continue to be monitored, and appropriate health recommendations will be issued as necessary." Dr. Cohen added, "As work continues at the disaster site, the presence of dust and smoke odor in the downtown area has been of understandable concern to residents. **However, air monitoring by Federal, State and City agencies has indicated that the levels of particulate *matter being detected are below the level of public health concern and do not pose long-term* health risks to the general public."**

In addition to air monitoring activities, efforts are being made daily to suppress dust and smoke at the World Trade Center disaster site. Results of daily dust sampling conducted by the U.S. Environmental Protection Agency is available online at epa.gov. Factsheets detailing Health Department recommendations pertaining to air quality, asbestos, safely reoccupying homes and buildings, and worker safety are available online at nyc.gov/health. For more information about all Health Department activities, New Yorkers can call **(212) 227-5269.** For information about asbestos issues, you can consult our website at nyc.gov/dep or call the New York City Department of Environmental Protection at **(718) DEP-HELP** and ask to be referred to our asbestos staff.

Very truly yours,

Joel A. Miele Sr., P.E., Commissioner

Appendix K

Indoor Air and Dust Test Results

EPA conducted indoor air monitoring and indoor dust wipe sampling in the weeks after the collapse. This EPA indoor air monitoring (prior to the FEMA-funded residential cleanup) was limited primarily to testing for asbestos in buildings. EPA's dust wipe sampling tested for metals, PCBs, and dioxin.

On September 13, 2001, 14 air samples were collected from 26 Federal Plaza, 290 Broadway, and Chase Manhattan Plaza, and analyzed for asbestos. All samples were analyzed by TEM and the results converted to PCM equivalent readings in fibers per cubic centimeter (f/cc). One of the 14 samples exceeded the New York City standard for asbestos clearance of .01 f/cc (see Table K-1).

Table K-1: Indoor Air Test Results from September 13, 2001

Address	Sample ID	Sample Volume [1]	PCM Analysis		TEM Analysis			
			f/cc	f/mm2 [2]	f/cc	s/mm2	s = .5- 5 [3]	s > 5 [4]
Chase Manhattan Plaza	571	np	na	na	0.0098	na	na	na
26 Federal Plaza (13th floor)	16370	np	na	na	0.0064	na	na	na
26 Federal Plaza (13th floor)	16371	np	na	na	<0.0033	na	na	na
26 Federal Plaza (Lobby S.)	16372	np	na	na	0.0072	na	na	na
26 Federal Plaza (Lobby W.)	16373	np	na	na	0.0037	na	na	na
26 Federal Plaza (39th floor)	16374	np	na	na	<0.0038	na	na	na
26 Federal Plaza (38th floor)	16375	np	na	na	<0.0039	na	na	na
26 Federal Plaza (26th floor)	16376	np	na	na	<0.0038	na	na	na
290 Broadway (8th floor)	27490	np	na	na	0.0042	na	na	na
290 Broadway (Lobby)	27491	np	na	na	<0.0043	na	na	na
290 Broadway (22nd floor N.)	27492	np	na	na	<0.0041	na	na	na
290 Broadway (22nd floor S.)	27493	np	na	na	0.004	na	na	na
290 Broadway (LL-1)	27494	np	na	na	0.013	na	na	na
290 Broadway (LL-2)	27495	np	na	na	0.0044	na	na	na

KEY:
np = sample volume not provided on data sheets.
na= not analyzed for this metric.

NOTES:
[1] = sample volume for TEM (AHERA method) is 1200 liters for 25 mm filter
[2] = fibers per millimeter squared
[3] = structures equal to or greater than 0.5 micrometers and less than or equal to 5 micrometers in length
[4] = structures greater than 5 micrometers in length

During the period September 17 to November 3, 2001, EPA collected dust wipe samples within four buildings: Stuyvesant High School, Public School 234, Manhattan Borough Community College, and the Jacob Javits Convention Center. The samples were analyzed for various metals at all locations, while at Stuyvesant and the Community College samples were also collected and analyzed for PCBs and dioxin. Fifty-four percent of the sample results were below the minimum

detection limit, while the remaining 46 percent detected contaminants in varying levels. The highest recorded amount for each pollutant at each location is shown in Table K-2.

Table K-2: Highest Recorded Readings for Dust Wipe Samples

Analyte	Stuyvesant High School	Jacob Javits Convention Center	Manhattan Borough Community College	Public School 234	Unit
Aluminum	320	220	570	83	ug/wipe
Antimony	0.81	1	0.79	0.15	ug/wipe
Arsenic	0.1	0.24	0.38	<0.1	ug/wipe
Barium	4.2	9.3	9.4	2.1	ug/wipe
Beryllium	<0.1	<0.1	<0.1	<0.1	ug/wipe
Cadmium	0.59	0.47	2	<0.25	ug/wipe
Calcium	3300	1900	5000	1400	ug/wipe
Chromium	3.3	2.1	4.4	0.6	ug/wipe
Cobalt	<0.5	<0.5	1.1	<0.5	ug/wipe
Copper	5	7.3	9.8	6.1	ug/wipe
Iron	360	580	840	200	ug/wipe
Lead	4.5	6.3	9.7	1.5	ug/wipe
Magnesium	370	240	670	160	ug/wipe
Manganese	15	8.9	28	3.9	ug/wipe
Mercury	.01		0.02	<.01	ug/wipe
Nickel	1.5	1.9	2.4	<0.5	ug/wipe
Potassium	110	380	220	<100	ug/wipe
Selenium	<.01	<.01	<.01	<.01	ug/wipe
Silver	<.25	0.26	<.25	<.25	ug/wipe
Sodium	<25	1300	280	250	ug/wipe
Thallium	<.01	<.01	<.01	390	ug/wipe
Vanadium	<0.5	<0.5	1.2	0.81	ug/wipe
Zinc	55	93	150	39	ug/wipe
PCBs-totals	0	na	0	<5	ng/100cm2
TEQ (ND=1/2)	0.0046	na	.0055	0.0082	ng/100cm2

na = samples not analyzed for this pollutant.

On September 26, 2001, bulk dust samples from 110 Greenwich were collected and analyzed for various pollutants. For those pollutants where a screening level existed, the test results were all below the applicable soil screening levels contained in EPA's Hazard Evaluation Handbook. Table K-3 presents the results of testing at 110 Greenwich.

Table K-3: Bulk Dust Sampling at 110 Greenwich

Analyte	Result [1]	Screening Level [2]
Aluminum	18900 mg/Kg	780000 mg/kg
Antimony	< 5.75 mg/Kg	310 mg/kg
Aroclor 1016	< 740 ug/kg	
Aroclor 1221	< 740 ug/kg	
Aroclor 1232	< 740 ug/kg	
Aroclor 1242	< 740 ug/kg	
Aroclor 1248	< 740 ug/kg	
Aroclor 1254	< 740 ug/kg	
Aroclor 1260	< 740 ug/kg	
Asbestos	[3]	
Arsenic	< 0.96 mg/Kg	43 mg/kg
Barium	195 mg/Kg	
Beryllium	1.76 mg/Kg	15 mg/kg
Cadmium	3.8 mg/Kg	390 mg/kg
Calcium	186000 mg/Kg	
Chromium	71.5 mg/Kg	3900 mg/kg
Cobalt	5.6 mg/Kg	47000 mg/kg
Copper	93.2 mg/Kg	31000 mg/kg
Iron	7410 mg/Kg	230000 mg/kg
Lead	97.7 mg/Kg	
Magnesium	19100 mg/Kg	
Manganese	757 mg/Kg	18000 mg/kg
Mercury	0.37 mg/Kg	78 mg/kg
Nickel	15.5 mg/Kg	16000 mg/kg
Potassium	5400 mg/Kg	
Selenium	< 0.96 mg/Kg	3900 mg/kg
Silver	4.91 mg/Kg	3900 mg/kg
Sodium	3880 mg/Kg	
TEQ (ND =1/2)	60.9pg/g	410 pg/g
Thallium	< 0.96 mg/Kg	55 mg/kg
Vanadium	18.3 mg/Kg	5500 mg/kg
Zinc	791 mg/Kg	230000 mg/kg

[1] = All samples collected on September 26, 2001.
[2] = Residential soil screening level from EPA's Hazard Evaluation Handbook. Only accounts for health risk from ingestion.
[3] = No result reported in NYC Response database.

On October 10, 2001, two bulk dust samples inside 100 Church Street were collected and analyzed for asbestos. The results of this testing, done at the Department of Justice's request, found that one of the samples contained 1.1 percent asbestos while the other was non-detect.

On October 23, 2001, 10 air samples were collected at 100 Church Street and analyzed for asbestos. The samples were analyzed by both the TEM and PCM methods. All TEM results were below the AHERA standard of 70 s/mm2 and all PCM results were below .01 f/cc. This testing was performed on the 18th and 19th floors after these floors had been cleaned.

Table K-4: Indoor Air Test Results from October 23, 2001

Address	Sample ID	Sample Volume [1]	PCM Analysis		TEM Analysis			
			f/cc	f/mm2 [2]	f/cc	s/mm2	s = .5- 5 [3]	s > 5 [4]
100 Church St (front of 1927/8)	11931	2400	0.002	9.55	na	<20	0	0
100 Church St (Lobby)	11932	2400	0.002	11.46	na	<20	0	0
100 Church St (1909/1910)	11933	2160	0.003	15.92	na	<20	0	0
100 Church St (1902/1903)	11934	2400	0.001	7.64	na	<20	0	0
100 Church St (Alley 1960)	11935	2400	<0.001	<7	na	<20	0	0
100 Church St (Alley 1941)	11936	2400	<0.001	<7	na	<20	0	0
100 Church St (1935/1937)	11937	2400	0.004	21.66	na	<20	0	0
100 Church St (1835/1837)	11938	2400	<0.001	<7	na	<20	0	0
100 Church St (18FL-SW corner)	11939	2400	<0.001	<7	na	<20	0	0
100 Church St (18th main lobby)	11940	2400	0.005	30.57	na	<20	0	0

KEY:
np = sample volume not provided on data sheets.
na= not analyzed for this metric.

NOTES:
[1] = sample volume for TEM (AHERA method) is 1200 liters for 25 mm filter
[2] = fibers per millimeter squared
[3] = structures equal to or greater than 0.5 micrometers and less than or equal to 5 micrometers in length
[4] = structures greater than 5 micrometers in length

General Services Administration Monitoring of Federal Buildings

From September 13, 2001, through January 2, 2002, the General Services Administration, which is responsible for Federal building management, arranged for indoor environmental testing at Federal buildings located at 290 Broadway, 26 Federal Plaza, 201 Varick Street, and 1 Bowling Green. Over 100 air samples were analyzed and all samples were below the AHERA standard of 70 s/mm2. All but four air samples analyzed by TEM were non-detect for asbestos. The four samples that detected asbestos all occurred between September 13 and September 19, 2001. Two samples showed 25 s/mm2 and two samples could not be analyzed because the filters were overloaded. The only testing for asbestos in dust was conducted on September 14, 2001. Three dust samples collected in the lobby of 290 Broadway and two collected outside the building on September 13, 2001, showed the presence of chrysotile asbestos by TEM analysis. The results for these tests only reported whether asbestos was present or not, not the percentage of asbestos in the sample. Table K-5 through K-7 provide more information on the results of indoor testing of Federal buildings.

K-5: Asbestos Air Testing

Location	Sampling Period	PCM Results (0.01 f/cc)		TEM Results (70 s/mm2)	
		No. of Samples	No. above 0.01 f/cc	No. of Samples	No. above 70 s/mm2
290 Broadway	09/13/01 - 09/28/01	18	0	58	0
	10/09/01- 10/23/01	16	0	16	0
	12/03/01 - 01/02/02	21	0	21	0
1 Bowling Green	10/12/01- 10/25/01	18	0	16	0

Note: All results were non detect except for 4 of the 58 samples collected between 9/13/01 and 9/28/01. Two of these sample showed asbestos levels of 25 s/mm2 by TEM and 2 samples could not be analyzed because of overloaded filters.

K-6: Asbestos Dust Testing at 290 Broadway

Sample Collection Information			PLM	TEM
Date	Type	No.	No. of Samples Asbestos Detected	No. of Samples Asbestos Detected
09/14/01	Vacuum	5	Not Analyzed	5
09/14/01	Tape	5	0	0
09/14/01	HVAC Filter	3	0	0

K-7: Non-Asbestos Air Sampling Results

Pollutant	Screening Level	Test Method	290 Broadway		500 Pearl Street	
			No. of Samples	No. Above Screening Level	No. of Samples	No. Above Screening Level
Lead	50 ug/m3	NIOSH 7082	3	0	6	0
Respirable Dust	5.0 mg/m3	NIOSH 0600	3	0	6	0
Carbon Dioxide	5000 ppm	Telaire CO2	3	0	6	0
Carbon Monoxide	50 ppm	SGA91	3	0	6	0
VOCs	1 ppm [1]	H-Nu Photo	3	0	6	0

[1] = Method Detection Limit

Other Indoor Air Studies

"Characterization of Particulate Found in Apartments After Destruction of the World Trade Center."[18] This study was conducted at the request of the Ground Zero Elected Officials Task Force. This study selected two residential apartment buildings for sampling – one presumed to have significant WTC dust contamination and the other not – based on their locations. Six air samples were collected from inside one apartment building and five from the other. All 11 samples were analyzed by the TEM method. The study found higher levels of

[18] Eric J. Chatfield, Ph.D., Chatfield Technical Consulting Limited, and John R. Kominsky, M.Sc.,CIH, CSP, CHMM, Environmental Quality Management, Inc.; October 12, 2001.

airborne asbestos in apartment building expected to have WTC dust contamination. Further, the study found that asbestos levels in both buildings exceeded the AHERA standard of 70 s/mm2:

- Asbestos concentrations ranged from 6,277 to 10,620 s/mm2 in the building expected to experience significant WTC dust contamination.
- Asbestos concentrations ranged from 141 to 379 s/mm2 in the building not expected to experience significant WTC dust contamination.

"Health Risks from Exposures to Asbestos and Inorganic Metals Due to Collapse of the World Trade Center.[19] The results of the aforementioned "Characterization of Particulate Found in Apartments After Destruction of the World Trade Center" study were analyzed by a consultant for the Ground Zero Elected Officials Task Force to address possible health risks to residents and workers from exposure to the levels of inorganic metals and asbestos contamination found in the study.

"Final Report of the Public Health Investigation to Assess Potential Exposures to Airborne and Settled Surface Dust in Residential Areas in Lower Manhattan, NYCDOH, and ATSDR."[20] This was the largest study in terms of buildings analyzed and was conducted by ATSDR and NYCDOH. The final report was issued in September 2002. The study collected dust and air samples in and around 30 residential buildings (encompassing 59 apartment units) in Lower Manhattan, along with 4 buildings north of 59th Street for comparison purposes. Of the 59 apartments sampled, 50 – or 85 percent – had been reportedly cleaned (professionally or otherwise) prior to ATSDR's sampling.

The study concluded that the increased risk of cancer or other adverse lung health effects from prolonged exposure to WTC dust was greater than 1-in-10,000 for those areas sampled. This risk was based on several worst-case scenario assumptions. These worst-case assumptions were that apartments tested would not be cleaned after sampling, all fibers detected were asbestos, and the levels detected in the study represented long-term levels. The report noted that for individuals who frequently clean their apartments using HEPA vacuums and damp cloths/mops or take part in the EPA cleaning program, it was unlikely their exposure would resemble worst-case conditions. The report noted that when evaluating the health risks from indoor contamination, it did not take into account the potential effects of high doses of dust, fibers, and other materials that people in the WTC area at the time of the attacks may have experienced. The report noted these exposures could add to the public's risk of long-term health effects.

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19 Dr. E.B. Ilgren, MD, MA, D Phil, October 11, 2001.

20 New York City Department of Health and Mental Hygiene and U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, as part of the World Trade Center Environmental Assessment Workgroup, September 2002.

Appendix L

Details on Use of Respirators at Ground Zero

Reports on Lack of Respirator Use

An October 2001 report[21] by the National Institute of Environmental Health Sciences discussed worker safety issues at the WTC site for the period up to October 5, 2001. The report's observations generally focused on construction workers at the site and not Fire Department rescue team or Federal disaster assistance personnel. According to the report:

- Respiratory protection was rare with the exception of heavy equipment operators. Further, workers were observed in the smoke plume emanating from the pile without hard hats, eye wear, or respirators.
- Workers did not decon [decontaminate] after leaving the site. The hand/face and boot wash stations did not appear to be used by most of the workers.
- During the September 22-26, 2001, period, an increase in worker protection was observed, notably respiratory protection. Vehicles leaving the site began to be hosed down.
- There was no evidence that any safety and health program was operating at the site. The lack of an operating safety and health program was confirmed by various support personnel, workers, and government officials.

A January 2002 report[22] prepared by a certified industrial hygienist for the Operating Engineers National Hazmat Program noted that during the period October 2 -16, 2001, less than half of the heavy equipment operators regularly used respirators when working on the "pile" at Ground Zero, and often this use decreased to less than one-third of the workers This report, which discussed respiratory protection lessons from the WTC disaster, concluded that the respirators NIOSH recommended for use at the site were correct and sufficiently protective provided that they were properly tested and conscientiously worn.

In contrast to the recovery operation at the WTC site, the January 2002 report noted that workers conducting WTC debris sorting and inspection at the Fresh Kills landfill were wearing half-face respirators, hard hats, eye protection, and Tyvek suits. The author noted that respiratory protection compliance by workers at Fresh Kills was reported to be approximately 90 percent as

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[21] "Worker Education and Training Program (WETP) Response to the World Trade Center Disaster: Initial WETP Grantee Response and Preliminary Assessment of Training Needs," Donald Elisburg, John Moran, National Institute of Environmental Health Sciences WETP, National Clearinghouse for Worker Safety and Health Training, October 6, 2001.

[22] "Respiratory Protection at the World Trade Center: Lessons From the Other Disaster," Bruce Lippy, CIH, CSP, January 15, 2002.

opposed to 30-50 percent compliance at the WTC site. The author observed that:

> *". . . debris is pulled by workers from the smoking, twisted wreckage of the World Trade Centers and then wetted and hauled to a site where the debris is carefully sorted by workers wearing more protective clothing, much more consistently."*

Moreover, the author noted that workers at the landfill were officially informed that not wearing respirators would result in disciplinary action. OIG investigators from our New York office who participated in the recovery operations confirmed the report's conclusions about the difference in respiratory use between the WTC and landfill sites.

EPA Actions to Encourage Respirator Use

As demonstrated by a fact sheet prepared on September 11, 2001, EPA's emergency response officials immediately recognized the need for and recommended the use of air purifying respirators[23] at Ground Zero (a copy of this document is available on our OIG web site). EPA officials told us this fact sheet was provided to a FEMA official, but was not issued. We contacted a FEMA representative who told us that the flyer was not issued because it was decided that New York City should handle worker protection issues.

EPA also provided respirators for workers at the site. According to a May 1, 2002, letter from EPA's Region 2 Administrator to Senator Joseph Lieberman (D-CT) and Senator George Voinovich (R-OH), EPA had distributed 22,100 air purifying respirators and 30,500 sets of P100 particulate cartridges to New York City by September 22, 2001. Additionally, 600 respirators (MSA and 3m brand) and 2,000 cartridges (GME-P100) were provided to the New York State Department of Environmental Conservation and the New York State Department of Health. The bulk of EPA-procured equipment was transported from EPA's Edison facility by the New York National Guard to the New York City Office of Emergency Management for distribution to response workers.

As the rescue phase progressed, EPA emergency response officials told us they were concerned about the lack of respirator use at Ground Zero and outlined these concerns in a letter to NYCDOH dated October 5, 2001. This letter outlined the threat of potential exposure of workers to hazardous substances. The letter noted that EPA "... has recommended, and continues to recommend, that workers utilize personal protective equipment and the personal wash stations to prevent the spread of asbestos and other hazardous substances from the WTC to their homes, cars, public transportation, food service locations, etc." The letter stated that EPA had observed very inconsistent compliance with its recommendations, but did not have the authority to enforce compliance with non-EPA/United States Coast Guard employees. The letter concluded by recommending that the Incident Commander adopt and enforce a site-wide Health and Safety Plan. A copy of the letter is in Appendix P.

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[23] NIOSH recommended the use of half-face negative pressure respirators with P-100, organic vapor/acid gas (P-100/OV/AG) cartridges. Respirators must be properly fitted to provide adequate protection against airborne hazards.

Health Impacts of Lack of Respirator Use at Ground Zero

Two studies documented acute health effects suffered by emergency and construction workers at Ground Zero. A study[24] of firefighters who responded to the collapse concluded that intense, short-term exposure to material generated during the collapse of the World Trade Center was associated with bronchial responsiveness and the development of cough. The study found that the following percentages of firefighters developed "World Trade Center cough" that was severe enough to require at least 4 weeks of medical leave:

- 8 percent of the firefighters with a high level of exposure to contaminants at the site (i.e., present at the WTC collapse).
- 3 percent of the firefighters with a moderate level of exposure to contaminants at the site (i.e., present within first 2 days after the collapse).
- 1 percent of the firefighters with a low level of exposure to contaminants at the site (i.e., present within 3-7 days of the collapse).

Initial findings of medical examinations of workers directly involved in rescue and recovery efforts also found evidence of acute health impacts. Preliminary results of these examinations released in January 2003 and reported in the Washington Post concluded that 78 percent of those sampled had suffered lung ailments and 88 percent had experienced ear, nose, and throat problems in the months immediately following the attack. Further, a September 2002 report[25] by the Mount Sinai School of Medicine concluded that protection of workers at Ground Zero was "seriously inadequate." The report noted that the response of workers in the first few hours and days after the attack without regard to their personal safety was laudable and understandable. However, according to the Mount Sinai report, a lack of enforcement of worker protection measures in the weeks and months that followed was not excusable.

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[24] "Cough and Bronchial Responsiveness in Firefighters at the World Trade Center Site," David J. Prezant, M.D., et al, New England Journal of Medicine, Vol. 347, No. 11, September 12, 2002.

[25] "Lesson Learned for Public Health from September 11, 2001: *A One-Yar Perspective,"* Philip J. Landrigan, M.D., M.Sc., et al, September 2002.

Appendix M

Cleaning Procedures for Residents Opting to Have Their Residences Cleaned

Cleaning Procedures	Scope of Work	
	A	B
Common Areas	Cleaned if requested by the building owner. Procedures included vacuuming, wet wiping, and cleaning of carpets using a water extraction cleaner. Surface not cleaned by wet methods to be vacuumed two times.	Cleaned if requested by the building owner. Procedures included vacuuming, wet wiping, and cleaning of carpets using a water extraction cleaner. Additionally, all surfaces except for carpet and fabric covered furniture to be cleaned a second time.
HVAC Systems	HVAC systems determined to be impacted by WTC dust to be cleaned in accordance with a site-specific scope of work prepared by the monitoring contractor and approved by EPA. In the event that the entire HVAC system needs cleaning, a separate site-specific contract will be awarded by NYCDEP for the work. Work to be completed before initiation of cleaning of common spaces and residences in the building.	HVAC systems determined to be impacted by WTC dust to be cleaned in accordance with a site-specific scope of work prepared by the monitoring contractor and approved by EPA. Work to be completed before initiation of cleaning of common spaces and residences in the building.
Residences	Cleaned using HEPA vacuums, water extraction cleaners, and wet wiping. First foot of all exhaust duct work to be vacuumed.	Cleaned using HEPA vacuums, water extraction cleaner, and wet wiping. First foot of all exhaust duct work to be vacuumed. Additionally, all surfaces except for carpet and fabric covered furniture to be cleaned a second time.
Worker Protection	No specific measures described in the scope of work.	Residents not allowed in work areas, except residents may be present in their residence during cleaning when the work area can be isolated by barriers. Asbestos abatement procedures to be employed include, among others: use of personal protective equipment including respirators, a properly enclosed decontamination system, posting of warning signs, isolation barriers to seal off openings, and all waste generated during the cleaning being treated as asbestos-containing waste and disposed in accordance with applicable rules and regulations.

Appendix N

Details from EPA and Non-EPA Lessons Learned Reports

Recommendations of EPA Lessons Learned Reports

Headquarter's Lessons Learned Report

1. **Clarify Involvement of Senior EPA Leaders, and Confirm Authority of Emergency Response Personnel in Decision-Making and Communications During National Emergencies**

    1. Issue a national policy for EPA's implementation of a NIIMS-type ICS structure to meet its needs in responding to national emergencies.
    2. Ensure all EPA emergency personnel are trained and equipped to effectively implement EPA's ICS (including relevant portions of the NCP).
    3. Develop a process to involve senior EPA management in policy and strategic decision-making as appropriate for national emergencies.
    4. Revise Regional and area plans to incorporate national ICS policy.
    5. Develop a national terrorism training and exercise strategy/program using ICS to strengthen on-scene and management response coordination.

2. **Revisit, and Revise as Needed, Existing Internal and External Emergency Response Coordination Plans and Structures; Conduct Interagency Training and Exercises to Solidify Government-wide Understanding of Roles, Responsibilities, and Capabilities**

    1. Examine existing coordination structures within the Agency (e.g., NICT, Regional Incident Coordination Team (RICT)) to ensure adequate participation and efficient operational capability.
    2. Consider how to better use the NRT and the Catastrophic Disaster Response Group (CDRG) during national emergencies, and ways to quickly access the senior leadership of member organizations.
    3. Better educate EPA's responders in the existing EPA, OSHA, and State roles for the protection of the health and safety of all responders.
    4. Collaborate with OSHA and U.S. Department of Health and Human Services (HHS) agencies to clarify the Agency's role in assuring protection of the health and safety of all responders.
    5. Develop a structure for intra-agency coordination that encompasses all levels of management during national emergencies.
    6. Communicate new and revised structure and processes to emergency response staff and all involved levels of agency leadership.
    7. Coordinate with the OHS to develop a coherent coordination strategy for all responders during national emergencies; specifically, address the need to improve emergency coordination with the FBI.

3. **Develop an Emergency Response Infrastructure to Address both Data Analysis Issues and Information Management**

   1. Clearly define a process for approving and coordinating the release of information to other agencies and the public; ensure program staff on AA and Office level (e.g., OSWER and OERR) review information before it is released.
   2. Establish a forum for Regional emergency response, Regional labs, and OERR's analytical staff to specify and address analytical needs during emergencies.
   3. Ensure that prompt communication of analytical results to emergency response staff is addressed in response procedure revisions.
   4. Continue the Environmental Assessment Workgroup (EAWG) to address interagency sampling and analysis needs.
   5. Ensure laboratory analysis and data management of health, safety, and risk information are incorporated in emergency response plans.
   6. Work with OHS and other emergency response organizations to have EPA designated the lead agency for environmental data during national emergencies when both EPA and other agencies are conducting environmental analyses.
   7. Ensure that sufficient laboratory capabilities for national emergencies are readily available to all Regions.

4. **Develop EPA Policies and Procedures for Public Information Dissemination During National Emergencies, Within Established Emergency Response Plans and Structures**

   1. Continue developing a network of tools to facilitate public communication.
   2. Clarify roles, authorities, protocols, and contingency plans for Headquarters, Regional, Community Outreach, and Regional Press Office staff during national emergencies.
   3. Coordinate with OHS, CEQ, and other response partners to identify and address obstacles to timely and consistent presentation of environmental information during national emergencies.

5. **Increase the Agency's Emergency Response Resources, and Address the Unique Demands of OSC Positions in Human Resource Processes**

   1. Assess additional personnel needs for responding to national emergencies while maintaining emergency response preparedness.
   2. Establish Western Environmental Response Team (WERT)
   3. Pursue personnel classification and associated human resource practice changes to acknowledge the unique expectations and demands placed on OSCs during national emergencies.
   4. Support WERT readiness needs.
   5. Identify geographic distribution and readiness of supplies, equipment, and contractor capacity.
   6. Identify and meet emergency response staff personal safety needs, including providing both equipment and training/exercises.
   7. Assess additional analytical program resource needs for national emergencies.
   8. Establish a process to support responders logistically during national emergencies.
   9. Clearly articulate additional equipment response resource needs in the budget requests for FY 2003 and beyond.

6. **Invest in the Safety and Security of EPA Staff and Facilities, Including Telecommunications Needs**

   1. Review all COOPs to ensure all facilities are included, and bring COOP planning, training, and exercises in line with current threats.
   2. Improve and update employee evacuation planning.
   3. Review stress management assistance provided to Headquarters, Regions 2 and 3, and ERT. Assess stress levels of EPA emergency response employees, and determine whether additional action should be taken.
   4. Address, using currently available resources, all possible facility security needs, at both government-owned and private buildings.

5. Provide telecommunications redundancy nationwide that will provide for ongoing communication (voice and data) to EPA's workforce during a national emergency, as well as emergency notification systems.
6. Provide central communication principles using the web to ensure EPA employees are given the latest, most recent information.
7. Determine whether a Headquarters-sponsored stress management system should be more formally deployed in future national emergencies.
8. Broaden health monitoring for OSCs and other Agency response personnel to make it consistent nationwide.
9. Systematically follow through on facility security improvements requiring additional resources.

7. Identify and Address National Environmental Vulnerabilities

1. Complete EPA efforts to identify national environmental vulnerabilities posed by public and private utilities/facilities.
2. Coordinate with State, local, and other environmental regulators to plan for reducing environmental vulnerabilities.
3. Increase technical support by EPA and States to identify and assist in corrective actions to reduce vulnerabilities
4. Increase inspections to identify and oversee corrective actions to reduce environmental vulnerabilities caused by permit or regulation violations.
5. Examine EPA's authorities and regulations to identify any changes needed to effectively address vulnerabilities.

Region 2 Lessons Learned Recommendations

Overarching Recommendations

1. EPA Region 2 should undertake an effort to connect with senior officials of the Federal Emergency Management Agency, U.S. Army Corps of Engineers, and the Department of Health and Human Services on a routine basis to ensure EPA mission is clearly understood.

2. Region 2 needs to develop a comprehensive approach to emergency management and response, perhaps based upon the NFPA 1600 Standard, that includes all divisions in the region. This would:

   - Spread responsibility across the organization so that one division is not the sole source of information, staffing responsibilities, decision making, and documentation.
   - Provide for a consistent, expandable and contractible structure and process for the Region that is understood across organizational boundaries.
   - Routinize emergency/disaster response.

3. Region 2 should identify a team of dedicated people who will respond in the event of a new crisis. This would limit the stress on personnel who might otherwise be pulled from the current response to another, as well as allowing designated staff to prepare, to the extent possible, for the possibility of mobilization. This could be accomplished by assigning an individual to a particular task until they are directly and explicitly relieved. In addition, a feedback mechanism could be established to encourage and solicit concerns during and after a response.

4. The Region's Continuity of Operations Plan (COOP) needs to be reviewed and updated.

5. Senior leadership of Region 2 and Regional staff not currently assigned to emergency response who might respond in a disaster, should participate in introductory training and education on basic disaster management and response. This would include intergovernmental relationships that are inherently different than typical Superfund emergency response and removal.

6. Public information, risk communications, and crisis communications must be organized and strategized in advance of a disaster. Region 2 should develop a comprehensive approach - which includes Headquarters and regional Federal and State partners - on how to handle crisis communications. Then, in a disaster event, relationships are established, lines of coordination and communication are established, and communications/public affairs officers can focus on tactics rather than trying to develop a framework in the midst of the emergency. Mechanisms should be in place for resolving differences about the interpretation of risk and the appropriate response.

7. Nationally, EPA should examine policies and procedures for ESF #10 activation and coordination with USCG to ensure roles and responsibilities are executed according to the FRP.

Additional Recommendations

1. As soon as possible, educate Region 2 personnel and management on Agency and Region responsibilities and authorities during a disaster or crisis with emphasis on the relationship between the Stafford Act, FRP, National Contingency Plan (NCP) and ICS. Include suggested peer relationships with counterpart agencies at all levels, but especially at the senior management level (e.g., regional administrators).

2. National Issue - Adopt an incident management system that is consistent across all regions, has common terms and plugs into other crisis/consequence management structures. National and regional management systems should be compatible

   Regional Issues - Create Regional crisis management structure, staffed by people with authority, commitment and qualifications, to improve roles and communication between management and OSCs. **Develop an incident management** system for Region 2 that:
   - Expands or contracts as needed to address both crises and routine events.
   - Prescribes specific people to fill roles during an event. The Coast Guard "watch quarter station bill" or synchronization matrix may serve as a model.
   - Includes mechanism for provision of resources, "protect" incident managers.
   - Has agreements, plans and procedures for internal communications during a crisis.
   - Includes a crisis management team that supports the incident management system in terms of the Region 2 operating principles.

   Regional Interagency Coordination Team (RICT)
   - Training for backup staff
   - Mobilize Regional resources
   - Signed agreement by Division Directors
   - Ensures leadership/managerial backup

   Regional Incident Command System (ICS)
   - Dedicated and known backup
   - Clear commander
   - Known ability to expand and contract

   Emergency Operations Center (EOC)
   - Physically separate from branch

3. Develop a Regional Strategy and Standard Operating Procedures (SOP) for communicating risk to the public during a crisis.
   - Include processes and resources needed to obtain and manage information.
   - Include links to incident management structure, data management mission.
   - Include defined up-front risk parameters and benchmarks.

4. Develop a logistics and support capability for incident management system that:
   - May include standing/expedient contracts, especially for sampling and analytical services, as well as data management.
   - Obtains facilities and other support resources.
   - Includes resource management and contracts in the development.
   - Include processes for intra and inter-agency coordination.

5. Develop agreements and processes for the emerging data generation and management mission including:
   - Developing methods and demonstrating a commitment to plan (identify data monitoring objectives, sampling and analytic methods, and benchmarks).
   - Ensure the process/system is flexible and could include external contributors and users. Define users and contributors.

6. Need a corporate philosophy on how to manage expectations in a crisis (internally outside of Region 2 emergency responders and externally). Consider:
   - Expectations of elected officials and the public
   - Part of incident management system specific to health and well-being

7. Develop a crisis management plan. SOPS, COOP, should address all issue categories
   - Mechanism for elevating to Incident of National Significance
   - Separate policy and communications priorities from operational priorities
   - Establish protocol for continuing response if local/State counterparts are unavailable for any reason
   - Inventory of regional resources
   - Expedited contract authorities

8. Clearly identify scope and boundaries of work within authorities and expertise. (e.g. logistical tasks) (e.g. accept only Mission Assignment with authority?)

   - Educate Region 2, EPA Headquarters, and other Federal and State agencies about scope, boundaries and authorities with emphasis on the relationship between the Stafford Act, FRP, NCP and ICS.
   - Manage expectations
   - Establish and maintain relationships and contacts

Major Conclusions of Non-EPA Lessons Learned Reports

Lessons Learned for Public Health from September 11, 2001: *A One Year Perspective;* Philip J. Landrigan, M.D., M.Sc., Jordan Slutsky, Angali Garg, M.S., Mona Lisa Mouallem, Lauri Boni; Center for Children's Health and the Environment of the Mount Sinai School of Medicine; September 2002:

- Inadequate preparation for disaster as public health authorities had not established partnerships with agencies outside the health field
- Unclear lines of authority which resulted in poor risk communications, a disorganized approach to worker health and safety, and failure to agree on who should clean up residences.
- Neither workers or the public were provided accurate information on health risks in the first weeks after the attacks.
- Protection of workers was seriously inadequate
- Lack of exposure standards for chemicals in settled dust or on surfaces inside buildings

Lessons Learned on Environmental, Occupational, and Residential Exposures From the Attack on the World Trade Center; Paul J. Lioy, Ph.D. and Michael Gochfeld, M.D., Ph.D; American Journal of Industrial Medicine, December 2002:

- Improved data collection for emergencies is needed. This should include development of :
  - improved portable and flexible emergency response monitors,
  - strategies for the rapid acquisition of settled particulate material samples in catastrophic events that yield resuspendable dust/smoke, and
  - a rapid method for determination of site-specific and event-specific analytes that could cause acute or chronic effects.
- Need to develop emergency response standards for :
  - community evacuation, worker re-entry, and residential/commercial re-entry, in various community or occupational zones at increasing distances from a disaster site, and
  - Short-term exposure in establishing evacuation and restricted entry zones, and determining an "all clear" based on potential acute health outcomes.
- Need to develop a formal post-disaster cleanup protocol and a lead agency to implement the program so that cleanup can proceed without delay. Also need to develop a set of residential dust/smoke clearance levels to permit safe re-entry after cleanup.
- Need to conduct research on the design of respirators to ensure that they will be used in emergency response. Many of the existing non-air pack respirators are heavy and not easily worn over the nose and mouth during complex operations.

Risk Communication in the Aftermath of the World Trade Center Disaster, George D. Thurston, S.cD. and Lung Chi Chen, PhD, American Journal of Industrial Medicine, December 2002:

- The public wants facts upon which they can make individual decisions, not just reassurances.
- The government needs to develop peer-reviewed pollution benchmarks of "acceptable" and "unacceptable" exposures applicable to such disaster situations and make them available to the public and media.
- Physicians, scientists, and other exposure/health effects experts need to be consulted regarding the appropriateness of government monitoring and health effects assessments on a real-time basis.

Perspective on the Tragedy at the World Trade Center, Joel Shufro, American Journal of Industrial Medicine, December 2002:

- A new regulatory framework regarding potentially toxic exposures is needed,
- Government agencies saw their role as reassuring the public or said little, rather than use their position as a bully pulpit to provide the public with information they could use to make informed decisions,
- The absence of strong enforcement and leadership on the part of EPA, OSHA, PESH, the New York City Department of Health and New York City Department of Environmental Protection resulted in unnecessary exposure of workers and community residents to toxic substances,
- A uniform sampling protocol and centralized collection of all testing results is needed, and
- Government agencies appear to have ignored their own precedents [e.g. government intervention in Gramercy Park and Libby, Montana].

Health Effects of World Trade Center Site Workers, Stephen Levin, MD, Robin Herbert, MD, Gwen Skloot, MD, Jamie Szeinuk, MD, Alvin Teirstein, MD, David Fischler, MD, Debra Milek, MD, George Piligian, MD, Elizabeth Wilk-Rivard, MD, and Jacqueline Moline, MD; American Journal of Industrial Medicine, December 2002:

- The importance of an advisory to health care providers ASAP to assist with their evaluation and clinical management of the physical and psychological problems WTC-related patients experienced.
- Immediate capture of registry (contact) information for volunteers and workers.
- Rapid distribution of appropriate respiratory protection and a peer-based structure for encouraging consistent use.
- Rapid mobilization of resources for pro-active medical evaluation/treatment–respiratory, musculoskeletal, and psychological–during the weeks following exposure at the disaster site.
- Testing of indoor settings, including analysis of settled dust and aggressive air monitoring, to establish a gradient of exposure with distance from Ground Zero to guide recommendations regarding clean-up and reoccupancy.
- Communication by public health agencies regarding exposure hazards in lay language, with focus not only on long-term cancer risks, but on short-term health consequences as well.
- Greater attention to human health experience, rather than exclusive focus on air monitoring for the usual suspects.

Respiratory Protection at the World Trade Center: Lessons From the Other Disaster, Bruce Lippy, CIH, CSP, January 15, 2002:

- The chosen respirators were correct.
- Compliance with the requirements was poor at Ground Zero.
- Workers received mixed messages about the importance of wearing respiratory protection.
- Achieving high compliance with respiratory requirements in not unrealistic in these situations.

Safety and Health of Heavy Equipment Operators at Ground Zero, Bruce Lippy, CIH, CSP, American Journal of Industrial Medicine, December 2002:

- Except for asbestos, the few excess pollutant readings at the site were almost always associated with specific tasks.
- In the eagerness to declare the New York Financial District safe for re-occupancy, Government communications blurred the distinctions between the OSHA and EPA asbestos standards.
- The lack of a clear command structure at the site thwarted efforts to enforce the use of personal support equipment and other risk-reduction measures.
- Need to consider the use of OSHA's Hazardous Waste Operations and Emergency Response Standard in responding to terrorist incidents.

Firefighter Safety and Health Issues at the World Trade Center Site, Ronald Spadafora, Deputy Assistant Chief, Fire Department of New York, American Journal of Industrial Medicine, December 2002:

- Safety controls must be instituted by the uniformed services for the protection of the rescuers no matter how great the life hazard,
- The Site Safety Officer role in the FDNY's Incident Command Structure is a crucial one. This position must be filled immediately at the scene of a terrorist attack or similar event,
- Schedule an adequate number of Safety Chiefs on duty at any given time,
- Firefighters must be informed of the dangers in their work environment prior to the start of the detail, when possible,
- A universal-fit respirator cartridge should be available to rescue workers,
- Respirators should have built-in voice emitters to enhance communication, and
- Lighter personal protective equipment (hard hat, military fatigues/boots, safety glasses/goggles) for rescue and recovery workers must be made readily available.

Appendix O

Details on Health-Based Benchmarks Needed

Acute Exposure Guideline Levels. EPA is responsible for a program involving entities inside and outside the government to develop Acute Exposure Guideline Levels (AEGLs). These guidelines are developed by the National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances. The AEGLs address exposures to pollutants that last for 10 minutes, 30 minutes, 1 hour, 4 hours, and 8 hours, and are established to address three potential types of health impacts from these acute exposures: non-disabling, disabling, and death. This program has finalized a limited number of AEGLs; however, none of the finalized guidelines addressed the primary pollutants of concerns for Lower Manhattan after September 11. EPA's Office of Research and Development and the Office of Prevention, Pesticides and Toxic Substances are currently working to establish needed AEGLs.

Sub-Chronic Guidelines. EPA also did not have sub-chronic guidelines for the contaminants found in Lower Manhattan on September 11. ATSDR defines sub-chronic as exposures lasting 2 weeks to 1 year. In general, EPA's benchmarks have focused on lifetime cancer risk over a 30-year exposure period. Because sub-chronic guidelines did not exist for the WTC pollutants of concern, these 30-year benchmarks were adjusted to fit the situation found at WTC. For example, to assess sub-chronic (1 year) exposure to dioxin in the ambient air, EPA took the dioxin 30-year exposure benchmark and adjusted it to reflect a 1-year exposure by multiplying the 30-year exposure benchmark by 30. These guidelines should be developed, to the extent possible, before a disaster strikes so that the process can be properly peer reviewed and any necessary revisions made before they are needed.

Indoor Air Benchmarks. EPA also did not have risk-based indoor air or bulk dust benchmarks for the pollutants found in dust deposited indoors. A work group formed after September 11, consisting of officials from Federal, New York State, and New York City agencies, developed indoor air benchmarks for COPCs resulting from the WTC towers collapse. These benchmarks, identified in a document entitled "World Trade Center Indoor Air Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks," were initially published in draft in September 2002. The document was peer reviewed and a revised interim final version was published in April 2003. The COPC report could be used as a starting point in developing health benchmarks for additional pollutants that may be encountered in future disasters. EPA's Homeland Security Strategy includes plans to identify chemical and biological substances for which indoor air reference levels (benchmarks) may be needed, and establish advisory indoor air reference levels for the substances identified.

Health-Based Benchmarks for Asbestos. As addressed in Chapter 2, health-based asbestos standards for indoor and outdoor air do not exist. The AHERA standard, used as a primary WTC benchmark to communicate asbestos risk for ambient air, is the filter background contamination level estimated when the TEM protocol was developed. Filters with smaller asbestos contamination levels are now available, so that smaller concentrations of asbestos can now be

reliably measured. The TEM analysis of asbestos data in response to the WTC disaster suggests that the minimum detection limit may now be approximately 15 to 20 s/mm2.

A significant issue with regard to indoor spaces was the potential exposure from asbestos in dust. In assessing the need for asbestos abatements in indoor spaces in New York City, the City relied on the NESHAP definition of asbestos-containing material, which defines asbestos-containing material as 1 percent or more asbestos by volume. This is not a health standard, and dust with less than 1 percent asbestos could pose a health risk. Risk assessors employ a mathematical formula to estimate the amount of asbestos in dust that can be expected to become airborne in order to evaluate the potential risk to human health from asbestos in dust. This factor is known as the "K Factor." However, this factor is not deemed reliable at this time. The panel that completed the peer review for EPA's indoor standards did not endorse the asbestos-settled dust benchmark because the "the K-factor methodology is, at this time, inadequate for predicting inhalation exposure from asbestos surface loading measurement."

We believe EPA should review the AHERA standard and determine whether the standard needs to be revised in light of the fact that better filters are available today, and continue the work of the indoor COPC group to develop health-related screening levels for asbestos in dust

Benchmarks for Exposure to Multiple Pollutants. The synergistic impacts of multiple pollutants on human health in the aftermath of an air quality emergency, such as occurred on September 11, are unknown. Synergistic effects have been documented between asbestos and cigarette smoke. For example, the lung cancer risk from exposure to asbestos is increased if the individual exposed to asbestos is a cigarette smoker. Researchers interviewed indicated that there could be other synergistic effects caused by the wide array of pollutants generated by the collapse of the WTC, but research is not available to make this determination.

Appendix P

EPA Letter Concerning Worker Protection

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
EDISON, NEW JERSEY 08837

OCT 05 2001

Mr. Kelly R. McKinney, P.E.
Associate Commissioner
Bureau of Regulatory and Environmental Health Services
The City of New York
DEPARTMENT OF HEALTH
125 Worth Street, Room 616, CN-32
New York, NY 10013

Dear Mr. McKinney:

Health and safety concerns for workers at the World Trade Center Disaster Site (WTC) has been a concern from the beginning of the response. In addition to standard construction/demolition site safety concerns, this Site also poses threats to workers related to potential exposure to hazardous substances. Sources of hazardous substances include (1) building materials from the destroyed buildings (primarily asbestos), (2) hazardous materials that were stored in the buildings (refrigerants, hazardous wastes, ethylene glycol, compressed gas cylinders, etc.), and (3) products of combustion being emitted from the fires that continue to burn within the debris piles. EPA, along with a number of other federal, state and your agency, has been gathering information about these threats to worker health. Air sampling by EPA and others indicates that asbestos and other contaminants are present in the air at the WTC. EPA has recommended, and continues to recommend, that workers at the Site wear respiratory protection.

In addition, EPA has recommended, and continues to recommend, that workers utilize personal protective equipment and the personnel wash stations to prevent the spread of asbestos and other hazardous substances from the WTC to their homes, cars, public transportation, food service locations, etc. We have observed very inconsistent compliance with our recommendations, however, we do not have authority to enforce the worker health and safety policies for non-EPA/USCG employees. Therefore, EPA believes the Incident Commander should adopt and enforce a site-wide Health and Safety Plan. If there is anything I can do to assist you concerning this matter, please feel free to call me at (732) 321-6656.

Sincerely yours,

Bruce Sprague, Chief
Response and Prevention Branch

cc: FCO, FEMA

Appendix Q

EPA Response to the Draft Report

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 6 2003

OFFICE OF THE ADMINISTRATOR

MEMORANDUM

SUBJECT: Transmittal Memorandum for EPA's Response to Inspector General's (Draft) Evaluation Report: "EPA's Response to the World Trade Center Collapse -- Challenges, Success, and Improvements." (Assignment Number: 2002-0000702)

FROM: Marianne Lamont Horinko
Acting Administrator

TO: Nikki Tinsley
Inspector General

This memorandum transmits the Agency's consolidated response to the subject draft report ("Draft Report"). With this memo, I formally request that EPA's comments be included as part of the final version of the official report.

The unprecedented terrorist attack on the World Trade Center (WTC) and the enormity of its aftermath compelled responding government agencies to write a new book on disaster response. While the Draft Report acknowledges the situation that the nation -- and New York City in particular -- confronted following the disaster, the nature of its criticisms, conclusions and recommendations do not reflect those circumstances. In fact, this document is infected with the attitude that somehow "business as usual" conduct should have prevailed.

See Appendix R Note 1

I am exceedingly proud of the response that the men and women of EPA made in the aftermath of the World Trade Center collapse. Along with other first responders, our people were there within hours of the attack and hundreds of our specialists devoted long hours under difficult conditions to provide assistance and information. EPA responded with its heart as well as its science to protect the health of the public and the workers involved in rescue and recovery. In all, we took over 25,000 samples and conducted a quarter of a million measurements of nearly 700 potential contaminants.

See Appendix R Note 2

EPA's response was extraordinary, especially when examined in the chaotic context in which we and other governing bodies found ourselves. EPA began monitoring immediately for contaminants – without benchmarks or standards that applied to the disaster situation such as ambient asbestos – and we did it without electricity, in the midst of firefighting and rescue

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operations, in the midst of high security concerns, and surrounded by construction equipment moving debris. The New York City Emergency Command Center was destroyed, agencies' New York offices were closed, communications services in Lower Manhattan were inoperative, and airlines were shut down.

Given the magnitude of the disaster, the massiveness of the response, the very real security issues at stake, and the many entities involved, it was essential that the Executive Branch coordinate the federal response. At a time of national emergency, the people expect the government to speak with one voice.

See Appendix R Note 3

Indeed, one of the key lessons learned is the need for centralized communications during times of national crisis. The creation of the Department of Homeland Security institutionalized the coordination of communications in one Department. The Draft Report, however, goes to great length to erroneously criticize federal efforts, specifically the Council on Environmental Quality (CEQ), to coordinate health and safety communications.

EPA, along with other agencies and departments responsible for environment, health and safety, acted to provide the best health and safety guidance to those who lived and worked in Lower Manhattan, based on available data and using our best professional judgement under extraordinary circumstances. We continuously monitored the environmental effects of the explosion, fire and ultimate collapse of the WTC buildings. We made this data available as widely and as transparently as possible. Our public statements at every stage conveyed our best professional advice based on the most current data available.

See Appendix R Note 4

We continue to evaluate our response to identify improvements that can be made in how we manage and respond to future situations of this magnitude. A few weeks after the attacks, EPA commissioned a formal report, conducted by an objective outside contractor, to assess the "lessons learned" from these events. Many of the "lessons learned" that we have been implementing since 2002, anticipated most of those the Draft Report now highlights. We are making every effort to strengthen our planning and response systems to be as ready as possible for any unforeseen catastrophic event, and we are committed to continuing to provide the public with the best possible environmental information and assistance in times of national crises.

See Appendix R Note 5

The Report lacks sufficient acknowledgment of our efforts to implement our "lessons learned," and is flawed in its lack of recognition in other areas such as:

- EPA's message was communicated to different audiences.
  - For the "general public," EPA stated from the beginning that people living and working in lower Manhattan were not exposed to levels of contaminants in the outdoor air that EPA believed would pose a significant long-term health threat.
  - EPA advised people experiencing acute health problems to see their physician, and stressed that workers at the site faced a higher risk and must wear protective respiratory gear (supplied by EPA and other agencies).

See Appendix R Note 6

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- EPA also emphasized that people returning to dusty homes and workplaces should have these spaces professionally cleaned by asbestos contractors

- The Report erroneously focuses on five early Agency press releases, neglecting the extensiveness of EPA's communications.

  See Appendix R Note 7

  - EPA undertook a massive outreach program, which included hundreds of media interviews (print, radio, TV), participation in public forums, distributions of tens of thousands of fact sheets and handouts, and extensive usage of the Internet (including information in three languages).

- An immediate and continuing problem in measuring and communicating environmental risk associated with the WTC dust/debris cloud was the fact that for many of the contaminants of concern, there were no health based standards.

  See Appendix R Note 8

  - The need for such standards could not have ever been reasonably anticipated.
  - Even for asbestos, the contaminant of greatest concern, there was no applicable standard covering the situation in Lower Manhattan.
  - In exercising its professional judgement, EPA consulted with experts in environmental health and science at federal, state and local levels.

Could things have been done better? Certainly. Were mistakes made? Without a doubt. But like other agencies of government in the wake of this event, EPA has reviewed its response, asked tough questions about its conduct, and begun the process the process of change and improvement.

To be a valid basis for planning, the Draft Report needed to capture the things that went right - and the vast majority of our efforts did - as well as what needs to be improved. This Report simply seems out of touch with the reality of what took place at the World Trade Center, and thus it trivializes both the horrendous event that occurred and the extraordinary efforts of EPA and other responders.

See Appendix R Note 9

By ignoring that good work, the Report leaves a bruised population wondering once again if their government properly served them at their time of greatest need. The fact is, the dedicated people of the EPA – and government at all levels – rose to the challenge of the World Trade Center disaster... and performed with courage and distinction.

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EPA's Response to the World Trade Center Collapse:
Challenges, Successes, and Areas for Improvement
Draft Report
Office of the Inspector General

GENERAL OBSERVATIONS

Response to the World Trade Center collapse was unprecedented in the challenges it presented to federal, state and local emergency responders. EPA undertook immediate efforts to ascertain the presence of contaminants from the collapse and fires, and to assist FEMA and New York City in all phases of the subsequent recovery and cleanup. EPA's activities included sampling and analysis of ambient air and water; wash down and decontamination of vehicles; removal and disposal of hazardous materials; vacuuming of dust and debris from streets; supplying personal protective equipment; assisting Financial District in retrieval of electronic files/papers; and provision of data and health information to the public. To illustrate the magnitude of the activities conducted at the site, over 25,000 samples were taken representing 227,000 measurements of 692 potential contaminants. The initial response continued until May 2002 and at times, involved as many as 290 EPA and US Coast Guard personnel, and 200 Agency contractors.

See Appendix R Note 10

While the report acknowledges the unprecedented nature of the response to the terrorist attack upon the WTC, many of its findings and recommendations imply that the response could have been conducted in a manner consistent with a standard regulatory approach, e.g. implementation of NESHAPs asbestos regulations. Further, the report does not recognize that the WTC response and clean up efforts were conducted in the absence of adequate background concentrations for the contaminants of potential concern, e.g., typical levels of asbestos or dioxin in an urban apartment. Having such information available would have greatly simplified the effort to delineate areas that were impacted and determine when indoor residential environments were cleaned to pre-event condition. Additionally, the report does not acknowledge the Agency's massive campaign to provide quality information to the public – through hundreds of media interviews, tens of thousands of fact sheets and handouts and innovative use of the internet, including information in three languages. Lastly, and most importantly the report fails to recognize the nature of decision making in a catastrophic emergency. We must accept that a future incident may involve a scenario or contaminant that we simply cannot foresee. This means that while work can and should be done to develop protocols, standards and benchmarks – when an event of the magnitude of the World Trade Center attack occurs, many decisions will based on the best professional judgement of emergency responders from all branches and levels of government, through the leadership ranks of the Department of Homeland Security.

See Appenidix R Note 11

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CHAPTER 2

EPA STATEMENTS ABOUT AIR QUALITY NOT ADEQUATELY QUALIFIED

Report Conclusions/Recommendations:

- **Conclusion:** "EPA's early statements about air quality were incomplete in that they lacked necessary qualifications and not supported by data available at the time. CEQ influenced the final message in EPA's air quality statements. Competing considerations, such s national security concerns and the desire to reopen Wall Street, also played a role in EPA's air quality statements. The "safety" of the air in Lower Manhattan after the collapse of the WTC towers is still being debated and studied. However, given the current lack of health-based benchmarks, the lack of research data on synergistic effects, and the lack of reliable information on the extent of the public's exposure to these pollutants, the answer to whether the outdoor air around WTC was "safe" to breathe may not be settled for years to come."

- **Recommendation:** That the EPA Administrator develop procedures for emergency risk communication to ensure that EPA's public pronouncements regarding health risks and environmental quality are adequately supported with available data and analysis.

EPA Response:

The EPA "statement" referred to in the report was made days after the attack, based on air sampling at seven sites surrounding the WTC site. The Agency knew, from testing conducted at the time of the 1993 WTC bombing, that asbestos was the primary contaminant of concern outside the WTC site. Following 9/11, the news media was filled with stories about possible asbestos contamination of the air. Tens of thousands of residents and hundreds of thousands of workers were displaced and scared. EPA's initial statement was made in direct response to the public's concern about asbestos contamination. The EPA press release from which the statement was quoted detailed the monitoring that led to the statement and made it clear that further monitoring for asbestos and other contaminants would take place. EPA subsequently made this and extensive additional monitoring data available on an interactive Web site that allowed people to track data at mapped monitoring stations.

See Appendix R Note 12

EPA never withheld data from the public and sampling results were reported out as soon as they were reviewed. Results were communicated in discussions with media representatives, federal, state and local officials, elected officials and interested citizens. The Agency did coordinate press releases with the Council for Environmental Quality (CEQ). This is neither unusual nor unexpected during a catastrophic disaster on the scale

See Appendix R Note 13

of the WTC attacks. EPA acknowledges that there are lessons to be learned about how to communicate more effectively, especially in the difficult area of risk communication, and and has made this a priority as it implements "lessons learned" from both 9/11 and the Columbia accident. EPA's *Homeland Security Strategic Plan* includes goals which commit EPA to use reliable information to ensure informed decision-making and to disseminate timely, quality environmental information to all levels of government, industry and public.

See Appendix R Note 13

CHAPTER 3

EPA's RESPONSE TO INDOOR ENVIRONMENT CONSISTENT WITH STATUTES AND REGULATIONS BUT MAY HAVE DELAYED NEEDED HEALTH PROTECTION

Report Conclusions/Recommendations:

- **Conclusion:** "For indoor environment concerns resulting form the collapse of the WTC towers, EPA had the authority to act under CERCLA but was not obligated to do so. Guidelines exist for determining whether an emergency response is warranted; however, these guidelines are not definitive. Under the NCP, it was within EPA's discretion to defer to New York City the responsibility for responding to indoor contamination concerns. EPA's action was consistent with the FRP, which is intended to supplement local government response.

  Although EPA acted within its discretion, a 1998 Presidential directive and the more recent National Strategy for Homeland Security task EPA with taking the leadership role in cleaning up buildings and other sites contaminated by chemical or biological agents as a result of an act of terrorism. EPA needs to work with the Department of Homeland Security and other agencies to determine the nature and form with which the Federal government should assume a more direct role in addressing indoor environment concerns, under what circumstances this direct role should occur, and the oversight mechanisms to be employed when local agencies undertake such responses. In the WTC case, the delay in providing a government-organized and adequately monitored cleanup in Lower Manhattan may have contributed to unnecessary exposures to asbestos and other pollutants by unprotected workers and residents."

- **Recommendations:** That the EPA Administrator coordinate with the Department of Homeland Security, FEMA, and other appropriate Federal agencies, and those State and local governments having jurisdiction over potential terrorist targets to :

  Develop protocols for determining how indoor environmental concerns will be handled in large-scale disasters, to include addressing:

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The agency or agencies responsible for testing and/or overseeing testing of indoor spaces;

Sampling methods to be used in analyzing indoor contamination;

Benchmarks to be used in assessing whether the indoor contamination pose a threat;

Under what circumstances government-assisted cleanups are warranted;

How these cleanups will be funded; and

The agency or agencies responsible for communicating testing results and appropriate cleaning instructions.

Develop and publish oversight criteria and State and local agency reporting requirements for those agencies involved in cleaning up buildings and other disasters.

EPA Response:

EPA disagrees that unprotected residents and workers may have experienced unnecessary exposures to asbestos or other pollutants as a result of delay in providing a government-organized and adequately monitored cleanup in Lower Manhattan. From the beginning, FEMA, New York City and State, as well as EPA provided advice to residents on cleanup methods (wet wiping/mopping, HEPA vacuuming) that has proven effective. In addition, residents with more than minimal dust, were urged to use professional, asbestos abatement cleaners. FEMA provided financial assistance to residents to enable them to relocate while cleanup was being done, and New York City provided guidance and cleanup requirements to building owners. All this took place in the absence of a "Government-organized cleanup." Subsequent EPA studies show that the basic cleaning techniques that were recommended were effective in reducing dust and reducing dust to below health based benchmarks where these could be identified. In summary, EPA feels that the advice and assistance provided was sufficient to enable the affected population to take appropriate action to minimize further risk.

See Appendix R Note 14

With respect to the outside environment, EPA provided personal protective equipment, repeatedly stated that workers at Ground Zero should use this equipment and were at greater risk than the surrounding population. Additionally, the Agency consistently raised concerns over the use of protective equipment to local officials. Additionally, EPA repeatedly advised anyone with acute symptoms to consult with their physicians and acknowledged that sensitive populations, such as those with respiratory illnesses might react differently than the general population, and also should consult their physicians.

See Appendix R Note 15

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In summary, EPA's initial role in support of New York city and State officials in no way created additional health risk to workers or residents. In fact, EPA and other federal, state and city agencies responded to the best of their abilities to reduce potential risk as quickly and as reasonably as possible. EPA generally agrees with the recommendations concerning coordination with the Department of Homeland Security and other federal agencies, and that the topic of roles and responsibilities for all levels of government regarding potential contamination of indoor spaces should be further explored. The Agency further agrees that consideration should be given to possible identification of sampling methods, benchmarks, circumstances where government-assisted cleanups are appropriate, funding support and communications.

See Appendix R Note 14

CHAPTER 4

ASBESTOS EMISSION CONTROL WORK PRACTICES INCONSISTENT

Report Conclusion/Recommendation:

- **Conclusion:** "Although many steps were taken to reduce asbestos emissions from the WTC site, problems were encountered in fully implementing the applicable NESHAP requirements for emergency situations, such as ensuring that trucks transporting debris were adequately wetted down before leaving the WTC site. Further, the placement of WTC debris, unloading and transfer operation near schools and residences compounded the potential impact of not implementing normally required NESHAP requirements. Given the likelihood that many buildings across the country may contain asbestos, EPA and State and local agencies need to establish improved monitoring and oversight procedures for ensuring appropriate NESHAP work practices are followed in responding to situations that cause widespread damage."

- **Recommendation:** The EPA Administrator ensure that EPA Regional and Headquarters personnel are aware of the "Guidelines for Catastrophic Emergency Situations Involving Asbestos," including its application in the event of future terrorist attacks or other disasters. EPA develop specific monitoring, reporting and oversight procedures for ensuring that federal, State, and local responders follow the appropriate asbestos NESHAP work practices, including initiating enforcement actions when EPA observes violations of NESHAP work practices.

EPA Response:

In the immediate aftermath of WTC collapse and fires, "ensuring" compliant work practices was extremely difficult. This was not for lack of knowledge about what should be done, but rather as a matter of practically implementing these practices under extreme conditions of duress. Search and rescue operations were going on in the presence of

See Appendix R Note 16

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debris removal including removing molten steel beams from the site. Search, rescue and construction equipment surrounded the site. EPA worked with New York City and State agencies to set up truck routes, wet-down stations, on-site wetting of debris, wetting at the barges, and wash stations for workers on the pile at Ground Zero. Given the physical impediments and the intensity of the situation, it took time to implement best work practices fully. As the various federal, state and local agencies became organized in their response and set up communications with debris cleanup contractors, these problems were eliminated, to the maximum extent possible. With respect to the recommendations, EPA agrees that the regulations for NESHAPS should be reviewed to determine whether additional procedures are necessary to provide to federal, State and local responders. Additionally, the applicability of NESHAPS to disaster situations may need to clarified.

See Appendix R Note 16

CHAPTER 5

AIR QUALITY-RELATED COMMUNICATIONS NOT EFFECTIVE IN GETTING PUBLIC AND WORKERS TO TAKE RECOMMENDED PRECAUTIONS

Report Conclusion/Recommendation:

- **Conclusion:** "The public wanted better information about air quality than they received from government sources. A NYCDOH study, other lessons learned reports, and testimony provided at various hearings suggest that the public did not receive adequate air quality information and that individuals cleaned their residences without using proper procedures and personal protection. In addition, workers at Ground Zero may not have used respirators due, in part, to inadequate EPA and other government communication.

  EPA was one of many governmental and non-governmental agencies that communicated health risk to the public. The levels of non-adherence to the risk communications of these governmental agencies suggests that all the participating levels of government need to re-examine their policies, procedures, and practices for ensuring that the necessary precautions are consistently followed."

- **Recommendations:** That the EPA Administrator coordinate with FEMA and other applicable Federal agencies to clearly establish Federal agency responsibilities, roles and procedures during an emergency response that ensure that:

  Workers responding to emergencies are adequately protected by the development and strict enforcement of health and safety plans.

  Health hazard information is effectively communicated to emergency response crews.

Sufficiently detailed health risk information is effectively communicated to the public, including actions that the public should take to reduce their potential exposure to harmful pollutants.

EPA Response:

With respect to worker safety on or near the debris pile at Ground Zero, although OSHA had direct responsibility, EPA supported them in many ways. EPA immediately provided a large supply of respirators for the workers, followed by a long-term and concerted effort to educate workers about the need to wear the masks. Further, EPA's worker-safety message was stressed repeatedly in news releases, media interviews, public meetings and appearances, on the Agency's WTC Web site, in flyers and posters at the worker wash station that EPA provided.

See Appendix R Note 17

With respect to the public's reported need for better information, EPA and other federal, State and local agencies provided the most comprehensive and up to date information available. As mentioned earlier in response to Chapter 1, extensive air monitoring data was available on an interactive Web site and air sampling results were reported out as soon as they were reviewed in discussions with media representatives, federal, state and local officials, elected officials and interested citizens. While government agencies, including EPA, should examine risk communication tools and skills in emergency situations and make improvements, the public sometimes wants information that is simply not scientifically available, or is not available quickly. EPA feels that the efforts made in conjunction with New York City and State, FEMA and OSHA provided reasonable assurance that worker's and the general public's exposure to contaminants was minimized.

See Appendix R Note 18

As the report acknowledges, EPA has initiated actions to improve risk communications to the public, and with regard to worker safety, is participating in a FEMA-led Interagency effort to provide uniform occupational safety and health policy under the Federal Response Plan.

CHAPTER 6

FURTHER ACTIONS NEEDED TO ADDRESS CURRENT WTC RESPONSE

Report Conclusion/Recommendation:

- **Conclusion:** "Extensive ambient monitoring data collected after September 11 demonstrated that outdoor air quality levels around Lower Manhattan eventually returned to pre-September 11 levels. As such, EPA does not need to take additional actions to address outdoor ambient air quality concerns specifically related to the collapse of the

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WTC towers.

EPA, in cooperation with FEMA and New York City, has initiated a large-scale indoor cleanup. In our opinion, this cleanup should meet the minimum criteria for protecting human health that EPA has established for Superfund cleanups. Also, the indoor cleaning and testing program should employ aggressive testing in all residences and treat buildings as a system. Additionally, EPA should evaluate the potential health risks for pollutants of concern in work spaces and for geographic areas north of Canal Street, in Brooklyn, and any other areas where meteorological data show pollutants of concern may have been deposited."

- **Recommendation:** That the EPA Administrator ensure that EPA Region 2:

  Submit the revised "World Trade Center Indoor Air Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks: document to TERA for a second peer review."

  Implement a post-cleaning testing program to ensure that, in addition to asbestos, the indoor cleanup program has reduced residents' risk of exposure from all of the identified COPCs to acceptable limits.

  Due to concerns over possible re-contamination of residences cleaned under the Indoor Air Residential Assistance program, EPA should treat buildings as a system and implement a post-cleaning verification program to ensure that residences cleaned by the program have not been re-contaminated.

  Work with FEMA and OSHA to assess whether the ongoing residential testing and cleaning program should be expanded to address potential contamination in work spaces in Lower Manhattan, or whether other measures need to be taken to ensure that work spaces are not contaminated with WTC dust.

EPA Response:

EPA, in conjunction with New York City and FEMA, has initiated and nearly completed a large-scale indoor cleanup under the Federal Response Plan – not Superfund and the program has met the criteria for protecting human health. Under this program EPA did cleaning and testing in 675 building "footprints" as identified in the city's building inventory. From NYC records, there appear to be about 22,000 residential units below Canal Street. There are 2,323 building footprints which would also include approximately 1550 commercial buildings. If a cleanup program were expanded to include all of these buildings footprints and the commercial space therein, it would be a monumental undertaking which EPA studies and data indicate is not necessary.

See Appendix R Note 19

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First, the vast mass of dust and debris from the WTC collapse has been removed. This is a result of cleanup during the response actions, the Ground Zero cleanup, cleanup of building exteriors by the private sector and New York City. Second, in 95 % of the over 4,100 residences cleaned and tested or tested only, the asbestos in the air results were non-detect. Lastly, cleanup techniques of wet mopping, wet wiping and HEPA vacuuming were found to be successful in achieving health-based benchmarks for WTC contaminants of concern. EPA focused upon a cleanup program for residences, because this is where individuals spend the most time and where the greatest need for assistance in conducting cleanup and getting reassurance was evident.

See Appendix R Note 20

Regarding the need for "aggressive" air sampling, EPA notes that scientists and physicians expert in environmental health issues advised EPA at a meeting convened by the New York Academy of Medicine in June 2002, that aggressive sampling was not a representative condition for testing and potential exposure. In addition, EPA's Confirmation Cleaning Study did not find a measurable difference in the use of modified or aggressive air disturbance technique in sampling.

See Appendix R Note 21

Lastly, EPA did evaluate the potential for health risks, qualitatively, for areas North of Canal Street, in Brooklyn, and beyond. The determination was that lower Manhattan was the principal impact area where the mass of building materials from the collapse was deposited and where the most fire plume exposure occurred. In addition, EPA's judgement is that commercial establishments had alternative sources of assistance to fund cleanup activity. EPA and OSHA have coordinated throughout the indoor cleanup program, and OSHA has agreed to investigate any complaints by workers in commercial establishments of dust exposure.

See Appendix R Note 22

With respect to the recommendation that EPA submit the revised "World Trade Center Indoor Air Assessment" for a second peer review, the Agency disagrees. EPA does agree that, as part of its efforts to develop indoor health based benchmarks, a protocol for establishing these would be usefully peer reviewed. Such a general protocol could take into account what was done for the WTC Contaminants of Potential Concern (COPC) EPA does not see any benefit to further peer review of the WTC specific document.

See Appendix R Note 23

With respect to the recommendation that EPA implement a post-cleaning testing program to ensure that, in addition to asbestos, the indoor cleanup program has reduced residents' risk of exposure from all of the identified COPCs to acceptable limits, the Agency disagrees. EPA believes that the health based asbestos in air clearance testing is effective in reducing the potential for risk related to WTC contaminants. The results of the Confirmation Cleaning Study support this, and the study results provide effective guidance for additional cleanup where there are continued concerns.

See Appendix R Note 24

With respect to the recommendation that due to concerns over possible re-contamination of residences cleaned under the Indoor Air Residential Assistance program, EPA should

treat buildings as a system and implement a post-cleaning verification program to ensure that residences cleaned by the program have not been re-contaminated, EPA disagrees. EPA has done post-cleaning testing in common spaces, in residences. EPA does not believe further testing to assure there has not been recontamination is needed. The testing results to date do not show widespread exceedences; the vast amount of dust from the WTC and streets and buildings (exterior and interior) has been removed. Retesting would involve over 4,000 dwelling units with an average of 5 asbestos in air samples per unit, or at least 20,000 additional samples. Cleanup work in lower Manhattan has largely been completed.

See Appendix R Note 25

With respect to the recommendation that EPA work with FEMA and OSHA to assess whether the ongoing residential testing and cleaning program should be expanded to address potential contamination in work spaces in Lower Manhattan, or whether other measures need to be taken to ensure that work spaces are not contaminated with WTC dust, EPA disagrees. As previously mentioned, EPA focused upon a cleanup program for residences, because this is where individuals spend the most time and where the greatest need for assistance in conducting cleanup and getting reassurance was evident. Further as stated above, the Agency has no data to support the need for a massive testing and cleanup program in Lower Manhattan.

See Appendix R Note 26

CHAPTER 7

EPA SHOULD CONTINUE EFFORTS TO IMPROVE CONTINGENCY PLANNING

Report Conclusion/Recommendation:

- **Conclusion:** "Although many organizations were involved in addressing air quality concerns resulting from the WTC collapse, subsequent events have demonstrated that, ultimately, the public and others expect EPA to monitor and resolve environmental issues, even though EPA may not have the overall responsibility to resolve these issues or the necessary resources to address them. These issues range from collecting, interpreting and communicating environmental information to cleaning up any environmental contamination. EPA must be prepared to take a leadership role, within the evolving framework established by the Department of Homeland Security and existing statutes, in fulfilling its mission of 'protecting human health and the environment,' if another large-scale disaster occurs."

- **Recommendations (summary):**

  EPA should work with the Department of Homeland Security and other agencies to share information on likely targets and threats and collaboratively develop approaches to address these threats.

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- EPA should define and clarify internal EPA organizational roles and responsibilities in responding to large-scale disasters. This should include designating teams of Agency experts – at both the National and Regional level – that can be mobilized to quickly provide needed technical support during a response. These areas may include specialized sampling techniques, exposure modeling and assessment, and risk assessment.

- EPA should develop and improve health-related benchmarks that can be used to assess health risk in emergencies (specific list recommended)

- EPA should develop an emergency quality assurance sampling plan to be used as a guidance for monitoring environmental conditions after a large-scale disaster. It should address monitoring objectives, sampling and analytic methods, and siting of monitors.

EPA Response:

With respect to the conclusion, EPA emphasizes that, at the WTC response, it certainly did exercise its opinions and judgements on matters impacting human health and the environment and will continue to do so within the context of its authorities and its role under the Federal Response Plan. With respect to the recommendations, it should be recognized that the Department of Homeland Security looks to EPA and other agencies to assist them in identification of potential targets and critical infrastructure. In fact, EPA has already provided much of the information recommended, to DHS. EPA collects the data under various legislative and regulatory programs and uses it to develop approaches and establish plans of action for protection of public health and safety in collaboration with State and local agencies. EPA generally agrees with the other Chapter 7 recommendations.

See Appendix R Note 27

Appendix R

OIG Evaluation of EPA's Response to the Draft Report

Transmittal Memorandum

Note 1 - We believe the report's findings, conclusions, and recommendations properly consider the unprecedented circumstances in which the response to the WTC tragedy was carried out. For instance, we point out the unprecedented nature of these events in the first line of the Executive Summary and the first line of Chapter 1. We do not believe that a response to such a tragedy can be conducted under a business as usual attitude. However, an emergency response should not preclude the Agency from following previously established guidance and practices regarding public safety and protection from hazardous substances conceived and designed to be applied in times of crisis. This position is consistent with the intent of EPA's Guidelines for Catastrophic Emergency Situations Involving Asbestos issued in 1992. These guidelines were issued after emergency responses to three incidents in 1989 focused attention on the need to consider asbestos along with other emergency response activities. Additionally, although the initial emergency response was carried out under trying conditions, as time passed the crisis nature of the response subsided and the Agency had the opportunity to consider its actions carefully before continuing its response efforts. For example, decisions regarding the approach to addressing indoor contamination evolved over time, after extensive deliberations, and well after the initial emergency response had subsided. We also note that, except for the recommendations in Chapter 6, the Agency agreed with the recommendations in five other chapters of the report, which does not suggest that we misunderstood the circumstances that the Nation, EPA, or the City faced following the disaster.

Note 2 - We agree that the Agency should be proud of the response of its men and women in the aftermath of the WTC attacks and collapse. We also agree that the Agency's response was made under extremely trying circumstances as detailed in Chapter 1 of the report. The findings, conclusions, and recommendations in this report are in no manner intended to disparage the valiant contributions of EPA personnel, or those of any other responding organization.

Note 3 - We agree with the need for coordinated federal efforts and the concept of centralized communications during a time of national emergency. In the report we recommend that EPA develop emergency communications policy and procedures which are consistent with the "Seven Cardinal Rules of Risk Communication,' the fifth of which is to "coordinate and collaborate with other credible sources."

We do not believe the report "goes to great length to erroneously criticize" CEQ's efforts "to coordinate health and safety communications." In accordance with the first assignment objective, the report appropriately examines the analytical basis for EPA's major public communications regarding air quality. To the extent that reassuring words were added to EPA's draft press release and cautionary words were deleted, it

is important to understand the basis for such changes in the Agency's risk communications. The report also provides the former EPA OCEMR Associate Administrator's explanation for why EPA's press releases did not discuss health effects or contain a recommendation that residents obtain professional cleaning. Additionally, as noted by the former EPA Chief of Staff, factors other than protecting human health and the environment entered into the determinations of the information that would be communicated to the public, including national security considerations and the desire to re-open Wall Street.

Note 4 - We agree that EPA made its data available to the public. However, based on the documentation we reviewed and our discussions with numerous environmental experts, both within and outside of EPA, we do not agree that the Agency's statement on September 18, 2001 that the air was safe to breathe reflected the Agency's best professional advice. In contrast, based on the circumstances outlined in Chapter 2 of the report, it appeared that EPA's best professional advice was overruled when relaying information to the public in the weeks immediately following the disaster.

Note 5 - We applaud EPA's efforts to evaluate its response and implement changes. We believe the report sufficiently acknowledges EPA's efforts to implement its "lessons learned." The draft report's Executive Summary acknowledges EPA's "lessons learned" efforts and highlights specific actions the Agency initiated. In addition, Chapter 7 of the report discusses EPA's "lessons learned" efforts in great detail.

Note 6 - We do not believe the report "is flawed in its lack of recognition" of the issues discussed. In regard to the absence of a long-term health threat, the Agency did not have a sound basis for reaching this conclusion at the time for the numerous reasons detailed in the report. Further, as noted in the report, the position that EPA took regarding WTC is inconsistent with the Agency's historical position that there is no safe level of asbestos.

In regard to the comment about the Agency advising people who were experiencing acute health problems to see their physician, no supporting documentation has been identified which shows that EPA instructed residents to see their physicians. We also provided agency officials with the opportunity to provide us with documentation which supported specific statements, but none has been provided to date.

In regard to EPA discussing acute health problems, we reviewed extensive information on EPA's risk communications, including all of the documents and videocassettes which were provided by Region 2 and EPA's Office of Public Affairs. We agree there were instances where documentation indicated agency spokespersons discussed acute health problems. However, as detailed in the draft report, EPA's press releases generally did not discuss potential acute health problems or the need to see a physician (except for rescue and cleanup workers at Ground Zero). The words "physician," "doctor," "acute," "symptoms," and "sensitive," do not appear in any of EPA's WTC press releases. Considering the totality of all the information we reviewed, it is our opinion that EPA did not communicate a clear, or consistent message on this subject. We agree that EPA advised rescue and cleanup workers to

take safety precautions. This agreement is detailed on page 9 of the draft report and illustrated in Appendix P.

We do not agree that EPA "emphasized" the need for professional cleaning because this concept was not discussed in EPA's press releases. According to the OCEMR Associate Administrator, a recommendation to obtain professional cleaning was deleted from an EPA press release by a CEQ official. As detailed in the draft report, EPA's press releases referred the public to a New York City Department of Health web site which recommended that people clean their own residences and businesses using wet rags, wet mops, and HEPA vacuums.

Note 7 - We do not believe that "The Report erroneously focuses" on five early Agency press releases. We reviewed many different types of information from many different sources including videocassettes which were provided by Region 2. We made extensive efforts to locate all relevant records. For example, by contacting the Administrator's Press Secretary and Scheduling Director, we were able to determine the date of a videotaped newscast which showed the Administrator advising the public orally about obtaining professional cleaning on October 26, 2001. Similarly, we worked closely with Region 2 officials and agreed with their analysis that EPA's web site recommended professional cleaning at least as early as December 11, 2001. In summary, although EPA's subsequent communications sometimes added information or clarification to the message presented in the press releases, the Agency's overall message of reassurance about long-term health impacts did not change.

In regard to the comment in the response to the draft report about EPA's "massive outreach program," we note, as detailed in the draft report, that a NYCDOH study, other lessons learned reports, and testimony provided at various hearings indicated that the public did not receive adequate air quality information and that individuals cleaned their residences without using proper procedures or personal protection.

Note 8 - We agree there were no health-based standards for many of the pollutants encountered in the aftermath of the WTC attacks, and the report does not intend to find fault with EPA or any other government organization for not having developed those benchmarks beforehand. However, we do not agree with using certain criteria-based benchmarks – particularly the NESHAP asbestos-containing material definition of one percent asbestos – as health-related benchmarks when environmental professionals clearly acknowledge that this standard is not protective of health.

Note 9 - The Agency is to be commended for its proactive approach to analyzing its response to the WTC collapse and initiating improvements to its emergency response capabilities. We disagree with the Agency's comment that this report "trivializes both the horrendous event that occurred and the extraordinary efforts of EPA and other responders." The primary objective of the report is to ensure that, if such a tragedy were to happen again; the public and emergency responders impacted by the disaster would receive the best available advice, protection, and assistance that the Government can provide.

General Observations

Note 10 - We agree that the Agency's response to the WTC collapse was unprecedented and enormous in terms of resources and human effort. Page 5 of the draft report acknowledged the many other activities – in addition to the air quality related activities – that EPA conducted in response to this tragedy.

Note 11 - We agree that the Agency undertook extraordinary efforts to provide information to the public and we acknowledge that the documents we reviewed indicated EPA provided full disclosure of sampling results. However, in our opinion, the importance of Agency press releases should not be minimized. As detailed in the draft report, EPA press releases result from a deliberative process that should reflect the Agency's official position on significant issues. Press releases are made available to essentially all news media and may well be quoted or paraphrased in radio, television, and other forms of communication. In our opinion, the Agency could have provided more complete and more useful information in its press releases.

We also agree that future incidents may involve scenarios that cannot be anticipated. In order to address this possibility, the draft report recommends that EPA designate teams of Agency experts – at both the National and Regional level – who can be mobilized quickly to provide needed technical support during a response, and that the Agency develop expert panels that can be used to quickly develop health-related benchmarks in emergency situations.

Chapter 2

Note 12 - We fully recognize the extraordinary circumstances that existed at the time the statement was made about the air being safe to breathe. However, for the reasons detailed in the draft report, there was insufficient information to support the statement made and the principle of acknowledging uncertainty was relevant.

We disagree with the assertion that EPA's statement about the air being safe to breathe would clearly be understood by New Yorkers as applying exclusively to asbestos. The press release sentence which preceded the subject statement asserts that New Yorkers are "not being exposed to excessive levels of asbestos or other harmful substances . . . ." The same press release also states that sample tests results are "below established levels of concern for asbestos, lead and volatile organic compounds."

Note 13 - We agree that, to our knowledge, EPA never withheld data from the public, and the draft report makes this point (page 10). The draft report does not imply that it is "unusual" or "unexpected" for the Agency to coordinate with CEQ during a "catastrophic disaster." In such a situation we would expect EPA to coordinate with numerous government entities and any non-government entity that could provide needed services. However, we would expect EPA to remain fully committed to its

mission of "protecting human health and the environment" during a catastrophic disaster. We understand that national security considerations or the desire to re-open Wall Street may affect certain communications. However, in our opinion, if such considerations cause EPA to omit or change statements that would otherwise have been made in its efforts to fulfill its mission, the Agency risks harm to its long term credibility as an authoritative source of health information for the public in times of crisis. EPA needs to acknowledge significant collaborations and, where necessary, qualify its communications appropriately. We agree with the goals of EPA's Homeland Security Strategic Plan which commit EPA to disseminating quality environmental information to all levels of government, industry and the public.

Chapter 3

Note 14 - We agree that, from the beginning, EPA and other government entities provided advice to residents to cleanup indoor spaces using wet rags, wet mops, and HEPA vacuums. As detailed in the draft report, EPA's Administrator and various Agency spokespersons orally advised the public to obtain professional cleaning when the dust was in their residences was "more than minimal," "a heavy amount," etc. However, we note the Agency's web site referred readers to NYC guidance and that a NYCDOH press release reassured residents that it was "unnecessary to wear a mask" while cleaning indoor spaces, and if a HEPA filtration vacuum was not available, simply "wetting the dust down with water and removing it with rags and mops is recommended."

In regard to potential exposures to asbestos and other contaminants, we note that a study of immigrant workers used to clean indoor space contaminated with WTC dust disclosed that these workers were not provided with personal protective equipment. The study reported that these workers reported health symptoms including coughing, sore throat, nasal congestion, chest tightness, headaches, fatigue, dizziness, and sleep disturbances that worsened after September 11, 2001. Further, a NYCDOH survey conducted in October 2001 found that the majority of residents polled had not followed the recommended cleaning procedures of using wet rags and HEPA vacuums. With respect, to the effectiveness of the cleaning studies, we note that EPA's Confirmation Cleaning Study report dated May 2003 found that:

> *. . . one to three cleanings were necessary to reduce contamination levels to below health-based benchmarks, and the number of cleanings required generally correlated with the levels of contamination initially identified in the units.*

We continue to believe unprotected workers and residents may have experienced unnecessary exposures to asbestos and other pollutants.

Note 15 - We agree EPA repeatedly stated that workers at Ground Zero should wear respirators, and that the Agency raised these concerns to local officials as discussed in Appendix L of the report. However, EPA's advice that workers wear respirators was directed to Ground Zero workers at the debris pile, and not to workers who cleaned contaminated indoor spaces outside the perimeter of Ground Zero. In regard to EPA's statements

that they repeatedly advised sensitive sub-populations and people experiencing acute symptoms to consult a physician, we note that these warnings were not presented in EPA's press releases. We attempted to verify the extent to which EPA advised these other groups through other forms of communication. For example, we reviewed briefing notes prepared for public meetings that EPA. These briefing notes showed that EPA officials intended to discuss sensitive populations at two public meetings in October 2001. We also reviewed newspaper and other news articles to determine when EPA publicly provided such advice. Based on the evidence EPA provided to us, and our own independent research, we were not able to conclude that EPA "... repeatedly advised anyone with acute symptoms to consult with their physicians..."

Chapter 4

Note 16 - We acknowledge the difficulty in implementing NESHAP work practices in the aftermath of the WTC collapse and agree that these work practices should not be implemented to the detriment of rescue operations in any emergency situation. However, even in the aftermath of an emergency, appropriate measures should be taken to the extent practical to reduce the exposure of emergency responders, clean-up crews, and the surrounding public to asbestos emissions.

Chapter 5

Note 17 - We agree that EPA conducted many activities to support efforts to alert Ground Zero workers to health-related issues, and we discuss these actions in Appendix L of the report.

Note 18 - EPA notes that the public sometimes wants information that is not scientifically available, or is not available quickly. We agree that this may sometimes be the case. EPA guidance in discussing the 4th rule of the "The Seven Cardinal Rule of Risk Communication" states: "If you do not know an answer or are uncertain, acknowledge it and respond with the answer as soon as possible."

Chapter 6

Note 19 - The Agency states that there are many residential and commercial buildings below Canal Street, and that a cleanup program including all of them would be a monumental undertaking that EPA studies and data indicate is not necessary. We agree that this would require a significant effort. However, the former EPA Administrator stated in September 2001 that the President made it to clear to spare no expense and to do everything needed to make sure the people of New York City were safe as far as the environment was concerned.

Note 20 - We agree that the vast amount of outdoor dust and debris has been removed, and thus exterior sources for contamination of indoor spaces have been significantly reduced. However, any indoor spaces contaminated with WTC dust that have not been cleaned using proper techniques will likely remain contaminated. The Agency notes that in

95% of the residences that were cleaned and tested or cleaned only, the asbestos readings were non-detect. It is encouraging that 95% were non-detect. However, it is not clear which sampling methods were used in obtaining these readings, what asbestos levels were present in the remaining 5 percent, and whether EPA believes possible asbestos contamination in 5 percent of the residences is acceptable. See note 24 for our comments regarding cleaning effectiveness.

Note 21 - Concerning the use of aggressive sampling, we agree that the use of a leaf blower does not represent normal activity in a residence. Neither does the use of a leaf blower represent normal activity in a school room, although the AHERA standard requires its use for clearing a school room after an asbestos abatement. Under a standard asbestos cleaning, all items in a room would be cleaned thoroughly, even documents as was done when cleaning a courthouse in Titusville, FL. In a private residence, especially when cleaning is voluntary and the owner can refuse to have individual items touched, it is extremely difficult to ensure that each item is cleaned of every microscopic asbestos fiber, yet this degree of cleaning should be the intent of the cleanup. Use of a blower prior to aggressive sampling serves to stir up the air, re-entrain dust and fibers in the air stream, and allow negative air filtration equipment to trap fibers that have been missed in the wet cleaning process or skipped entirely. It thus can be as much a cleaning procedure as a sampling procedure. We believe it is a necessary adjunct to the type of cleaning performed in NYC.

Note 22 - We accept EPA's statement that Agency officials qualitatively evaluated the potential for health risks beyond the current boundaries established for the residential cleanup. However, if a future disaster were to occur, we believe the boundaries of any government-organized cleanup should be based on a systematic, quantitative approach to determining the extent of contamination.

Note 23 - EPA issued a revised "World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks," as well as a "Response to Peer Review Comments on the Report." We note that both these documents cite the "World Trade Center Background Study Report" and the "Interim Final WTC Residential Confirmation Cleaning Study" which were issued in April and May 2003, respectively. Neither of these documents were available when the TERA panel peer reviewed the original COPC document in October 2002. In light of the significant, detailed comments that the peer review panel had on the original report, the detailed responses made in EPA's response document, and the fact that additional information is now available that was not available during the first peer review, we continue to believe it is appropriate that EPA re-submit the revised report, with newly issued supporting documentation, for peer review.

Note 24 - EPA states the belief that ". . . health-based asbestos-in-air clearance testing is effective in reducing the potential for risk related to [other] WTC contaminants." We note that 82% of the residential units re-cleaned during the Cleaning Study [Interim Final WTC Residential Confirmation Cleaning Study, Vol. 1, pp.113-114] had to be re-cleaned because the sampling filters were too clogged with dust to be analyzed. While we agree with the decision to re-clean residences under this circumstance, we

also interpret this to mean that, after cleaning, the units were still too dusty to pass the clearance test over 80 percent of the time. This is evidence that the cleaning process, although conducted under close EPA oversight, was often not successful. We had no evidence that this cleaning process would be more successful under the oversight of others, nor that the risks from exposure to other contaminants would be significantly reduced when the residence passes the asbestos clearance test.

Note 25 - Our recommendation applies to the interior building system in buildings with central heating, ventilation, and air conditioning (HVAC), composed of furnace/cooling coils and condenser, plenum, filtration system, supply ducts, and return ducts or return open air plenums. We continue to believe that these buildings should be treated and cleaned as an entire building system rather than as individual apartments because of the high likelihood that uncleaned subparts of the system will re-contaminate the entire system when the system is re-energized after cleaning of registers/ducts in a single or small group of apartments. We do not believe the absence of "widespread exceedences" provides sufficient assurances that public health is protected. EPA's own regulations state that asbestos is a known human carcinogen with no known safe level of exposure.

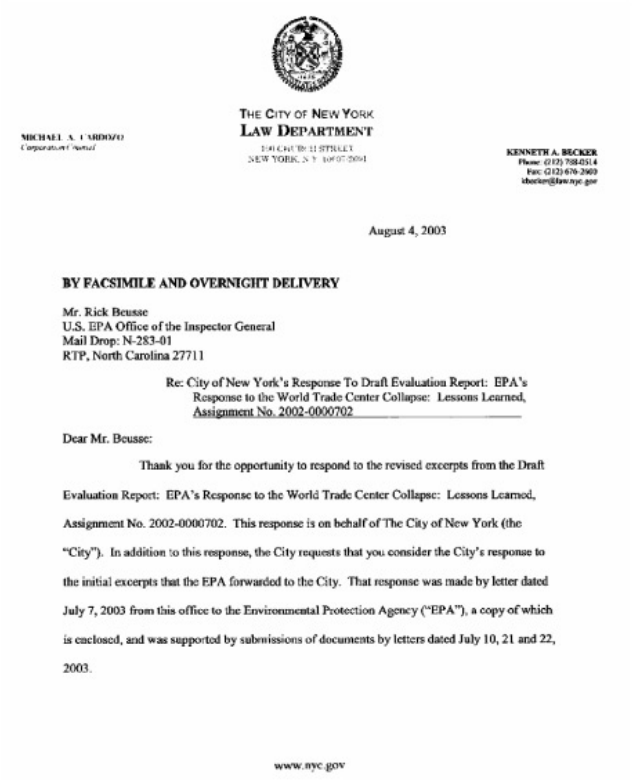
Note 26 - As indicated on page 9 of its response, EPA indicates that it has coordinated with OSHA throughout the indoor cleaning program, and that OSHA is prepared to address worker complaints. While we commend EPA and OSHA for coordinating on this issue, we continue to believe EPA, OSHA, and FEMA should assess the need for a work space cleaning program and formally come to an agreement as to whether or not work spaces should be addressed pro-actively by a cleaning program.

Chapter 7

Note 27 - Based on the events that unfolded after September 11, 2001 it is clear that the public looks to EPA for its advice and opinions on issues related to the environment. We expect that the public and the Department of Homeland Security will continue to look to EPA for its professional advice and judgment on matters related to the environment.

Appendix S

New York City's Response to Draft Report Excerpts



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August 4, 2003

BY FACSIMILE AND OVERNIGHT DELIVERY

Mr. Rick Beusse
U.S. EPA Office of the Inspector General
Mail Drop: N-283-01
RTP, North Carolina 27711

Re: City of New York's Response To Draft Evaluation Report: EPA's Response to the World Trade Center Collapse: Lessons Learned, Assignment No. 2002-0000702

Dear Mr. Beusse:

Thank you for the opportunity to respond to the revised excerpts from the Draft Evaluation Report: EPA's Response to the World Trade Center Collapse: Lessons Learned, Assignment No. 2002-0000702. This response is on behalf of The City of New York (the "City"). In addition to this response, the City requests that you consider the City's response to the initial excerpts that the EPA forwarded to the City. That response was made by letter dated July 7, 2003 from this office to the Environmental Protection Agency ("EPA"), a copy of which is enclosed, and was supported by submissions of documents by letters dated July 10, 21 and 22, 2003.

www.nyc.gov

Before commenting on the excerpts that were forwarded to the City, we note that although this office requested the entire draft report so that the City would best be able to address the portions of the report concerning the City, only excerpts were supplied. Without access to the entire draft report to place sections concerning the City into context, the City is disadvantaged in providing comments to the excerpts. However, portions of the excerpts concerning the City compel a response by the City and the City hereby responds to the best of its ability, as follows:

1. The third sentence in the first paragraph on page 1 of the excerpts of the revised draft report is misleading. The sentence implies that the EPA assumed a lead role in responding to indoor environmental concerns because of criticism of the City. It implies furthermore that criticism of the City was warranted. The evidence does not support a conclusion that the EPA took a lead role with respect to this issue solely because of criticism of the City. There were a number of factors present at that time which appear to have influenced the EPA, including criticism of the EPA and the initial availability of federal funds at that time to address this issue. More importantly, there is no evidence that any criticism of the City with respect to indoor environmental concerns was warranted. Also, the sentence refers to EPA initiating a multi-agency task force at that time. This implies that this was the first time that federal, state and City agencies worked together to address this issue. The documents supplied by the City show that federal, state and City agencies worked together beginning September 12, 2001 to address a wide variety of environmental issues, including indoor environmental concerns. We recommend that the sentence be revised to read, "EPA began to assume a lead role in February 2002, when the Agency chaired a multi-agency task force to continue to address concerns about the indoor environment."

2. The City has similar comments with respect to the paragraph labeled "Indoor Contamination Response" on page 1. This paragraph refers to concerns raised by public and elected officials and specific criticism of the City. Again, including this criticism appears to imply that the criticism was warranted, particularly since the City's position is not presented. We note that in the same paragraph, where criticism of the EPA is set forth, the EPA's position is presented in rebuttal to the criticism. The City believes that the evidence does not support the criticism of the City. For example, criticism concerning delegating testing and remediation efforts to building owners and residents is unwarranted. The City did not delegate this responsibility to owners and residents. The owners and residents always have had this responsibility, it was never the City's responsibility to do this and consequently the City could not delegate what it did not have. Similarly, there is no evidence that the City did not enforce proper procedures for cleaning asbestos where it had the enforcement authority or that the City gave improper

advice to the public on testing and cleaning procedures. As noted in the City's previous submission dated July 7, 2003, the EPA adopted the City's advice to its citizens. Moreover, including these criticisms implies that there was asbestos in these buildings. There is no evidence to support a claim that any significant number of buildings were contaminated with asbestos. Both the sampling conducted by many agencies and the City's response to complaints concerning asbestos, where out of over 300 responses to complaints there was only 1 finding of asbestos above the threshold level, demonstrate that asbestos containing material was not present above the threshold level in these buildings. References to criticisms are also not appropriate for this substantive section of the EPA report. The City does not dispute that there was criticism, but the criticism is irrelevant to whether the City and EPA followed the appropriate statutes, regulations and procedures. While the criticism may provide an impetus for conducting an evaluation, it does not provide any substantive basis for the findings in the report. To include the criticism in the substantive portion of the report in the manner in which it is included erroneously implies that the criticism has been substantiated and is unduly prejudicial to the City. Accordingly, the City recommends that this paragraph be deleted.

3. Concerning the second sentence in the paragraph labeled "Initial Actions Taken by New York City and EPA" on page 1, although the City was not provided with the documentation, the City has been informed that there is EPA documentation concerning an alleged statement by the City that it would not be requesting federal assistance. The documentation, which appears to be quoted on page 4 and 5 of the revised report, refers to a conversation between the EPA and the U.S. Public Health Service and the New York State Department of Health, where these agencies allegedly relayed to EPA the alleged statement by the City. It is impossible for the City to comment on the source of the statement given its vagueness and the fact that it is not attributed to any individual or agency. The City can, however, confirm that the statement is contrary to its repeatedly expressed position that it welcomed any authorized federal assistance at that point in time. To include this statement and purport to characterize the City's position based on a single, unattributed, out-of-context statement is unfair to the City. This is not the type of reliable evidence that should be required to support findings in an Inspector General report. The City therefore recommends that the statement be deleted.

4. Concerning the last sentence in the first full paragraph on page 2, the City believes EPA Region 2's comment that it did not want to take a more assertive stance because it would create a confrontation is not valid for more reasons than just that EPA was the lead agency for Emergency Support Function #10. From September 12, 2001 to the end of the Response Effort, the EPA was thoroughly involved in the effort. EPA had a "seat at the table" as demonstrated by the documents submitted by the City. Moreover, there was a cooperative relationship between EPA and the City. The EPA provided support for the Response Effort's overall health and medical response, which coordinated both environmental health and worker safety issues. In fact, when at a point in time during the Response Effort, EPA suggested that its functions be transitioned to a contractor, the City urged the EPA not to do this and to continue to maintain an on-site

presence and be part of the team. To suggest that EPA could not become more assertive or involved because it would create a confrontation is inconsistent with the evidence.

5. The first paragraph in the section labeled "New York City's Initial Response" on page 2 is misleading. It fails to mention that the City's policy and practice in the past was to hold building owners responsible for maintaining a safe environment and when necessary cleaning up their buildings. In other previous disasters, the federal government did not provide for federal funding to municipalities to clean privately owned buildings or property. The City consequently had no authority to request reimbursement for this activity and no authority to enter privately owned buildings to effect such a cleanup without the owner's consent or the finding of imminent hazard. Thus, the second sentence is misleading. We recommend that the first three sentences be modified as follows: "Consistent with past practices and federal law, building owners were initially held responsible for cleaning their own buildings. According to New York City officials, the issue of funding the cleanup of privately owned buildings was discussed with FEMA and the EPA. Initially, the federal position was that the Stafford Act, the statute which provides authority for federal disaster response, did not provide direct funding to the City for cleanup of privately owned buildings. During this discussion, the federal agencies were informed that owners of privately owned buildings would be responsible for funding the cleanup of their buildings and agreed with this course of action. Building owners, who needed help, were directed to the Disaster Assistance Service Center (DASC) where they could apply for financial assistance from FEMA."

6. Concerning the first full paragraph on page 4, which begins, "NYCDEP officials told us . . .," the paragraph is misleading in that there never had been a certification program to determine the level of compliance with NYCDEP instructions concerning cleaning of privately owned buildings. Also, the paragraph does not reflect the proactive efforts of the NYCDEP and the fact that NYCDEP not only told EPA it cleaned all of the rest of the buildings, but provided documentation. The City suggests that the first sentence be revised to read, "NYCDEP officials told us they have never had and did not create a certification program, nor did they have authority to create such a program, to determine the level of compliance with their instructions regarding the testing and cleaning of asbestos inside buildings, unless a complaint was made or an asbestos abatement notification was filed with the City." The City suggests that an additional sentence be added that states, "However, NYCDEP made significant efforts, including establishing an additional "hotline" to insure that residents could obtain information concerning asbestos cleanup and could report any asbestos related problems." We suggest that the last sentence of the paragraph be revised to read, "NYCDEP officials provided documentation that the remaining buildings were cleaned by NYCDEP with FEMA funding."

7. With respect to the first full paragraph on page 5, which alleges that New York City officials told EPA that the City would not be requesting EPA assistance with respect to sampling and reoccupation issues, without further information such as who the New York City officials were, or even what New York City agency they represented, it is

impossible for the City to comment on the source of the allegation. Again, the City at that time was willing and eager to accept all authorized federal assistance. Moreover, as shown in the documents submitted by the City, the City had accepted U.S. Public Health Service and Agency for Toxic Substances and Disease Registry (ATSDR) assistance in conducting indoor air sampling. Thus, it would be inconsistent for the City to refuse the assistance of the EPA — another federal agency — in this matter. In fact, EPA participated in the discussion with ATSDR concerning the protocol for the Indoor Air Study. The City has already commented concerning the alleged statement made on September 30, 2001, which is referenced in this paragraph (see item 3, above) and will not repeat its comments. The City recommends that the two sentences that refer to the statements allegedly made on October 9, 2001 and September 30, 2001 be deleted.

8. The City believes that the paragraph labeled "Multi-Agency Residential Cleanup Undertaken" on page 5 is somewhat misleading. The second sentence suggests that the sole basis for EPA's involvement in indoor air in February 2002 was that it believed the City could not handle all the issues involved in this matter. This is not accurate. First, EPA did not just become involved in indoor issues in February 2002. As shown by the documents submitted by the City, EPA was involved in indoor air issues as early as September 29, 2001. Second, there were a number of events that coalesced around February 2002 that brought about more involvement in indoor issues by the EPA, including, public criticism of the EPA and, perhaps most importantly, the initial availability of federal funding for indoor cleaning of private residences. Therefore, the City recommends that the second sentence be deleted.

9. The first paragraph in the section labeled "EPA Role on Indoor Environment" on page 5 is misleading. It refers to the portion of the NCP which allows a state or local agency to take the lead role in the case of a hazardous substance release. However, in this case, the site was not declared a hazardous waste site. We recommend that a footnote be added to this sentence noting that the site was not declared a hazardous waste site.

10. In the first paragraph of the subsection labeled "Cleaning Instructions" on page 6, the report opines that as a result of the failure of the City to recommend that residents obtain professional cleaning, long term health risks may have been increased for individuals who cleaned their residences without using respirators and other professional cleaning equipment. This is speculation that is not supported by the evidence. Indoor air sampling data along with the "Interim Final WTC Residential Confirmation Cleaning Study," completed by EPA Region 2 in May 2003, confirm that the methods recommended by the City, and adopted in the EPA website, were appropriate. Accordingly, we recommend that this paragraph be deleted.

11. The last paragraph in this section is also inaccurate. The City strongly contests the current opinion of asbestos medical experts contained in the first sentence of this paragraph. First, a huge body of test results established that asbestos contamination in indoor air was virtually nonexistent. Also, the conclusion of the experts completely ignores the practicality of the situation, in that for respiratory protection to be effective,

the user must be fit tested first and also that it is medically dangerous for an individual to wear a respirator without being medically cleared. Finally, the last two sentences of the paragraph are sheer speculation. There is no evidence as to how the individuals cleaned their residences. More importantly, as noted previously, there is no evidence of asbestos contamination in indoor air that would support the requirement to use abatement procedures or support the speculation that if abatement procedures were not used, health risks would be increased. Accordingly, this paragraph should be deleted.

12. Page 7 provided to the City is blank.

13. As a technical correction, in the first paragraph on page 8, the New York State Department of Labor, not the Department of Environmental Conversation, is delegated the responsibility for implementing federal regulations under the NESHAP program.

14. Concerning the first full paragraph on page 9 of the draft report, the City believes that given the prominent mention of the NESHAP notification requirement, this paragraph should include a sentence indicating that the EPA, because of its involvement, had functional notice of the demolition and everything concerning the demolition and that, as a practical matter, notification would not likely have changed the manner in which demolition was conducted. We recommend that the following sentences be added at the beginning of the paragraph, "While the EPA and other agencies were not provided formal written notice of the WTC demolition activities, the EPA and other regulatory agencies had notice, in advance, of the demolition activities and the manner in which they were being conducted as a result of these agencies' involvement in the Response Effort. EPA and the other regulatory agencies did not object to these activities and even if formal written notification was provided, it is doubtful the activities would have been conducted in any different manner."

15. As the only intact asbestos containing material encountered at the WTC site was below grade, the City recommends that the first sentence of the first paragraph on page 10 be revised to read, "Both NYCDDC and EPA officials told us that asbestos containing material (e.g., pipe wrapping, steel insulation) was only encountered below grade, and when it was encountered during removal it was tested and treated in accordance with asbestos abatement procedures."

16. The last sentence of the footnote on page 11 should be modified to provide a more complete explanation. The sentence should read, "Furthermore, they stated that the vehicles did not require decontamination since they were not transporting hazardous waste as defined by the EPA under 40 CFR Part 260-280. While decontamination procedures were not required, wash down procedures were mandated."

17. The first paragraph in the section labeled "Transfer of Debris to Barges" on page 12 is misleading and unfairly prejudicial to the City. It is based on citizen complaints rather than substantial evidence. The testimony of people complaining may be a useful starting point for analysis but it must be evaluated very carefully. This has

not been done here. This paragraph, without any critical evaluation at all, seems to accept all of the complaints as true. The verifiable evidence available, however, suggests that the complaints are unfounded. Only one aspect of the testimony is true. The trucks transporting WTC debris were not marked as carrying hazardous waste. They were not marked in this manner because they were not carrying hazardous waste as defined by the EPA. This is just one example of testimony that should have been critically evaluated before being included in the report. Of more concern is the uncritical acceptance of testimony of trucks not being wetted down properly and trucks not being covered properly, both allegedly resulting in the release of dust. The area around Stuyvesant High School was among the most thoroughly monitored in the City. There is no data to show that this area was contaminated by the operation of the transfer station for WTC debris from trucks to barges in the vicinity of the High School. Thus, if there was a release of dust, it was so insignificant as to present no risk at all to health and safety and should not be highlighted in this report. EPA, itself, represents that air sampling concerning barge operations indicated that 99.83% of the samples were below the screening levels. The City consequently recommends that this paragraph be deleted.

18. The paragraph that begins at the bottom of page 12 should be modified. The last sentence reports that there was lead found in the ventilation system of Stuyvesant High School. The sentence also reports that it was not determined whether this lead was from WTC fallout. Environmental monitoring in lower Manhattan indicates that airborne lead levels averaged over 90 days (from September 2001 through November 2001) did not exceed the EPA National Ambient Air Quality Standard (NAAQS) of 1.5 ug/m3. Given these results and the ubiquity of tetraethyl lead in urban environments from its use in leaded gasoline, it is very unlikely that the lead found in the ventilation system was from WTC fallout. Even if it was, this has nothing to do with the City's response to the terrorist attacks on the World Trade Center. While this may be of some academic interest, it has no place in this part of the report. The City recommends that this sentence be deleted.

19. The first paragraph in the section labeled "Asbestos Levels During Demolition and Debris Removal" is misleading. It unduly emphasizes that after September 2001 there were 7 air monitoring samples which exceeded the AHERA standard. The paragraph fails to mention that EPA collected a total of 12,676 ambient samples in lower Manhattan for phase contrast light microscopy analysis and 8,872 samples for transmission electronic microscopy analysis. Considered in this context, the fact that there were only seven exceedances demonstrates that the response actions taken were appropriate. The report mischaracterizes the seven exceedances as showing the sporadic presence of asbestos in the ambient air. Given the extensive monitoring, less than one exceedance per month can hardly be characterized as "sporadic." We recommend that the paragraph be revised to delete the table showing the exceedances and any reference to the table be deleted. Also, the reference that two of the exceedances were near Stuyvesant High School should be deleted. Reference to Stuyvesant implies that this location should be given preference over other locations near the site. The fourth sentence of the paragraph should be revised to read, "Out of approximately 21,000

samples taken from October 2001 through May 2002 there were only seven exceedances of the AHERA standard."

20. The second full paragraph on page 20 beginning, "The indoor residential cleanup program" is inaccurate. The second sentence states that the Governor of New York did not declare a public health emergency. In fact, the Governor declared a "general emergency," which is construed to include a public health emergency. Also, the fourth sentence states that the City indicated that an indoor cleanup was not necessary. This is not correct. At no time did the City indicate that an indoor cleanup was not necessary. In fact, early in the "Response Effort," the City inquired concerning the availability of federal funds to pay for such a cleanup. The City also widely disseminated guidelines for building owners and tenants to clean indoor spaces. The City accordingly recommends that the second sentence be modified to delete the phrase, "and the Governor of New York did not declare a public health emergency for this incident." We recommend that the fourth sentence of the paragraph be deleted.

21. We strongly recommend that the respirator sections contained within pages 16 through 19 be completely taken out of this report. Work place safety and personal protective equipment are matters within the jurisdiction of OSHA. These matters are, therefore, inappropriate for assessment by EPA-OIG. Further, much of the material concerning respirators appears to be based on two reports that are inaccurate, incomplete and insufficiently researched. If these sections remain in the report, we advise the following: The section entitled "Respirator Use at Ground Zero Lacking" should be changed to "Respirator Use at Ground Zero." Within that section, the first sentence should be changed to read: "A widely publicized aspect of the WTC response was the less than 100% compliance with requirements to use respirators by rescue and construction crews," since there was not a total lack of respirator use. The second sentence should be changed to: "It was beyond the scope of this review to determine the extent of noncompliance with respirator requirements and why this occurred" for the same reason. The fourth sentence within that section should read: "Our limited work in this area indicated that respirators were widely available but provisions of the site requirements for using respirators were not fully complied with for a number of reasons" since there was a plethora of respirators at the site. The sixth sentence contains several inaccuracies and should be changed to: "Other reasons appeared to include the respirators' interference, due to the state of the technology, with the ability of emergency workers to communicate and conflicting messages about the air quality at Ground Zero."

22. The section entitled "Reports on Lack of Respirator Use" on page 17 should be completely deleted because, while it purports to represent a total picture of site operations, it in fact presents a very narrow and skewed snapshot by the author, who was at the site for a very limited number of hours, and who misidentified a key City agency – the Department of Design and Construction – and its role in the rescue and recovery efforts. The bullet points should be taken out with the exception of the point starting with "During the September 22-26 period," because there were thousands of rescue and clean-up workers on the site and a DDC official monitoring safety at the site personally

observed many who did wear respirators diligently. There are hundreds of photographs that depict the use of respiratory equipment and hard hats. Respirator use was tracked and enforced throughout the response to the disaster. In addition, this was not a hazardous waste operation. OSHA defines the scope of a "hazardous waste operation" as "clean up operations required by a governmental body, whether federal, state, local or other, involving hazardous substances that are conducted at uncontrolled hazardous waste sites." Although the debris produced by the collapse of the WTC did contain minor concentrations of various contaminants, including asbestos, fiberglass and alkaline cement dust, extensive sampling never indicated the presence of hazardous waste as defined by the EPA in Resource Conservation and Recovery Act regulations 40 CFR Parts 260-280. In addition, there was an aggressive safety and health effort underway, spearheaded by the DDC and OSHA working in close collaboration. Beginning September 12, 2001, daily health and safety meetings were held and attended by multiple City, State and Federal agencies, including EPA, FEMA, OSHA, DEC, DDC, DOH, DEP, FDNY, NYPD and OEM, together with the contractors' safety personnel, at which air monitoring and PPE protocols were discussed and established. There was a preliminary "Accident Prevention Plan" in place from September 14, 2001 through October 29, 2001, at which time the World Trade Center Emergency "Environment, Safety and Health Plan" went into effect. Teams of safety and health professionals worked around the clock providing "direct intervention" to get workers to comply with basic safety and health requirements, especially the use of PPE. There were as many as 30 safety professionals on site each day. OSHA employees were constantly roving the site with safety equipment, and provided hands-on instruction and preliminary fit checking at IS 89 and at supply caches on the site. There are tens of thousands of documents which record these multi-agency health and safety efforts, many of which have already been provided to the EPA. Additional documents can be provided upon request.

23. On page 18, the first sentence beginning with "In contrast" should read as follows: "In contrast to the recovery operation at the WTC site, the January 2002 report noted that workers conducting WTC debris sorting and inspection at the Fresh Kills landfill wore half-face respirators, hard hats, eye protection, and Tyvek suits." The language that the work at Fresh Kills was handled as a "hazardous waste operation" should be eliminated because WTC debris at the Fresh Kills landfill, and at Ground Zero, did not call for a hazardous waste response under OSHA or EPA standards, nor was it handled as such. The next sentence should begin: "The author opined" to avoid an erroneous impression that the reported information was an EPA finding. The sentence beginning "In other words" is inaccurate and should be replaced with: "The author's perception was that PPE use was more prevalent at the Fresh Kills landfill than at the WTC site." The report as written is again misleading in describing the debris as hazardous waste, and mischaracterizes the Fresh Kills landfill operation, which presented its own unique, multi-faceted challenges, as "less hazardous."

24. On page 19 the first sentence of the first full paragraph beginning "As the rescue phase progressed," should be changed to read as follows: "As the rescue phase

progressed. EPA emergency response officials told us they were concerned about the less than 100% compliance with respirator requirements at Ground Zero and outlined these concerns in a letter to NYCDOH, dated October 5, 2001." The third sentence of that paragraph should read "The letter noted that EPA had recommended and continued to recommend that workers at the site wear respiratory protection, and that workers comply with procedures to prevent them from spreading debris from the site to their homes, cars, and other locations." Again, "decontamination" and "contaminants" language assumes a hazardous waste operation, and this was not such an event.

To make it easier to understand our proposed modifications to the respirator sections contained within pages 16 through 19, I have enclosed a copy of the excerpts from the draft report with interlineations containing our proposed language.

Thank you for the opportunity to comment concerning the revised draft report. If you have any questions, please do not hesitate to contact me or my staff.

Very truly yours,

Kenneth A. Becker
Chief, World Trade Center Unit

Enclosures

Appendix T

OIG Evaluation of New York City's Response to Draft Excerpts

The following numbered notes respond to the numbered comments in New York City's response in Appendix S.

1. We agree that there were a number of factors that caused EPA to assume a lead role in responding to indoor environmental concerns, and that only presenting the criticism of NYC and not EPA would be misleading. Our draft already recognized that EPA was criticized as well and that this also influenced their actions regarding indoor concerns. The sentence has been clarified by deleting the lead-in clause that only cited criticism of New York City. The sentence now reads as follows:

   > EPA began to assume a lead role in February 2002, when the Agency initiated a multi-agency task force to address concerns about the indoor environment

2. We presented the criticism as background information that is necessary for the reader to understand the information that follows and to put this information into proper context. Regarding indoor asbestos contamination, evidence does not support the City's contention that there is "no evidence to support a claim that any significant number of buildings were contaminated with asbestos." Appendix K to our report points out that an October 12, 2001 study of two residential buildings – one presumed to have significant WTC dust contamination and the other not – found that both buildings had significant asbestos contamination, ranging from 6,277 to 10,620 s/mm2 in one building and from 141 to 379 in the other building – all of which are above the 70 s/mm2 level. As we also point out, from September 2001 to September 2002 (when the indoor testing and cleaning program was implemented), many residents returned and cleaned their own residences, leaving it unknown as to the level of WTC dust contamination that actually was deposited in their residences. Further, EPA recent cleaning confirmation study report notes that one to three cleanings were necessary to achieve the health related clearance levels. We do not believe changes are needed.

3. We do not agree with removing the cited information. In our opinion, an EPA Regional Administrator's letter to a United States Congressman is evidence that we can cite in our report. Further, EPA's Situation Reports represent evidence we can cite as these are contemporaneous documents, that are completed soon after events are observed. We have included NYC's position on this issue by adding the following sentence to the paragraph:

   > New York City officials disagreed with the characterizations of their statements presented in these documents and told us that they repeatedly expressed the position that the City welcomed any authorized federal assistance at that time.

4. No change is needed as this portion of the draft was removed during the editing process.

5. The City's position has been included in the final report as follows (revised sentences in italics):

> *Initially, building owners were held responsible* for cleaning up their own buildings, including interiors and exteriors. *According to New York City officials, the issue of funding the cleanup of privately owned buildings was discussed with FEMA and EPA; and the initial federal position was that the Stafford Act (the implementing statute for the FRP) did not provide direct funding to New York City for this cleanup. New York City officials said that during this discussion they informed the federal agencies that building owners would be responsible for funding the cleanup of their buildings and the federal agencies agreed with this position. Under this arrangement, owners of* rental units were responsible for cleaning apartment walls, ceilings, and floors; common areas, such as hallways and lobbies; and heating, ventilation, and air conditioning (HVAC) systems*, when deemed necessary as explained in guidance provided by New York City.* Renters were responsible for cleaning personal belongings. In resident-owned condominiums, residents were responsible for cleaning their units, while building owners were responsible for cleaning common areas and HVAC systems.

6. No change is needed as this phrase was deleted during the editing process.

7. See response to note 3.

8. See response to note 1 where we explain that there were a number of factors that caused EPA to assume a lead role in responding to indoor environmental concerns. However, according to the EPA Chief of Staff, who was highly knowledgeable of EPA's reasons for becoming involved in indoor environmental concerns, EPA's reasons were as stated. Further, recognizing the importance of this information, we confirmed this and other information obtained from the Chief of Staff in writing.

9. A site does not have to be officially declared a "hazardous waste site" in order to engage state/local response. The NCP Part 300.500 contains the state role provisions. Nothing in this section precludes state/local involvement based on a formal declaration of the site. CERCLA and the NCP plainly allow states to respond on their own to non-NPL sites, and to decide whether to become the lead or support agency in Fund-financed sites. Nonetheless, NYC's suggested footnote has been added to ensure clarity in describing the response.

10. The cited sentence is based on evidence presented in the report which suggests that persons cleaning apartments that contained WTC dust may have increased their long-term health risks if they did not wear appropriate personal protective equipment. In regard to the "Interim Final WTC Residential Confirmation Cleaning Study," the study report notes that 1 to 3 cleanings were necessary to achieve the health-related clearance levels, with the number of cleanings related to the extent of dust in the unit. Further, the clearance levels

were established to correspond to a 1 in 10,000 increased lifetime risk of cancer. As a matter of comparison, for a Superfund site cleanup the desired cleanup goal is a 1 in 1,000,000 increased lifetime risk of cancer with a minimum goal of 1 in 10,000.

11. See response to note 2.

12. No comment needed.

13. Suggested change made.

14. Section clarified by adding the following statement:

> New York City officials maintained that EPA had functional notice of NESHAP related activities through its participation at these meetings and that it was doubtful that notification would have changed the manner in which these activities were conducted.

15. The report already points out that asbestos removal activities prior to September 11, 2001, were of accessible asbestos materials, not all asbestos materials. No change made.

16. The last sentence of the footnote was revised as follows:

> They also said that the vehicles did not require decontamination since they were not transporting hazardous waste as defined by EPA under 40 CFR Part 260-280; and while decontamination procedures were not required, wash down procedures were mandated.

17. Testimony at EPA Superfund Ombudsman, Congressional, New York State Assembly, and New York City Council hearings is sufficient evidence to indicate a concern with removal activities. The OIG draft report presents a balanced discussion of this issue, as the testimonial evidence was supplemented with the results of ambient air readings in the area around the barge as well as a consultant's opinion on the impact this may have had on Stuyvesant High School.

18. Questions about lead contamination at Stuyvesant High School were raised in the news as well as at EPA Superfund Ombudsman hearings. This information was retained in the final report.

19. This paragraph was moved to Chapter 2 and revised during the editing process. During this process the specific statements questioned by New York City were eliminated. Further, the final report now includes the total number of air samples analyzed by the TEM method.

20. This paragraph was revised to eliminate the reference to a "public health emergency." The correct reference should be "immediate hazard." We retained the FEMA officials' statement about New York City's position on the formal indoor cleanup program because this was the position presented to us during our October 21, 2002 interview with the New York City Department of Health and Mental Hygiene's Assistant Commissioner for

Environmental Health. We have also retained reference to the memorandum provided by the EPA Region 2 Administrator. The questioned paragraph was revised as follows:

> The indoor residential cleanup program was administered by EPA and New York City. FEMA officials told us that they normally do not fund indoor cleanups of private spaces related to a disaster unless an immediate hazard is declared. FEMA officials told us that New York City officials indicated a formal cleanup program was not needed. Therefore, in May 2002, the EPA Region 2 Administrator provided FEMA with a memorandum that furnished the necessary justification to authorize funding.

21. With regard to federal agency responsibilities, we agree that worker safety and personal protective measures are within the jurisdiction of OSHA. However, protecting human health and safety in an emergency is a shared goal, and one in which EPA actively supported OSHA. Additionally, EPA was criticized for its efforts in this area and may again face similar challenges in the future. Therefore, this is a legitimate topic for us to address in our report.

22. The cited report is a public document, issued by a Federal Agency, therefore it is sufficient evidence for us to cite. In addition, the report's findings related to safety measures at the site were corroborated by press accounts, our interviews, and reports from various officials present at the site. Further, we do not agree with New York City's interpretation of RCRA regulations. Asbestos, is a hazardous substance under CERCLA and, therefore, the OSHA definition of a hazardous waste operation as involving hazardous substances is appropriate. Therefore, we have retained this section in our report.

23. This section was revised to better reflect the cited report's information and to eliminate any misperception that the author's conclusions are those of our report. The section was revised as follows:

> In contrast to the recovery operation at the WTC site, the January 2002 report noted that workers conducting WTC debris sorting and inspection at the Fresh Kills landfill were wearing half-face respirators, hard hats, eye protection, and Tyvek suits. The author noted that respiratory protection compliance by workers at Fresh Kills was reported to be approximately 90 percent as opposed to 30-50 percent compliance at the WTC site. The author observed that:
>
> > "*. . . debris is pulled by workers from the smoking, twisted wreckage of the World Trade Centers and then wetted and hauled to a site where the debris is carefully sorted by workers wearing more protective clothing, much more consistently.*"
>
> Moreover, the author noted that workers at the landfill were officially informed that not wearing respirators would result in disciplinary action. OIG investigators from our New York office who participated in the recovery operations confirmed

the report's conclusions about the difference in respiratory use between the WTC and landfill sites.

24. We do not agree with characterizing respirator use at Ground Zero as "less than 100% compliance." We agree that the paragraph should be revised to directly quote the cited letter and to eliminate the use of the term "decontamination." The paragraph was revised to read as follows:

> As the rescue phase progressed, EPA emergency response officials told us they were concerned about the lack of respirator use at Ground Zero and outlined these concerns in a letter to NYCDOH dated October 5, 2001. This letter outlined the threat of potential exposure of workers to hazardous substances. The letter noted that EPA ". . has recommended, and continues to recommend, that workers utilize personal protective equipment and the personal wash stations to prevent the spread of asbestos and other hazardous substances from the WTC to their homes, cars, public transportation, food service locations, etc." The letter stated that EPA had observed very inconsistent compliance with its recommendations, but did not have the authority to enforce compliance with non-EPA/United States Coast Guard employees. The letter concluded by recommending that the Incident Commander adopt and enforce a site-wide Health and Safety Plan. A copy of the letter is in Appendix P.

Appendix U

Distribution

EPA Headquarters

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Assistant Administrator for Air and Radiation
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Associate Administrator for Congressional and Intergovernmental Relations (1301A)
Director, Office of Regional Operations (1108A)

EPA Regions

Regional Administrators
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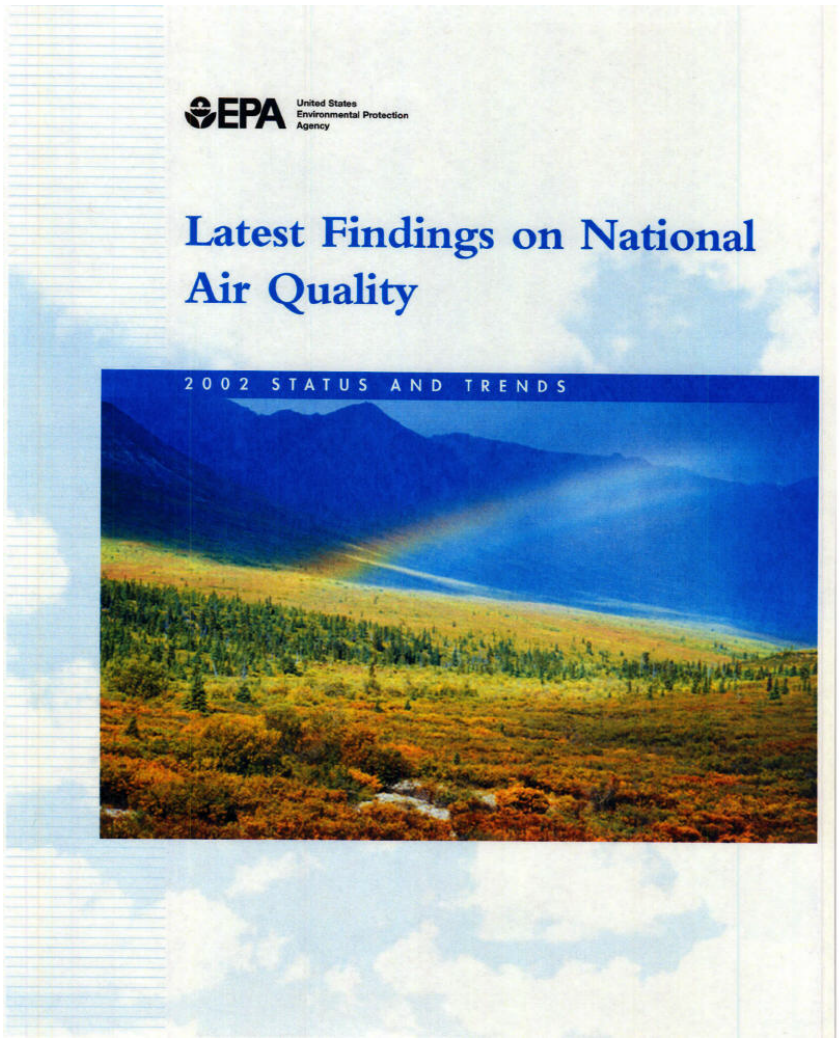
New York City Agencies

City of New York Law Department

EPA Office of Inspector General

Inspector General (2410)
Assistant Inspector General for Program Evaluation
Assistant Inspector General for Human Capital
Assistant Inspector General for Planning, Analysis and Results
Media and Congressional Liaison
Counsel
Science Advisor
Product Line Directors
Editor
Human Resource Center Managers


EPA
United States
Environmental Protection
Agency
Latest Findings on National
Air Quality
2002 STATUS AND TRENDS

EPA 454/K-03-001
August 2003

Latest Findings on National Air Quality

2002 STATUS AND TRENDS

Contract No. 68-D-02-065
Work Assignment No. 1-03

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Emissions, Monitoring, and Analysis Division
Research Triangle Park, North Carolina

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More detailed information on air pollution trends is available at www.epa.gov/airtrends.

National Air Quality

A summary report highlighting our nation's air quality status and trends.





EPA tracks air pollution in two ways:

- Air quality measured from over 3,000 locations (over 5,200 monitors) across the nation operated primarily by state, local, and tribal agencies
- Emissions going back more than 30 years.

Highlights

- National air quality levels measured at thousands of monitoring stations across the country have shown improvements over the past 20 years for all six principal pollutants.
- Since 1970, aggregate emissions of the six principal pollutants have been cut 48 percent. During that same time, U.S. gross domestic product increased 164 percent, energy consumption increased 42 percent, and vehicle miles traveled increased 155 percent.
- Despite this progress, about 160 million tons of pollution are emitted into the air each year in the United States. Approximately 146 million people live in counties where monitored air in 2002 was unhealthy at times because of high levels of at least one of the six principal air pollutants.
- The vast majority of areas that experienced unhealthy air did so because of one or both of two pollutants—ozone and particulate matter (PM). Important efforts to control these pollutants include implementing more protective National Ambient Air Quality Standards (NAAQS) for ozone and PM and issuing rules to reduce emissions from onroad transportation and stationary combustion sources. These rules will bring reductions in emissions over the next several years.
- Additional reductions will be needed to provide clean air in the future. For example, the Clear Skies legislation currently being considered in Congress, would, if enacted, mandate reductions of particle- and ozone-forming compounds from power generators by 70 percent from current levels through a nationwide cap and trade program. This will also reduce acid rain and improve visibility. Also, in May 2003, EPA proposed nonroad diesel engine regulations that would help improve PM and ozone air quality. By 2030, this program would reduce annual emissions of PM by 95 percent, NO_x by 90 percent, and sulfur levels by 99 percent from these engines.
- Of the six tracked pollutants, progress has been slowest for ground-level ozone. Over the past 20 years, almost all geographic areas experienced some progress in lowering ozone concentrations. The Northeast and Pacific Southwest exhibited the greatest improvement. In particular, substantial progress seen in Los Angeles has continued through 2002. However, the national average ozone (8-hour) levels have been fairly constant in other metropolitan areas. An analysis to adjust 8-hour ozone levels in metropolitan areas to account for the influence of meteorological conditions shows the 10-year trend to be relatively unchanged. At the same time, for many national parks, the 8-hour ozone levels have increased somewhat.
- Ground-level ozone is not emitted directly into the air, but is formed in the atmosphere by the reaction of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) in the presence of heat and sunlight. Emissions of VOCs have decreased about 40 percent over the past 20 years. However, regional-scale NO_x reductions over the same period are only 15 percent. More NO_x reductions will be necessary before more substantial ozone air quality improvements are realized. Some of these additional reductions will result from existing and recently enacted NO_x emission reduction programs and also, potentially, from the Clear Skies legislation, if enacted.
- The improvement in overall emissions since 1970 included in this year's findings reflect more accurate estimates of VOC, NO_x, PM, and carbon monoxide (CO) releases from highway vehicles and nonroad engines. Previous years' findings underreported emissions for cars and trucks in the 1970s and 1980s. This year's findings incorporate improvements in EPA's mobile source emission models, which are based on actual emissions measurements from thousands of motor vehicles and have been peer-reviewed. The new mobile model better represents average U.S.

Six Principal Air Pollutants Tracked Nationally

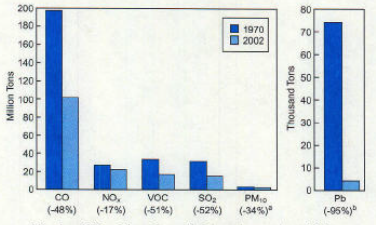
- Nitrogen Dioxide (NO_2)
- Ozone (O_3) – formed by volatile organic compounds (VOCs) and nitrogen oxides (NO_x)
- Sulfur Dioxide (SO_2)
- Particulate Matter (PM) – formed by SO_2, NO_x, ammonia, VOCs, and direct particle emissions
- Carbon Monoxide (CO)
- Lead (Pb)



driving habits, such as more rapid accelerations and faster highway speeds.

- Sulfates formed primarily from SO_2 emissions from coal-fired power plants are a major component of fine particles (known as $PM_{2.5}$) in the eastern United States. SO_2 emissions decreased approximately 33 percent from 1983 to 2002. Nationally, average SO_2 ambient concentrations have been cut approximately 54 percent over the same period. Reductions in SO_2 concentrations and emissions since 1990 are primarily due to controls implemented under EPA's Acid Rain Program. Sulfate reductions since 1999 are partly responsible for some improvement in ambient fine particle concentrations, particularly in the southeastern United States.
- In many locations, EPA now has 4 years of air quality monitoring data for fine particles (known as $PM_{2.5}$). Areas across the Southeast, Mid-Atlantic, Midwest regions, and California have air quality that is unhealthy due to particle pollution. Region-wide emissions from power plants and motor vehicles are among the largest contributors to the high $PM_{2.5}$ concentrations.
- Since 1990, many actions have been taken that will significantly reduce air toxics across the country. Specifically, regulations for facilities such as chemical plants, dry cleaners, coke ovens, and incinerators will reduce emissions of toxic air pollution by 1.5 million tons from 1990 levels. In addition, recent actions to address emissions of toxic air pollutants from motor vehicles as well as stringent standards for heavy-duty trucks, buses, and diesel fuel will eliminate 95 percent of emissions of diesel particulate matter.
- Measurements have shown that atmospheric concentrations of methyl chloroform are falling, indicating that emissions have been greatly reduced. Concentrations of other ozone-depleting substances in the upper layers of the atmosphere, like chlorofluorocarbons (CFCs), are also beginning to decrease.

Comparison of 1970 and 2002 Emissions



[a] Based on 1985 emission estimates. Emission estimates prior to 1985 are uncertain.
[b] Values for lead are based on 2001 data; 2002 data for lead are not yet available.

Air Pollution

The Concern

Exposure to air pollution is associated with numerous effects on human health, including respiratory problems, hospitalization for heart or lung diseases, and even premature death. Children are at greater risk because they are generally more active outdoors and their lungs are still developing. The elderly and people with heart or lung diseases are also more sensitive to some types of air pollution.

Air pollution can also significantly affect ecosystems. For example, ground-level ozone has been associated with reductions of agricultural and commercial forest yields, and airborne releases of NO_x are one of the largest sources of nitrogen pollution in certain waterbodies, such as the Chesapeake Bay.

The Causes

Air pollution comes from many different sources. These include large stationary sources such as factories, power plants, and smelters; smaller sources such as dry cleaners and degreasing operations; mobile sources such as cars, buses, planes, trucks, and trains; and natural sources such as windblown dust and wildfires.

Six Principal Pollutants

Under the Clean Air Act, EPA establishes air quality standards to protect public health, including the health of "sensitive" populations such as people with asthma, children, and older adults. EPA also sets limits to protect public welfare. This includes protecting ecosystems, including plants and animals, from harm, as well as protecting against decreased visibility and damage to crops, vegetation, and buildings.

	Percent Change in Air Quality 1983-2002	1993-2002
NO_2	-21	-11
O_3 1-h	-22	-2[a]
8-h	-14	+4[a]
SO_2	-54	-39
PM_{10}	—	-13
$PM_{2.5}$	—	-8[b]
CO	-65	-42
Pb	-94	-57

	Percent Change in Emissions 1983-2002	1993-2002
NO_x	-15	-12
VOC	-40	-25
SO_2	-33	-31
PM_{10}[c]	-34[d]	-22
$PM_{2.5}$[c]	—	-17
CO	-41	-21
Pb[e]	-93	-5

—Trend data not available.
[a] Not statistically significant.
[b] Based on percentage change from 1999.
[c] Includes only directly emitted particles.
[d] Based on percentage change from 1985. Emission estimates prior to 1985 are uncertain.
[e] Lead emissions are included in the toxic air pollutant emissions inventory and are presented for 1982-2001.

Negative numbers indicate improvements in air quality or reductions in emissions. Positive numbers show where emissions have increased or air quality has gotten worse.

Changes in air quality concentrations do not always match changes in nationwide emissions. There are several reasons for this. First, most monitors are located in urban areas so air quality is most likely to track changes in urban air emissions rather than in total emissions. Second, not all of the principal pollutants are emitted directly to the air. Ozone and many particles are formed after directly emitted gases react chemically to form them. Third, the amount of some pollutants measured at monitoring locations depends on the chemical reactions that occur in the atmosphere during the time it takes the pollutant to travel from its source to the monitoring station. Fourth, emissions from some sources are estimated rather than measured. Finally, weather conditions often contribute to the formation and buildup of pollutants in the ambient air. For example, peak ozone concentrations typically occur during hot, dry, stagnant summertime conditions.



EPA has set national air quality standards for six principal air pollutants (also called the criteria pollutants): nitrogen dioxide (NO_2), ozone (O_3), sulfur dioxide (SO_2), particulate matter (PM), carbon monoxide (CO), and lead (Pb). Four of these pollutants (CO, Pb, NO_2, and SO_2) are emitted directly from a variety of sources. Ozone is not directly emitted, but is formed when NO_x and volatile organic compounds (VOCs) react in the presence of sunlight. PM can be directly emitted, or it can be formed when emissions of nitrogen oxides (NO_x), sulfur oxides (SO_x), ammonia, organic compounds, and other gases react in the atmosphere.

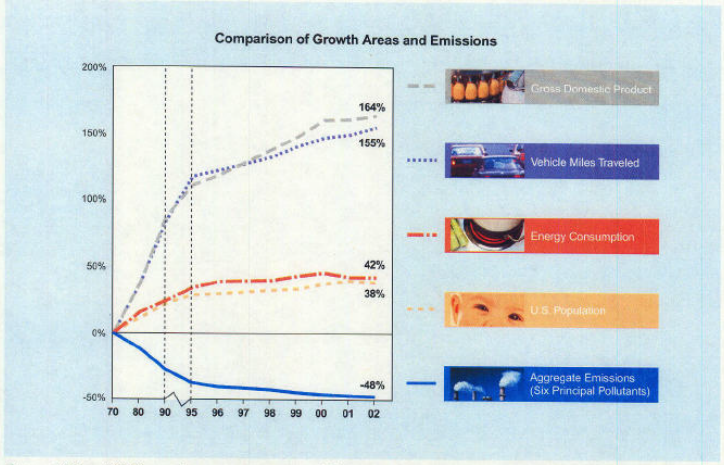
Each year EPA looks at the levels of these pollutants in the air and the amounts of emissions from various sources to see how both have changed over time and to summarize the current status of air quality.

Reporting Air Quality and Emissions Trends

Each year, air quality trends are created using measurements from monitors located across the country. The table to the left shows that the air quality based on concentrations of the principal pollutants has improved nationally over the past 20 years (1983–2002).

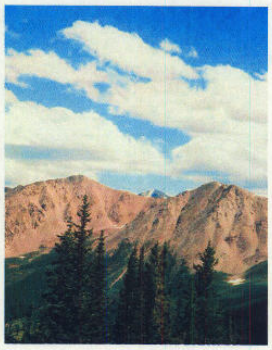
EPA estimates nationwide emissions of ambient air pollutants and the pollutants they are formed from (their precursors). These estimates are based on actual monitored readings or engineering calculations of the amounts and types of pollutants emitted by vehicles, factories, and other sources. Emission estimates are based on many factors, including levels of industrial activity, technological developments, fuel consumption, vehicle miles traveled, and other activities that cause air pollution.

Methods for estimating emissions continue to improve. Today's estimates are different from last year's estimates. One reason is because this year



Between 1970 and 2002, gross domestic product increased 164 percent, vehicle miles traveled increased 155 percent, energy consumption increased 42 percent, and U.S. population increased 38 percent. At the same time, total emissions of the six principal air pollutants decreased 48 percent.

EPA used updated, peer-reviewed models that estimate VOC, NO_x, CO, and PM emissions from highway vehicles and nonroad engines and and better represent real-world conditions, such as more rapid accelerations and faster highway speeds. The emissions estimates generated by the new highway vehicle model are derived from actual tailpipe measurements from thousands of vehicles. Another change in the reporting of emissions trends is that emissions from wildfires and prescribed burning are not considered in the estimates of emission change. This is due to the large variability in the year-to-year levels of these emissions and the relatively small impact these distant emissions have on most monitoring locations. Because of the high degree of uncertainty in predicting emissions for these fires, their emissions have not been projected for 2002 for PM, CO, and VOCs. These emissions will be estimated when 2002 acres-burned data become available. However, fire

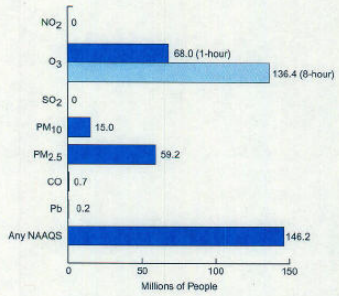


emissions are included in the emission graphics through 2001. As a result of these reporting changes, some emissions trends have changed significantly. For example, rather than describing no change in the 20-year emission trend for CO, EPA now estimates a 41 percent decrease in CO emissions from 1983 to 2002. This estimated change in emissions is supported by the trend in CO air quality.

Emissions of air pollutants continue to play an important role in a number of air quality issues. About 160 million tons of pollution are emitted into the atmosphere each year in the United States. These emissions mostly contribute to the formation of ozone and particles, the deposition of acids, and visibility impairment.

Despite great progress in air quality improvement, approximately 146 million people nationwide lived in counties with pollution levels above the NAAQS in 2002. Out of the 230 nonattainment areas identified during the 1990 Clean Air Act Amendments designation process, 124 areas remain. In these nonattainment areas, however, the severity of air pollution episodes has decreased.

Number of People Living in Counties with Air Quality Concentrations above the Level of the NAAQS in 2002



Multiple years of data are generally used to determine if an area attains the NAAQS.

The Clean Air Act

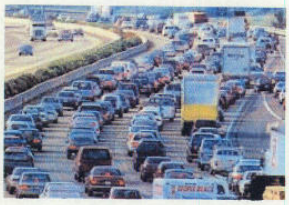
The Clean Air Act provides the principal framework for national, state, tribal, and local efforts to protect air quality. Improvements in air quality are the result of effective implementation of clean air laws and regulations, as well as efficient industrial technologies. Under the Clean Air Act, EPA has a number of responsibilities, including

- Conducting periodic reviews of the NAAQS for the six principal pollutants that are considered harmful to public health and the environment.
- Ensuring that these air quality standards are met (in cooperation with the state, tribal, and local governments) through national standards and strategies to control air pollutant emissions from vehicles, factories, and other sources.
- Reducing emissions of SO_2 and NO_x that cause acid rain.
- Reducing air pollutants such as PM, SO_x, and NO_x, which can reduce visibility across large regional areas, including many of the nation's most treasured parks and wilderness areas.
- Ensuring that sources of toxic air pollutants that may cause cancer and other adverse human health and environmental effects are well controlled and that the risks to public health and the environment are substantially reduced.
- Limiting the use of chemicals that damage the stratospheric ozone layer in order to prevent increased levels of harmful ultraviolet radiation.

NITROGEN DIOXIDE (NO_2)

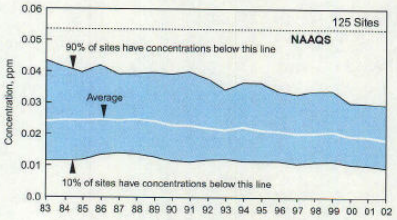
Nature and Sources of Nitrogen Oxides

Nitrogen dioxide is a reddish brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). Nitrogen oxides (NO_x), the generic term for a group of highly reactive gases that contain nitrogen and oxygen in varying amounts, play a major role in the formation of ozone, PM, haze, and acid rain. While EPA tracks national emissions of NO_x, the national monitoring network measures ambient concentrations of NO_2 for comparison to national air quality standards. The major sources of



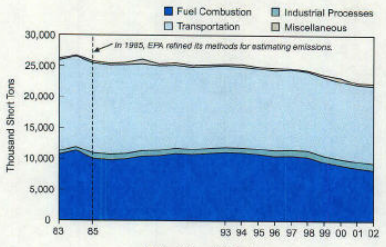
man-made NO_x emissions are high-temperature combustion processes such as those that occur in automobiles and power plants. Home heaters and gas stoves can also produce substantial amounts of NO_2 in indoor settings.

NO_2 Air Quality, 1983–2002
Based on Annual Arithmetic Average



1983–02: 21% decrease
1993–02: 11% decrease

NO_x Emissions, 1983–2002



1983–02: 15% decrease
1993–02: 12% decrease

Health and Environmental Effects

Short-term exposures (e.g., less than 3 hours) to low levels of NO_2 may lead to changes in airway responsiveness and lung function in individuals with preexisting respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO_2 may lead to increased susceptibility to respiratory infection and may cause irreversible alterations in lung structure. NO_x react in the air to form ground-level ozone and fine particle pollution, which are associated with adverse health effects.

NO_x contribute to a wide range of environmental effects directly and when combined with other precursors in acid rain and ozone. Increased nitrogen inputs to terrestrial and wetland systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems such as those found in estuarine and coastal waters (e.g., Chesapeake Bay) can lead to eutrophication (a condition that promotes excessive algae growth, which can lead to a severe depletion of dissolved oxygen and increased levels of toxins harmful to aquatic life). Nitrogen, alone or in acid rain, also can acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum that are toxic to plants. Acidification of surface waters creates conditions of low pH and levels of aluminum that are toxic to fish and other aquatic organisms. NO_x also contribute to visibility impairment.

Trends in NO_2 Levels and NO_x Emissions

Since 1983, monitored levels of NO_2 have decreased 21 percent. These downward trends in national NO_2 levels are reflected in all regions of the country. Nationally, average NO_2 concentrations are well below the NAAQS and are currently at the lowest levels recorded in the past 20 years. All areas of the country that once violated the NAAQS for NO_2 now meet that standard. Over the past 20 years, national emissions of NO_x have declined by almost 15 percent. The reduction in emissions for NO_x presented here differs from the increase in NO_x emissions reported in previous editions of this report. In particular, this report's higher estimate of NO_x emissions in the 1980s and early 1990s reflects an improved understanding of emissions from real-world driving. While overall NO_x emissions are declining, emissions from some sources such as nonroad engines have actually increased since 1983. These increases are of concern given the significant role NO_x emissions play in the formation of ground-level ozone (smog) as well as other environmental problems like acid rain and nitrogen loadings to waterbodies described above. In response, EPA has proposed regulations that will significantly control NO_x emissions from nonroad diesel engines.



GROUND-LEVEL OZONE (O_3)

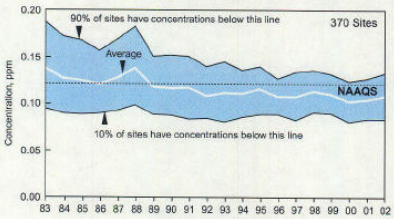
Nature and Sources of Ozone

Ground-level ozone (the primary constituent of smog) continues to be a pollution problem throughout many areas of the United States.

Ozone is not emitted directly into the air but is formed by the reaction of VOCs and NO_x in the presence of heat and sunlight. Ground-level ozone forms readily in the atmosphere, usually during hot summer weather. VOCs are emitted from a variety of sources, including motor vehicles, chemical plants, refineries, factories, consumer and commercial products, and other industrial sources. NO_x is emitted from motor vehicles, power plants, and other sources of combustion. Changing weather patterns contribute to yearly differences in ozone concentrations from region to region. Ozone and the pollutants that form ozone also can be transported into an area from pollution sources found hundreds of miles upwind.

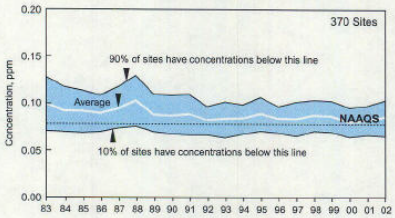
Ozone occurs naturally in the stratosphere and provides a protective layer high above the Earth. See page 26 for more information on the stratospheric ozone layer.

Ozone Air Quality, 1983–2002
Based on Annual 2nd Maximum 1-Hour Average



1983–02: 22% decrease
1993–02: 2% decrease

Ozone Air Quality, 1983–2002
Based on Annual 4th Maximum 8-Hour Average



1983–02: 14% decrease
1993–02: 4% increase

Health and Environmental Effects

Short-term (1- to 3-hour) and prolonged (6- to 8-hour) exposures to ambient ozone have been linked to a number of health effects of concern. For example, health effects attributed to ozone exposure include significant decreases in lung function and increased respiratory symptoms such as chest pain and cough. Exposures to ozone can make people more susceptible to respiratory infection, result in lung inflammation, and aggravate preexisting respiratory diseases such as asthma. Also, increased hospital admissions and emergency room visits for respiratory problems have been associated with ambient ozone exposures. These effects generally occur while individuals are actively exercising, working, or playing outdoors. Children, active outdoors during the summer when ozone levels are at their highest, are most at risk of experiencing such effects. Other at-risk groups include adults who are active outdoors (e.g., some outdoor workers) and individuals with preexisting respiratory disease such as asthma and chronic obstructive pulmonary disease. In addition, longer-term exposures to moderate levels of ozone present the possibility of irreversible changes in the lung structure, which could lead to premature aging of the lungs and worsening of chronic respiratory illnesses.

Ozone also affects vegetation and ecosystems, leading to reductions in agricultural crop and commercial forest yields, reduced growth and survivability of tree seedlings, and increased plant susceptibility to disease, pests, and other environmental stresses (e.g., harsh weather). In long-lived species, these effects may become evident only after several years or even decades, thus having the potential for long-term effects on forest ecosystems. Ground-level ozone damage to the foliage of trees and other plants can also decrease the aesthetic value of ornamental species as well as the natural beauty of our national parks and recreation areas.

Trends in Ozone Levels, Related Emissions

In 1997, EPA revised the NAAQS for ozone by setting an 8-hour standard at 0.08 ppm. Currently, EPA is tracking trends based on 1-hour and 8-hour data. Over the past 20 years, national ambient ozone levels decreased 22 percent based on 1-hour data and 14 percent based on 8-hour data. Between 1983 and 2002, emissions of VOCs (excluding wildfires and prescribed burning) decreased 40 percent. During that same time, emissions of NO_x decreased 15 percent. Additional NO_x reductions will be necessary before more substantial ozone air quality improvements are realized. For example, future emission reductions from existing and recently enacted NO_x control programs such as the NO_x SIP Call, Tier 2, Heavy Duty Diesel, Non-road Proposal, and, potentially, Clear Skies legislation will result in millions of fewer tons of NO_x emissions.

For the period 1983 to 2002, a downward national trend in 1-hour and 8-hour ozone levels occurred in most geographic areas in the country. The Northeast and Pacific Southwest exhibited the most substantial improvement for 1-hour and 8-hour ozone levels. The Mid-Atlantic and North Central regions experienced minimal decreases in 8-hour ozone levels. In contrast, the Pacific Northwest region showed a slight increase in the 8-hour ozone over the period 1983 to 2002.

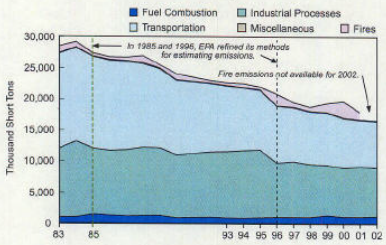
For the 10-year period 1993–2002, the national trend in 8-hour ozone shows a 4 percent increase and the national trend in 1-hour ozone shows a 2 percent decrease. However, standard statistical tests show that these trends are not statistically significant. Ozone concentrations varied over this 10-year period from year to year but did not change overall.



Regional trends can provide additional information to understand progress on ozone levels. For example, the trend in 8-hour ozone for the Pacific Southwest shows the 20-year trend (1983-2002) as a 29 percent decrease. When considering the Los Angeles area separately, the trend for Los Angeles shows a 49 percent decrease for the 20-year period and a 15 percent decrease for the other locations in the Pacific Southwest. For the 10-year period 1993-2002, the Pacific Southwest has an overall 13 percent decrease in 8-hour ozone. However, when considering Los Angeles separately, the Los Angeles area has a 28 percent decrease for the 10-year period while the Pacific Southwest without Los Angeles has a 5 percent decrease. This illustrates that national assessments for ozone do not describe trends completely, particularly where control measures such as those implemented in Los Angeles have had a significant effect in reducing ozone concentrations.

It is important to note that year-to-year changes in ambient ozone trends are influenced by meteorological conditions, population growth, and changes in emission levels of ozone precursors (i.e., VOCs and NO_x) resulting from ongoing control measures. For example, to further evaluate the 10-year

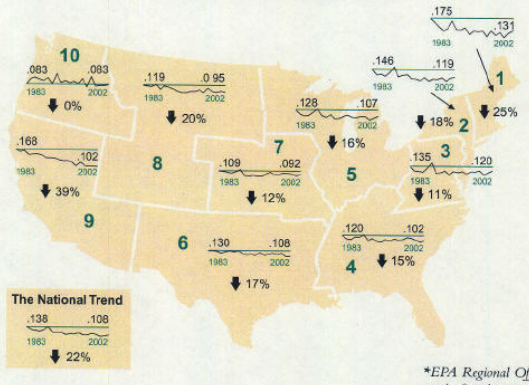
VOC Emissions, 1983–2002



1983–02: 40% decrease
1993–02: 25% decrease

Trend in 1-Hour Ozone Levels, 1983–2002, Averaged across EPA Regional Office Boundaries*

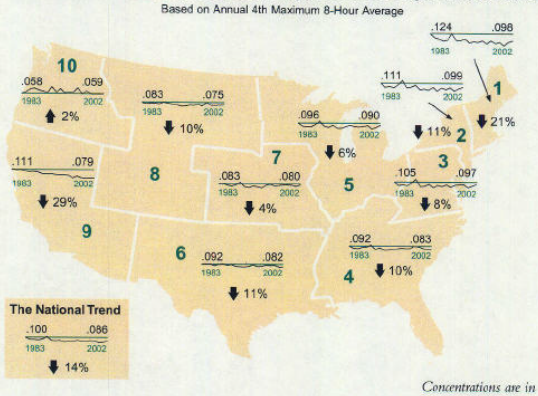
Based on Annual 2nd Highest Daily Maximum



EPA Regional Office contacts can be found at www.epa.gov/epahome/locate2.htm.

Trend in 8-Hour Ozone Levels, 1983–2002, Averaged across EPA Regional Office Boundaries

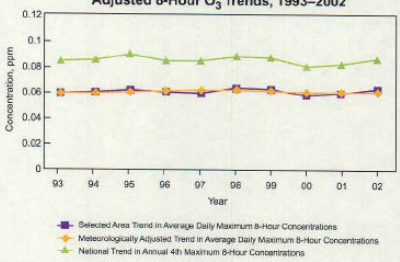
Based on Annual 4th Maximum 8-Hour Average



Concentrations are in parts per million (ppm).

8-hour ozone trends, EPA applied a model to the annual rate of change in ozone based on measurements in 53 metropolitan areas. This model adjusted the ozone data in these areas to account for the influence of local meteorological conditions, including surface temperature and windspeed. The figure below shows the aggregated trend in 8-hour ozone for these 53 areas adjusted for meteorological conditions for the 10-year period 1993-2002. The figure also shows the aggregated trend for these areas unadjusted for meteorology and the national average in 8-hour ozone. From this figure, the meteorologically adjusted trend for this 10-year period can be seen as relatively flat.

Comparison of Actual and Meteorological Adjusted 8-Hour O_3 Trends, 1993–2002



In 2002, meteorological conditions were favorable for relatively high ozone concentrations primarily in the eastern half of the nation as evidenced by the higher observed 8-hour ozone compared to meteorologically adjusted levels. On average, the June through August period in 2002 was the third warmest year on record. A preliminary review of these meteorological conditions indicates that they were similar to conditions experienced in 1988 in the eastern United States—another high-ozone year and the fourth warmest summer period on record. By way of comparison, the average daily maximum 4th-highest 8-hour ozone concentrations throughout the Eastern United States showed decreases of approximately 15 to 20 percent between 1988 and 2002. This indicates regional improvements in 8-hour ozone concentrations.

Furthermore, preliminary examination of meteorologically adjusted 8-hour ozone on a subregional basis in the Eastern United States reveals a pattern of increasing ozone through 1998 followed by a period of generally improving ozone air quality. This reversal appears to correspond to the implementation of regional NO_x reductions from power plants (see Acid Rain section).

Twenty-eight of our national parks had ozone trend data for the 10-year period 1993-2002. Seven monitoring sites in five of these parks experienced statistically significant upward trends in 8-hour ozone levels: Great Smoky Mountains (Tennessee), Craters of the Moon (Idaho), Mesa Verde (Colorado), Denali (Alaska), and Acadia (Maine). Monitoring data for one park showed statistically significant improvements over the same time period: Saguaro (Arizona). For the remaining 22 parks with ozone trends data, the 8-hour ozone levels at 13 increased only slightly between 1993 and 2002, while 5 showed decreasing levels and 4 were unchanged.

Although the recent national trends in 1-hour and 8-hour ozone are relatively unchanged, important regional decreases have occurred. EPA is continuing to investigate these regional assessments to further evaluate the trends in 1-hour and 8-hour ozone.



SULFUR DIOXIDE (SO_2)

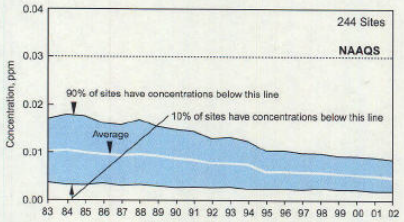
Nature and Sources of Sulfur Dioxide

Sulfur dioxide belongs to the family of SO_x gases. These gases are formed when fuel containing sulfur (mainly coal and oil) is burned at power plants and during metal smelting and other industrial processes. Most SO_2 monitoring stations are located in urban areas. The highest monitored concentrations of SO_2 are recorded near large industrial facilities. Fuel combustion, largely from electricity generation, accounts for most of the total SO_2 emissions.



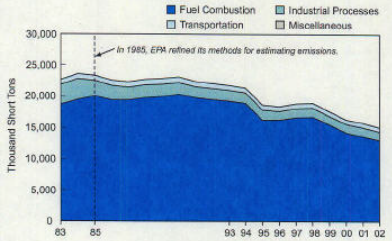
SO_2 Air Quality, 1983–2002

Based on Annual Arithmetic Average



1983–02: 54% decrease
1993–02: 39% decrease

SO_2 Emissions, 1983–2002



1983–02: 33% decrease
1993–02: 31% decrease

Health and Environmental Effects

High concentrations of SO_2 can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Short-term exposures of asthmatic individuals to elevated SO_2 levels during moderate activity may result in breathing difficulties that can be accompanied by symptoms such as wheezing, chest tightness, or shortness of breath. Other effects that have been associated with longer-term exposures to high concentrations of SO_2, in conjunction with high levels of PM, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. The subgroups of the population that may be affected under these conditions include individuals with heart or lung disease, as well as the elderly and children.

Together, SO_2 and NO_x are the major precursors to acidic deposition (acid rain), which is associated with the acidification of soils, lakes, and streams and accelerated corrosion of buildings and monuments. SO_2 also is a major precursor to $PM_{2.5}$, which is a significant health concern, and a main contributor to poor visibility. (See Acid Rain section, page 16, for a more detailed discussion.)

Trends in SO_2 Levels and Emissions

Nationally, average SO_2 ambient concentrations have decreased 54 percent from 1983 to 2002 and 39 percent over the more recent 10-year period 1993 to 2002. SO_2 emissions decreased 33 percent from 1983 to 2002 and 31 percent from 1993 to 2002. Reductions in SO_2 concentrations and emissions since 1990 are due, in large part, to controls implemented under EPA's Acid Rain Program, which began in 1995. In addition, in 2001 and 2002, energy consumption for electricity generation and industrial power leveled off; therefore, SO_2 and NO_x emissions from this sector did not increase as much as expected.

PARTICULATE MATTER (PM)

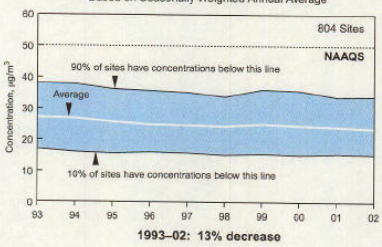
Nature and Sources of Particulate Matter

Particulate matter is the general term used for a mixture of solid particles and liquid droplets found in the air. Some particles are large enough to be seen as dust or dirt. Others are so small they can be detected only with an electron microscope. $PM_{2.5}$ describes the "fine" particles that are less than or equal to 2.5 μm in diameter. "Coarse fraction" particles are greater than 2.5 μm, but less than or equal to 10 μm in diameter. PM_{10} refers to all particles less than or equal to 10 μm in diameter (about one-seventh the diameter of a human hair). PM can be emitted directly or formed in the atmosphere. "Primary" particles, such as dust from roads or black carbon (soot) from combustion



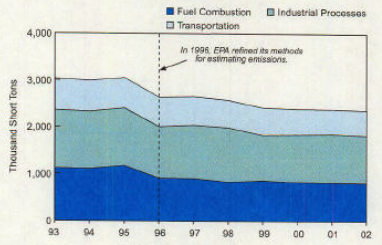
sources, are emitted directly into the atmosphere. "Secondary" particles are formed in the atmosphere from primary gaseous emissions. Examples include sulfates formed from SO_2 emissions from power plants and industrial facilities; nitrates formed from NO_x emissions from power plants, automobiles, and other combustion sources; and carbon formed from organic gas emissions from automobiles and industrial facilities. The chemical composition of particles depends on location, time of year, and weather. Generally, coarse PM is composed largely of primary particles and fine PM contains many more secondary particles.

PM_{10} Air Quality, 1993–2002
Based on Seasonally Weighted Annual Average



1993–02: 13% decrease

PM_{10} Emissions, 1993–2002



1993–02: 22% decrease

Health and Environmental Effects

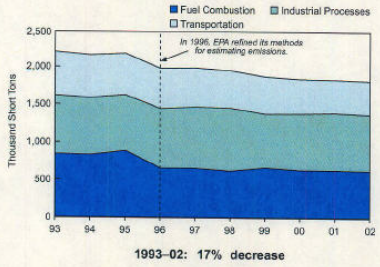
Particles that are small enough to get into the lungs (those less than or equal to 10 μm in diameter) can cause numerous health problems and have been linked with illness and death from heart and lung disease. Various health problems have been associated with long-term (e.g., multi-year) exposures as well as daily and, potentially, peak (e.g., 1-hour) exposures to particles. Particles can aggravate respiratory conditions such as asthma and bronchitis and have been associated with cardiac arrhythmias (heartbeat irregularities) and heart attacks. Particles of concern can include both fine and coarse-fraction particles, although fine particles have been more clearly linked to the most serious health effects. People with heart or lung disease, the elderly, and children are at highest risk from exposure to particles.

In addition to health problems, PM is the major cause of reduced visibility in many parts of the United States. Airborne particles also can impact vegetation and ecosystems and can cause damage to paints and building materials. (See sections on Acid Rain, NO_2, and SO_2.)

Trends in PM_{10} Levels and Direct Emissions

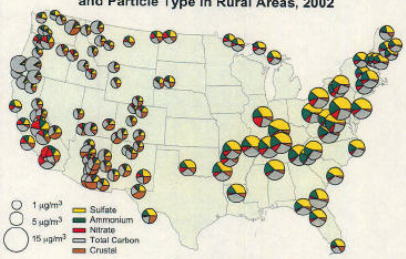
Between 1993 and 2002, average PM_{10} concentrations decreased 13 percent, while direct PM_{10} emissions decreased 22 percent.

$PM_{2.5}$ Emissions, 1993–2002



1993–02: 17% decrease

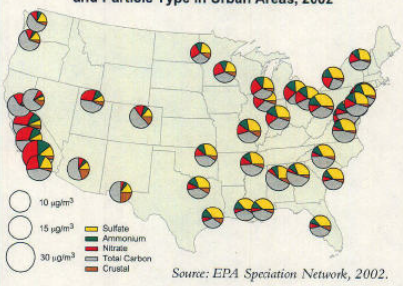
Annual Average $PM_{2.5}$ Concentrations (µg/m³) and Particle Type in Rural Areas, 2002



Source: Interagency Monitoring of Protected Visual Environments Network, 2002.

Note: Direct comparisons of the information in these two maps should take into consideration the fact that one is a rural network and the other is an urban network and that there are differences in instruments and measurement methods.

Annual Average $PM_{2.5}$ Concentrations (µg/m³) and Particle Type in Urban Areas, 2002



Source: EPA Speciation Network, 2002.

If enacted, President Bush's Clear Skies Initiative would decrease PM concentrations by dramatically reducing emissions of SO_2 and NO_x. This initiative would also reduce mercury emissions (www.epa.gov/clearskies).

Trends in $PM_{2.5}$ Levels and Direct Emissions

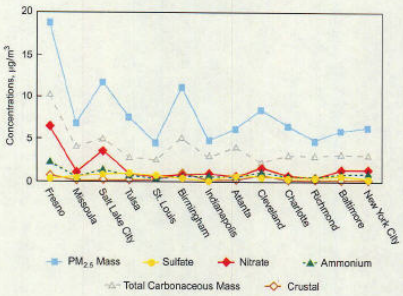
The chart at lidf shows that direct $PM_{2.5}$ emissions from man-made sources decreased 17 percent nationally between 1993 and 2002. This chart tracks only directly emitted particles and does not account for secondary particles, which typically account for a large percentage of $PM_{2.5}$. As discussed previously, the principal secondary particles are sulfates, nitrates, and organic carbon.

The maps at left show how sulfates, nitrates, and total carbon (black carbon and organic carbon) along with other components, contribute to $PM_{2.5}$ concentrations. The first map represents the most recent year of data (September 2001–August 2002) available from the Interagency Monitoring of Protected Visual Environments (IMPROVE) network, which was established in 1987 to track trends in pollutants, such as $PM_{2.5}$, that contribute to visibility impairment. Because the monitoring sites are located in rural areas throughout the country, the network is a good source for assessing regional differences in $PM_{2.5}$. The second map represents the most recent year of data (September 2001–August 2002) from EPA's urban speciation network, which was established in 1999. All of these sites are located in urban areas.

The IMPROVE data show that $PM_{2.5}$ levels in rural areas are highest in the eastern United States and southern California, as shown by the larger circles. Sulfates and associated ammonium dominate the East, with carbon as the next most prevalent component. Sulfate concentrations in the East largely result from SO_2 emissions from coal-fired power plants. In California and other areas of the West, carbon and nitrates make up most of the $PM_{2.5}$ measured.

The urban speciation data show that sites in urban areas, as shown in the circles in the map at right, generally have higher annual average $PM_{2.5}$ concentrations than nearby rural areas. Urban sites in the East include a large percentage of carbon and sulfates (and ammonium). Urban sites in the Midwest and far West (and especially in California) include a large percentage of carbon and nitrates.

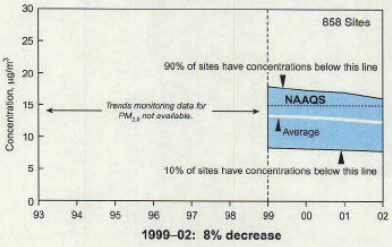
Urban Increments of $PM_{2.5}$ Mass and Major Chemical Species, 2002



Source: Interagency Monitoring of Protected Visual Environments Network and EPA Speciation Network, 2002.

The lines in the figure above display West-to-East urban increments of $PM_{2.5}$ levels and the major chemical constituents. EPA compared the annual average $PM_{2.5}$ concentration at each of these 13 sites with measurements from a nearby rural site. The urban excess shown above illustrates the difference in concentrations from these paired sites. In general, the single largest component of urban excess is total carbonaceous material. There is little or no excess of sulfates (confirming the regional nature of this pollutant) and only moderate urban excess of nitrate at some locations. The components of $PM_{2.5}$ showing urban excesses come from sources local to the urban area. This illustrates the importance of local, metropolitan area controls in addition to regional control programs.

$PM_{2.5}$ Air Quality, 1993–2002
Based on Seasonally Weighted Annual Average



In 1999, EPA and its state, tribal, and local air pollution control partners deployed a monitoring network to begin measuring $PM_{2.5}$ concentrations nationwide. Now that there are several years of monitoring data available, EPA has begun to examine trends at the national level. Annual average $PM_{2.5}$ concentrations decreased 8 percent nationally from 1999 to 2002. Much of that reduction occurred in the Southeast where the monitored levels of $PM_{2.5}$ decreased 18 percent from 1999 to 2002. Lower annual average concentrations in the Southeast can be attributed, in part, to decreases in sulfates, which largely result from power plant emissions of SO_2.

$PM_{2.5}$ concentrations vary regionally. Based on the monitoring data, parts of California and many areas in the eastern United States have annual average $PM_{2.5}$ concentrations above the level of the annual $PM_{2.5}$ standard. With few exceptions, the rest of the country generally has annual average concentrations below the level of the annual $PM_{2.5}$ health standard.

Because of health effects associated with short-term exposure to $PM_{2.5}$, daily levels are also of concern. Actual and forecasted daily air quality is assessed and reported using EPA's Air Quality Index (AQI). The forecasted AQI is typically featured in *USA Today* and on *The Weather Channel*, as well as in local media. In the summertime, ozone is usually the pollutant of concern on days when the air is unhealthy. But $PM_{2.5}$ also plays a role in unhealthy air quality in the summertime in some regions, even on days when the ozone levels are not high. $PM_{2.5}$ is also responsible for days with unhealthy air in cooler months. Because of its complex chemical makeup, $PM_{2.5}$ levels can be in the unhealthy range any time during the year (sulfates are usually higher in the summer; carbon and nitrates, in the winter). Many major metropolitan areas are beginning year-round reporting and forecasting of AQI values through the incorporation of daily $PM_{2.5}$ information.

CARBON MONOXIDE (CO)

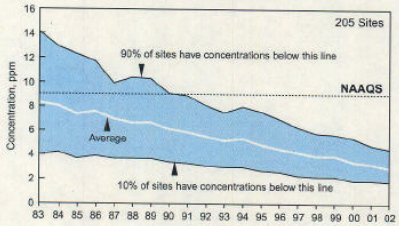
Nature and Sources of Carbon Monoxide

Carbon monoxide is a colorless and odorless gas, formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 60 percent of all CO emissions nationwide. Nonroad vehicles account for the remaining CO emissions from transportation sources. High concentrations of CO generally occur in areas with heavy traffic congestion. In cities, as much as 95 percent of all CO emissions may come from automobile exhaust. Other sources of CO emissions include industrial processes,



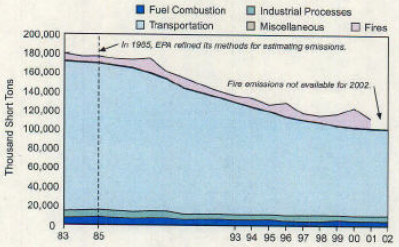
nontransportation fuel combustion, and natural sources such as wildfires. Peak CO concentrations typically occur during the colder months of the year when CO automotive emissions are greater and nighttime inversion conditions (where air pollutants are trapped near the ground beneath a layer of warm air) are more frequent.

CO Air Quality, 1983–2002
Based on Annual 2nd Maximum 8-hour Average



1983–02: 65% decrease
1993–02: 42% decrease

CO Emissions, 1983–2002



1983–02: 41% decrease
1993–02: 21% decrease

Health Effects

CO enters the bloodstream through the lungs and reduces oxygen delivery to the body's organs and tissues. The health threat from levels of CO sometimes found in the ambient air is most serious for those who suffer from cardiovascular disease such as angina pectoris. At much higher levels of exposure not commonly found in ambient air, CO can be poisonous, and even healthy individuals may be affected. Visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, and difficulty in performing complex tasks are all associated with exposure to elevated CO levels.

Trends in CO Levels and Emissions

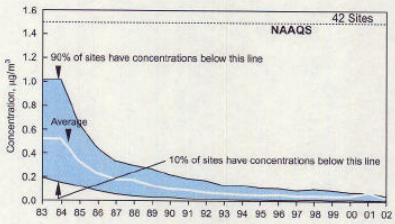
Nationally, the 2002 ambient average CO concentration is almost 65 percent lower than that for 1983 and is the lowest level recorded during the past 20 years. CO emissions from transportation sources, the major contributor to ambient CO concentration, decreased dramatically during this period as indicated by EPA's improved new model of highway vehicle emissions. In particular, this report's higher estimate of CO emissions in the 1980s and early 1990s reflects an improved understanding of emissions from real-world driving. Between 1993 and 2002, ambient CO concentrations decreased 42 percent. Total CO emissions decreased 21 percent (excluding wildfires and prescribed burning) for the same period. This improvement in air quality occurred despite a 23 percent increase in vehicle miles traveled during the 10-year period.

LEAD (Pb)

Nature and Sources of Lead

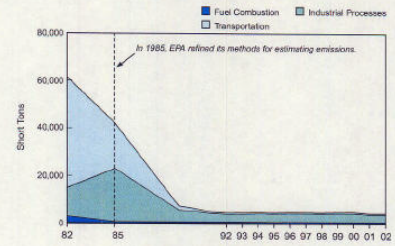
In the past, automotive sources were the major contributor of lead emissions to the atmosphere. As a result of EPA's regulatory efforts to reduce the content of lead in gasoline, however, the contribution of air emissions of lead from the transportation sector, and particularly the automotive sector, has greatly declined over the past two decades. Today, industrial processes, primarily metals processing, are the major source of lead emissions to the atmosphere. The highest air concentrations of lead are usually found in the vicinity of smelters and battery manufacturers.

Lead Air Quality, 1983–2002
Based on Annual Maximum Quarterly Average



1983–02: 94% decrease
1993–02: 57% decrease

Lead Emissions, 1982–2002[a]



1982–02: 93% decrease
1993–02: 5% decrease

[a] As of 2002, lead emissions are included in the Toxic National Emissions Inventory.

Health and Environmental Effects

Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ. Recent studies also show that lead may be a factor in high blood pressure and subsequent heart disease. Lead can also be deposited on the leaves of plants, presenting a hazard to grazing animals and humans through ingestion.

Trends in Lead Levels and Emissions

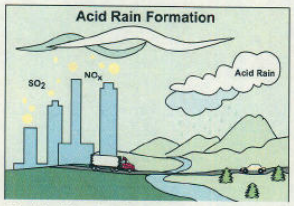
Because of the phaseout of leaded gasoline, lead emissions and concentrations decreased sharply during the 1980s and early 1990s. The 2002 average air quality concentration for lead is 94 percent lower than in 1983. Emissions of lead decreased 93 percent over the 21-year period 1982–2002. These large reductions in long-term lead emissions from transportation sources have changed the nature of the ambient lead problem in the United States. Because industrial processes are now responsible for all violations of the lead NAAQS, the lead monitoring strategy currently focuses on emissions from these point sources. Today, the only violations of the lead NAAQS occur near large industrial sources such as lead smelters and battery manufacturers. Various enforcement and regulatory actions are being actively pursued by EPA and the states for cleaning up these sources.



Acid Rain

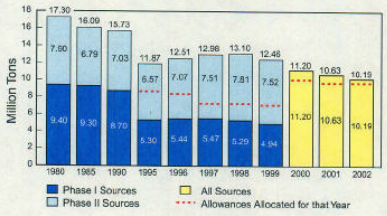
Nature and Sources of the Problem

Acidic deposition or "acid rain" occurs when emissions of sulfur dioxide and nitrogen oxides in the atmosphere react with water, oxygen, and oxidants to form acidic compounds. These compounds fall to the Earth in either dry form (gas and particles) or wet form (rain, snow, and fog). Some are carried by the wind, sometimes hundreds of miles, across state and national borders. In the United States, about 63 percent of annual SO_2 emissions and 22 percent of NO_x emissions are produced by burning fossil fuels for electricity generation.

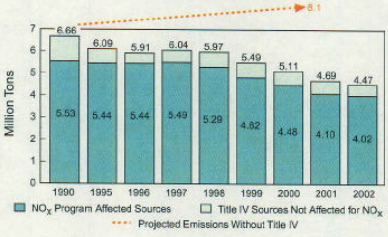


Coal-fired electric utilities and other sources that burn fossil fuels emit SO_2 and NO_x.

SO_2 Emissions Covered under the Acid Rain Program



NO_x Emissions Covered under the Acid Rain Program



Health and Environmental Effects

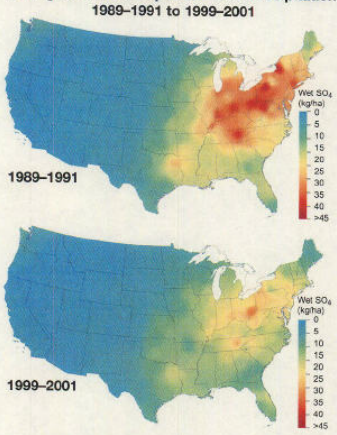
In the environment, acid deposition causes soils and waterbodies to acidify (making the water unsuitable for some fish and other wildlife) and damages some trees, particularly at high elevations. It also speeds the decay of buildings, statues, and sculptures that are part of our national heritage. The nitrogen portion of acid deposition contributes to eutrophication in coastal ecosystems, the symptoms of which include algal blooms (some of which may be toxic), fish kills, and loss of plant and animal diversity. Finally, acidification of lakes and streams can increase the amount of methyl mercury available in aquatic systems. Most exposure to mercury comes from eating contaminated fish. Reductions in SO_2 and NO_x have begun to reduce some of these negative environmental effects and are leading to significant improvements in public health.

Program Structure

The goal of EPA's Acid Rain Program is to improve public health and the environment by reducing emissions of SO_2 and NO_x. The program was implemented in two phases: Phase I for SO_2 began in 1995 and targeted the largest and highest-emitting coal-fired power plants. Phase I for NO_x began in 1996. Phase II for both pollutants began in 2000 and sets restrictions on Phase I plants as well as smaller coal-, gas-, and oil-fired plants. Approximately 3,000 units are now affected by the Acid Rain Program.

By 2010, the Acid Rain Program will reduce annual SO_2 emissions by half from 1980 levels. The program sets a permanent cap of 8.95 million tons on the total amount of SO_2 that may be emitted by power plants nationwide. It employs an emissions trading program to achieve emission reductions more efficiently and cost-effectively. Sources are allocated allowances each year (one allowance equals 1 ton of SO_2 emissions), which can be bought or sold or banked for future use. This approach gives sources the flexibility and

Change in Sulfate Deposition from Precipitation 1989–1991 to 1999–2001



Source: U.S. EPA analysis of National Atmospheric Deposition Program data.

incentive to reduce emissions at the lowest cost and the cap ensures that emission reductions are maintained over time.

The NO_x component of the Acid Rain Program limits the emission rate for all affected utilities, resulting in a 2 million ton NO_x reduction from 1990 levels by 2001. There is no cap on total NO_x emissions, but under this program a source can choose to overcontrol at units where it is technically easier to control emissions, average these emissions with those at their other units, and thereby achieve overall emissions reductions at lower cost.

Emissions and Atmospheric Trends

SO_2 emissions reductions were significant in the first 6 years of EPA's Acid Rain Program. In 2002, sources in the Acid Rain Program emitted 10.2 million tons, down from 15.7 million tons in 1990. Emissions of SO_2 in 2002 were 400,000 tons less than in 2001. As in 2001, sources again drew down the bank of unused allowances in 2002, resulting in emission levels greater than the allowances allocated in 2002 but still lower than emissions during any previous year.

NO_x emissions from all Acid Rain Program sources have also declined since 1990. NO_x emissions have decreased steadily from 6 million tons in 1997 to 4.5 million tons in 2002. The more than 1,000 sources affected by the Acid Rain NO_x Program emitted 4.1 million tons in 2000, approximately 1.5 million tons (25 percent) less than they did in 1990. NO_x emissions from these sources in 2001 were 3.6 million tons (over 40 percent) below what emissions were projected to have been in 2000 without the Acid Rain Program.

For all years from 1995 through 2001, wet sulfate deposition exhibited dramatic and unprecedented reductions over a large area of the eastern United States. Average sulfate deposition in 1999-2001 has decreased more than 8 kg/ha from 30-40 kg/ha in 1989-1991 in much of the mid-Appalachian and the northeastern United States. Similarly, sulfate air concentrations, which contribute to human health and visibility problems, were reduced significantly in the East. Wet nitrogen deposition decreased slightly in some places between 1989-1991 and 1999-2001, but increased in others up to 3 kg/ha in areas with significant agricultural activity and areas where vehicles are the predominant source of NO_x emissions.

These reductions in acid deposition and improvements in air quality are directly related to the large regional decreases in SO_2 and NO_x emissions resulting from the Acid Rain Program. The largest reductions in wet sulfate deposition occurred across the Ohio River Valley and in the Northeast. The largest reductions in sulfate concentrations also occurred along the Ohio River Valley and in states downwind. Reductions in the East in hydrogen ion concentrations, the primary indicator of precipitation acidity, were similar to those of sulfate concentrations, both in magnitude and location. The largest reductions in wet nitrate deposition were in the northeastern United States, Michigan, and Texas. The states immediately west of the Mississippi River and in the eastern Plains, parts of the Southeast, and California showed the highest increases in nitrogen deposition even though emissions from acid rain sources have not increased substantially there. Acid rain sources account for only 22 percent of nationwide nitrogen emissions, so emissions trends in other source categories, especially agriculture and mobile sources, also affect air concentrations and deposition of nitrogen.

Visibility

Nature and Sources of the Problem

Visibility impairment is one of the most obvious effects of air pollution and occurs at many of the best known and most treasured natural parks and wilderness areas, such as the Grand Canyon, Yosemite, Yellowstone, Mount Rainier, Shenandoah, and the Great Smoky Mountains National Park, as well as in urban areas.

Visibility impairment results from the scattering and absorption of light by air pollution, including particles and gases. The scattering and absorption by air pollution limits the distance we can see and can also degrade the color, clarity, and contrast of scenes. The same fine particles that are linked to serious health effects and premature death can also significantly affect our ability to see.

Some particles that contribute to visibility impairment are emitted directly into the atmosphere from their sources, such as dust from roads or elemental carbon (soot) from wood combustion. In other cases, particles are formed in the atmosphere from primary gaseous emissions such as sulfates formed from SO_2 emissions from power plants and other industrial facilities and nitrates formed from NO_x emissions from power plants, automobiles, and other types of combustion sources. These types of particles are referred to as secondarily formed particles. In the eastern United States, reduced visibility is mainly attributable to secondarily formed sulfates. Although these secondarily formed particles still account for a major portion of particulate loading in the West, primary emissions from sources like wood smoke contribute a larger percentage of the total particulate loading than in the East.

	East	West
Sulfates	60%–86%	25%–50%
Organic Carbon	10%–18%	25%–40%
Nitrates	7%–16%	5%–45%
Elemental Carbon (soot)	5%–8%	5%–15%
Crustal Material (soil dust)	5%–15%	5%–25%

This table shows pollutants that contribute to visibility impairment in the eastern and western parts of the United States. Sulfates are generally the largest contributor in both the East and the West.



The Clean Air Act provides for the protection of visibility in our national parks and wilderness areas, also known as Class I areas. There are 156 Class I areas across the United States as shown. (See ***http://www2.nature.nps.gov/ard/parks/ClassIAreas.jpg****)*

Also, humidity can significantly increase the effect of pollution on visibility, causing some particles to become more efficient at scattering light and causing visibility impairment. Annual average relative humidity levels are 70 to 80 percent in the East as compared with 50 to 60 percent in the West. Poor summer visibility in the eastern United States is primarily the result of high sulfate concentrations combined with high humidity levels.

Program Structure

The Clean Air Act provides for the protection of visibility in national parks and wilderness areas, also known as Class I areas. The Clean Air Act's national goal calls for remedying existing visibility impairment and preventing future impairment in these 156 Class I areas across the country.

In 1987, the IMPROVE network was established as a cooperative effort among EPA, states, National Park Service, U.S. Forest Service, Bureau of Land Management, and U.S. Fish and Wildlife Service. Data are collected and analyzed from this network to determine the type of pollutants primarily responsible for reduced visibility and to track progress toward the Clean Air Act's national goal.

In April 1999, EPA initiated a new regional haze program. The program addresses visibility impairment in national parks and wilderness areas caused by numerous sources located over broad regions. The program sets a framework for states to develop goals for improving visibility on the worst visibility days each year and to adopt emission strategies to meet these goals. Because fine particles are frequently transported hundreds of miles, pollution that occurs in one state may contribute

to the visibility impairment in another state. For this reason, EPA encourages states to coordinate through regional planning organizations to develop regional strategies to improve visibility and to reduce pollutants that contribute to fine particles and ground-level ozone. States are also required to review progress every 5 years and revise any strategies as necessary.

In 2000, the IMPROVE Monitoring Network started an expansion from 30 to 110 monitoring sites. The expansion work was completed in the fall of 2001. States, tribes, and federal land management agencies support more than 50 additional sites. Collectively, these will be used to track future progress in accordance with the regional haze program.

Visibility Trends

Without the effects of pollution, a natural visual range in the United States is approximately 75 to 150 km (45 to 90 miles) in the East and 200 to 300 km (120 to 180 miles) in the West.

Data collected by the IMPROVE network show that visibility impairment for the worst visibility in the West is similar to days with the best visibility in the East. In 2001, mean visual range for the worst days in the East was only 29 km (48.3 miles) compared to 117 km (195 miles) for the best visibility. In the West, visibility impairment for the worst days remained relatively unchanged over the 10-year period, with the mean visual range for 2001 (103 km) nearly the same as the 1992 level (98 km).



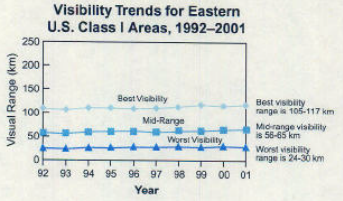


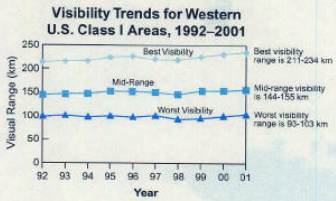
Shenandoah National Park under bad and good visibility conditions. The visual range in the top photo is 25 km while the visual range in the bottom photo is 180 km.

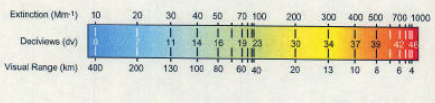




Yosemite National Park under bad and good visibility conditions. The visual range in the top photo is 111 km while the visual range in the bottom photo is greater than 208 km.







Visibility Metrics. *Comparisons of extinction (Mm^{-1}), deciviews (dv), and visual range (km). Notice the difference in the three scales: 10 Mm^{-1} corresponds to about 400 km visual range and 0.0 dv, while 1,000 Mm^{-1} is about 4 km visual range and 46 dv.*

Toxic Air Pollutants

Nature and Sources of the Problem

Toxic air pollutants, or air toxics, are those pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects. Air toxics may also cause adverse environmental and ecological effects. Examples of toxic air pollutants include benzene, found in gasoline; perchloroethylene, emitted from some dry cleaning facilities; and methylene chloride, used as a solvent by a number of industries. Most air toxics originate from man-made sources, including mobile sources (e.g., cars, trucks, construction equipment) and stationary sources (e.g., factories, refineries, power plants), as well as indoor sources (e.g., some building materials and cleaning solvents). Some air toxics are also released from natural sources such as volcanic eruptions and forest fires. The Clean Air Act identifies 188 air toxics from industrial sources. EPA has identified 21 pollutants as mobile source air toxics, including diesel particulate matter and diesel exhaust organic gases. In addition, EPA has listed 33 urban hazardous air pollutants that pose the greatest threats to public health in urban areas.

Health and Environmental Effects

People exposed to toxic air pollutants at sufficient concentrations may experience various health effects, including cancer and damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems.

In addition to exposure from breathing air toxics, risks also are associated with the deposition of toxic pollutants onto soils or surface waters, where they are taken up by plants and ingested by animals and eventually magnified up through the food chain. Like humans, animals may experience health problems due to air toxics exposure.

Trends in Toxic Air Pollutants

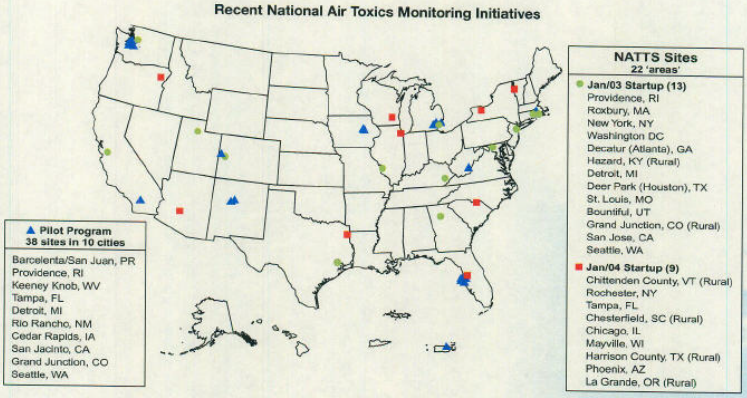
EPA and states do not maintain an extensive nationwide monitoring network for air toxics as they do for many of the other pollutants discussed in this report. Although EPA, states, tribes, and local air regulatory agencies collect monitoring data for a number of toxic air pollutants, both the chemicals monitored and the geographic coverage of the monitors vary from state to state. Currently, there are about 300 air toxics monitoring sites in operation. The available monitoring data help air pollution control agencies track toxic air pollutant levels in various locations around the country. EPA



is working with its regulatory partners to build on the existing monitoring sites to create a national monitoring network for a number of toxic air pollutants. The goal is to ensure that those compounds that pose the greatest risk are measured. EPA initiated a 12-month pilot monitoring project in 2001 in four urban areas and six small city/rural areas (see map below). The pilot program was developed to help answer several important national network design questions (e.g., sampling and analysis precision, sources of variability, minimal detection levels). A National Air Toxic Trend Site (NATTS) network was launched in early 2003. The central goal of the NATTS network is to detect trends in high-risk air toxics such as benzene, formaldehyde, 1,3-butadiene, acrolein, and chromium. By early 2004, 22 NATT sites (16 urban and 6 rural) will be operating (see map). For the latest information on national air toxics monitoring, see **www.epa.gov/ttn/amtic/airtxfil.html**.

EPA also compiles an air toxics inventory as part of the National Emissions Inventory (NEI, formerly the National Toxics Inventory) to estimate and track national emissions trends for the 188 toxic air pollutants regulated under the Clean Air Act. In the NEI, EPA divides emissions into four types of sectors: (1) major (large industrial) sources; (2) area and other sources, which include smaller industrial sources like small dry cleaners and gasoline stations, as well as natural sources like wildfires; (3) onroad mobile sources, including highway vehicles; and (4) nonroad mobile sources like aircraft, locomotives, and construction equipment.

Recent National Air Toxics Monitoring Initiatives



▲ Pilot Program
38 sites in 10 cities

Barceleta/San Juan, PR
Providence, RI
Keeney Knob, WV
Tampa, FL
Detroit, MI
Rio Rancho, NM
Cedar Rapids, IA
San Jacinto, CA
Grand Junction, CO
Seattle, WA

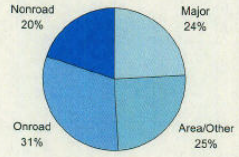
NATTS Sites
22 'areas'

● **Jan/03 Startup (13)**
Providence, RI
Roxbury, MA
New York, NY
Washington DC
Decatur (Atlanta), GA
Hazard, KY (Rural)
Detroit, MI
Deer Park (Houston), TX
St. Louis, MO
Bountiful, UT
Grand Junction, CO (Rural)
San Jose, CA
Seattle, WA

■ **Jan/04 Startup (9)**
Chittenden County, VT (Rural)
Rochester, NY
Tampa, FL
Chesterfield, SC (Rural)
Chicago, IL
Mayville, WI
Harrison County, TX (Rural)
Phoenix, AZ
La Grande, OR (Rural)

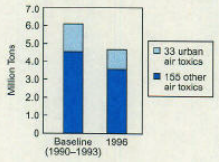
National Air Toxics Emissions, 1996

4.7 million tons



National Air Toxics Emissions

Total for 188 Toxic Air Pollutants



As shown in this pie chart, based on 1996 estimates (the most recent year of available data), the emissions of toxic air pollutants are relatively equally divided between the four types of sources. However, this distribution varies from city to city.

Based on the data in the NEI, estimates of nationwide air toxics emissions decreased by approximately 24 percent between baseline (1990-1993) and 1996. Thirty-three of these air toxics that pose the greatest threat to public health in urban areas have similarly decreased 31 percent. Although changes in how EPA compiled the national inventory over time may account for some differences, EPA and state regulations, as well as voluntary reductions by industry, have clearly achieved large reductions in overall air toxic emissions.

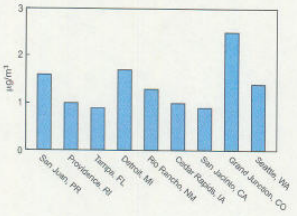
Trends for individual air toxics vary from pollutant to pollutant. Benzene, which is the most widely monitored toxic air pollutant, is emitted from cars, trucks, oil refineries, and chemical processes. The graph below shows trends for benzene at 95 urban monitoring sites around the country. These urban areas generally have higher levels of benzene than other areas of the country. Measurements taken at these sites show, on average, a 47 percent drop in benzene levels from 1994 to 2000. During this period, EPA phased in new (so-called tier 1) car

emission standards; required many cities to begin using cleaner burning gasoline; and set standards that required significant reductions in benzene and other pollutants emitted from oil refineries and chemical processes. EPA estimates that benzene emissions from all sources dropped 20 percent nationwide from 1990 to 1996. In the 2001 toxics pilot monitoring project, city averages of benzene ranged from about 0.9 to 2.5 $\mu g/m^3$.

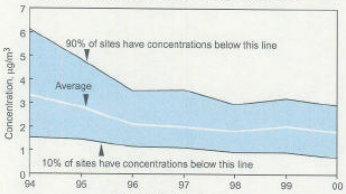
Risk Assessment

EPA has developed a National-Scale Air Toxics Assessment, which is a nationwide analysis of air toxics. It uses computer modeling of the 1996 NEI air toxics data as the basis for developing health risk estimates for 33 toxic air pollutants (a subset of the Clean Air Act's list of 188 air toxics plus diesel PM). The national-scale assessment is intended to provide state, local, and tribal agencies and others with a better understanding of the risks from inhalation exposure to toxic air pollutants from outdoor sources. It will help EPA and states prioritize data and research needs to better assess risk in the future and will provide a baseline to help measure future trends in estimated health risks. The next national-scale analysis will focus on 1999 data and is expected to be released by the end of 2003.

Benzene Levels in 2001 Pilot Monitoring Project



Ambient Benzene, Annual Average Urban Concentrations, Nationwide, 1994–2000



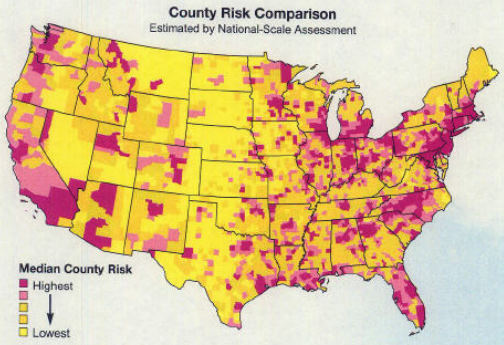
1994–00: 47% decrease

The map on page 23 shows a pattern of the distribution of relative cancer risk across the continental United States as estimated by the national-scale assessment. The highest ranking 20 percent of counties in terms of risk (622 counties) contain almost three-fourths of the U.S. population. Three air toxics (chromium, benzene, and formaldehyde) appear to pose the greatest nationwide carcinogenic risk. This map does not include the potential risk from diesel exhaust emissions. This is because existing health data are not sufficient to develop a numerical estimate of cancer risk for this pollutant. However, exposure to diesel exhaust is widespread, and EPA has concluded that diesel exhaust is a likely human carcinogen and ranks with the other substances that the national-scale assessment suggests pose the greatest relative risk. One air toxic, acrolein, is estimated to pose the highest potential nationwide risk for significant chronic adverse effects other than cancer. For more information, visit **www.epa.gov/ttn/atw/nata**.

This technical assessment represents an important step toward characterizing air toxics nationwide. It is designed to help identify general patterns in air toxics exposure and risk across the country and is not recommended as a tool to characterize or compare risk at local levels (e.g., to compare risks from one part of a city to another). More localized assessments, including monitoring and modeling, are under way to help characterize local-level risk.

Programs to Reduce Air Toxics

Since 1990, EPA's technology-based emission standards for industrial and combustion sources (e.g., chemical plants, oil refineries, dry cleaners, and municipal waste combustors) have proven extremely successful in reducing emissions of air toxics. Once fully implemented, these standards will cut annual emissions of toxic air pollutants by nearly 1.5 million tons from 1990 levels. Of this total reduction, dioxin emissions from municipal waste combustors and municipal waste incinerator units will have been reduced by approximately



99 percent and mercury emissions by 95 percent. Additional reductions are expected by 2005. EPA has also put into place important controls for motor vehicles and their fuels, including introduction of reformulated gasoline and low sulfur diesel fuel, and is taking additional steps to reduce air toxics from vehicles. Furthermore, air toxics emissions will further decline as the motor vehicle fleet turns over, with newer vehicles replacing older higher-emitting vehicles. By the year 2020, these requirements are expected to reduce emissions of a number of air toxics (benzene, formaldehyde, acetaldehyde, and 1,3-butadiene) from highway motor vehicles by about 75 percent and diesel PM by over 90 percent from 1990 levels.

In addition to national regulatory efforts, EPA's program includes work with communities on comprehensive local assessments, as well as federal and regional activities associated with protecting waterbodies from air toxics deposition (e.g., the Great Waters program, which includes the Great Lakes, Lake Champlain, Chesapeake Bay, and many coastal estuaries) and EPA initiatives concerning mercury and other persistent and bioaccumulative toxics. For indoor air toxics, EPA's program has relied on education and outreach to achieve reductions. Information about indoor air activities is available at **www.epa.gov/iaq/**.

For more information about EPA's air toxics program, visit the Agency's Web site at **www.epa.gov/ttn/atw**.

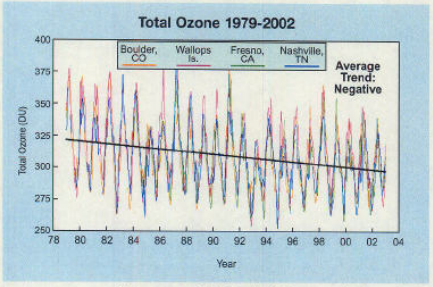


Stratospheric Ozone

Nature and Sources of the Problem

The stratosphere, located about 6 to 30 miles above the Earth, contains a layer of ozone gas that protects living organisms from harmful ultraviolet-B radiation (UV-B) from the Sun. Over the past 3 decades, however, it has become clear that this protective shield has been damaged. Each year, an "ozone hole" forms over the Antarctic, and ozone levels there can fall to 60 percent below normal. Even over the United States, ozone levels are about 3 percent below normal in the summer and 5 percent below normal in the winter.

As the ozone layer thins, more UV-b radiation reaches the Earth. The 1998 and 2002 Scientific Assessments of Stratospheric Ozone firmly established the link between decreased ozone and increased UV-B radiation. In the 1970s, scientists had linked several substances associated with human activities to ozone depletion, including the use of chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl bromide, and methyl chloroform. These chemicals are emitted from commercial air conditioners, refrigerators, insulating foam, and some industrial processes. Strong winds carry them through the lower part of the atmosphere, called the troposphere, and into the stratosphere. Once there, strong solar radiation reacts with the emitted chemicals to release chlorine and bromine atoms that attack protective ozone molecules. Scientists estimate that one chlorine atom can destroy 100,000 ozone molecules.



Data courtesy of the National Oceanic and Atmospheric Administration (NOAA), 2003. Monthly average total ozone measured in Dobson units (DU) at four mid-latitude stations across the United States from 1979 to 2002. Total ozone measurements from four midlatitude U.S. stations show a decline during the period. The large annual variation shown in each of the four cities is a result of ozone transport processes that cause increased levels in the winter and spring and lower ozone levels in the summer and fall at these latitudes.

Health and Environmental Effects

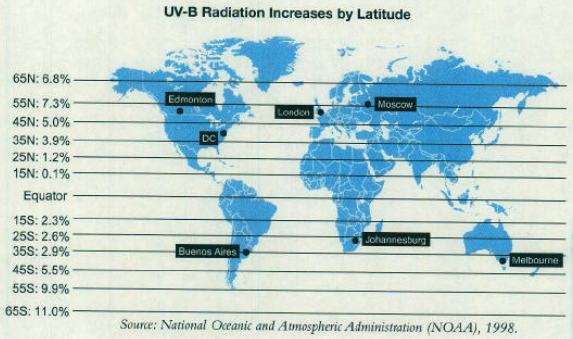
Ozone depletion allows for additional UV-B radiation to pass through the stratosphere and reach the Earth's surface, leading to increases in UV-related health and environmental effects. In humans, UV-B radiation is linked to skin cancer, including melanoma, the form of skin cancer with the highest mortality rate. It also contributes to cataracts and suppression of the immune system.

The effects of UV-B radiation on plant and aquatic ecosystems are not well understood. However, the growth of certain plants can be slowed by excessive UV-B radiation. In addition, some scientists suggest that marine phytoplankton, which are the base of the ocean food chain, are already under stress from UV-B radiation. This stress could have adverse consequences for human food supplies from the oceans.

Programs to Restore the Stratospheric Ozone Layer

In 1987, 27 countries signed the Montreal Protocol, a treaty that recognized the international nature of ozone depletion and committed the world to limiting the production of ozone-depleting substances. Today, more than 180 nations have signed the Protocol, which has been strengthened over time and now calls for the elimination of those chemicals that deplete stratospheric ozone.

The 1990 Clean Air Act Amendments established a U.S. regulatory program to protect the stratospheric ozone layer. In January 1996, U.S. production of many ozone-depleting substances virtually ended, including CFCs, carbon tetrachloride, and methyl chloroform. Production of halons ended in January 1994. Many new products that either do not affect or are less damaging to the ozone layer are now gaining popularity. For example, computer makers are using ozone-safe solvents to clean circuit boards, and automobile manufacturers are using HFC-134a, an ozone-safe refrigerant, in new motor vehicle air conditioners. In some industries,



Source: National Oceanic and Atmospheric Administration (NOAA), 1998.

A 1996 study using satellite-based analyses of UV-B trends demonstrated that UV-B levels had increased at ground level. This figure shows the percent increases in average annual UV-B reaching the surface from 1986 to 1996. UV-B incidence is strongly dependent on latitude. At latitudes that cover the United States, UV-B levels are 4 to 5 percent higher than they were in 1986.

the transition away from ozone-depleting substances has already been completed.

EPA is also emphasizing efforts like the UV Index, a daily forecast of the strength of UV radiation to which people may be exposed outdoors, to educate the public about the health risks of overexposure to UV radiation and the steps they can take to reduce those risks. To educate the public about UV radiation levels and the associated health risks, EPA promotes the UV Index, a daily forecast of the strength of UV radiation, and its national SunWise School for grades K through 8. SunWise Partner Schools sponsor classroom and schoolwide activities to raise children's awareness of stratospheric ozone depletion, UV radiation, and simple sun safety practices. For more information on SunWise, visit **http://www.epa.gov/sunwise**.

Trends in Stratospheric Ozone Depletion

Scientific evidence shows that the approach taken under the Montreal Protocol has been effective to date. The latest 2002 Scientific Assessment of Ozone Depletion indicates that the rate of ozone depletion is slowing. Measurements have shown that atmospheric concentrations of methyl chloroform are falling, indicating that emissions have been greatly reduced. Concentrations of other ozone-depleting substances in the upper layers of the atmosphere, like CFCs, are also decreasing. It takes several years for these substances to reach the stratosphere and release chlorine and bromine. For this reason, stratospheric chlorine levels are near their peak and are expected to slowly decline in the years to come. Because of the stability of most ozone-depleting substances, the ozone layer will not fully recover until the second half of this century. All nations that signed the Protocol must complete implementation of ozone protection programs if full repair of the ozone layer is to be accomplished.

For more information on Stratospheric Ozone, visit **http://www.epa.gov/air/ozone/index.html**.

International Issues and U.S. Air Quality

The transboundary flow of air pollution affecting the United States and its neighboring countries is now well known and documented. Under bilateral agreements with Mexico and Canada, EPA is pursuing policies and technical efforts to better understand and reduce the transport of air pollution back and forth across our borders, particularly in areas where this transport threatens public health and attainment of ambient air quality standards. Also, there is increasing evidence of intercontinental pollution transport from Central America and Asia to the United States. Recent studies and satellite images illustrate the degree of transport (see sidebar). EPA participates with other agencies in various treaties and international cooperative efforts to characterize and address the intercontinental transport of air pollution. For example, EPA, in conjunction with other research organizations, is currently conducting a modeling study of intercontinental pollution transport from Asia and its potential effects on regional air quality. This modeling analysis will also study the intercontinental transport of air pollution from the United States to Europe.

Under a bilateral agreement with Mexico signed in 1983, also known as the La Paz Agreement, the United States and Mexico have developed and implemented a series of strategies to address air quality along our shared border. The United States and Mexico currently operate coordinated air monitoring networks, compile emission inventories, and conduct modeling analyses designed to support reasonable pollution control strategies to achieve national air quality standards on both sides of the border. One example resulting from this cooperative agreement is the U.S.–Mexico Border Information Center on Air Pollution. Additional information on the Border Information Center is available at the EPA Technology Transfer Network Web site, **www.epa.gov/ttn/catc/cica**.

Canada and the United States made a historic commitment to address transboundary air pollution with the signing of the U.S.–Canada Air Quality Agreement in 1991. Addressing acid rain and transboundary flows of ozone have been the primary focus of cooperation under

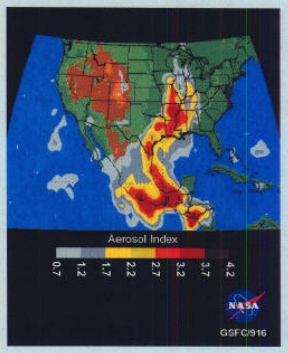
Air Pollution Transport

Modeling studies and satellite images show evidence of significant air pollution transport from Central America and southern Mexico. In addition, analysis of weather patterns reveals that upper air winds in summer months favor transport of airborne pollutants northward to the United States. With no mountain ranges to modify or impede them, air masses from Central America have an unobstructed path northward.

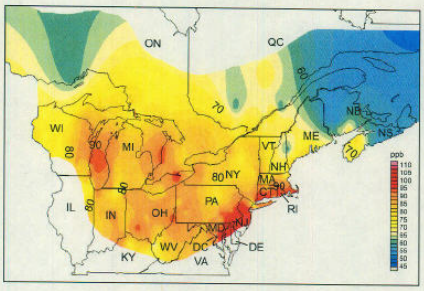
Pollution from Fires

In May 1998, smoke from Central American and southern Mexican forest fires moved as far north as the Great Lakes and north-central Ontario. EPA and its many partners tracked the aerosol plumes, evaluating and publicizing the threats to public health as the plumes moved through the United States. In Texas, visibility was typically down to less than 1 mile in many large cities. A satellite image (courtesy of NASA) illustrating the extent of this aerosol plume transport is shown here.

Earth Probe TOMS
Smoke/Dust over North America for May 15, 1998

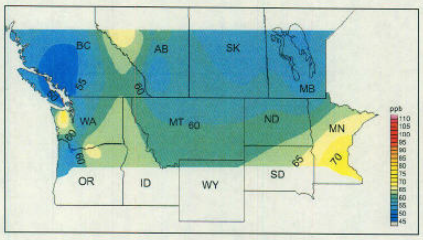


Ozone Concentrations in the Eastern Regions of the U.S. and Canada
(Average Annual 4th Highest Daily Maximum 8-hour Ozone, 1999-2001



Ozone concentrations are based on monitoring data from ozone sites located within approximately 500 km of the U.S.–Canadian border.

Ozone Concentrations in the Western Regions of the U.S. and Canada
(Average Annual 4th Highest Daily Maximum 8-hour Ozone, 1999-2001



the Agreement, and work to better understand the transboundary flows of fine particulate matter is under way. The Ozone Annex to this Agreement includes specific monitoring and reporting requirements of the two nations including (1) reporting ambient air quality within 500 km of the U.S.–Canadian border, (2) reporting annual emissions from major source categories beginning in 2004, and (3) developing joint analyses on ground-level ozone and precursors. The figures below illustrate the ozone concentration measurements within 500 km of the border in the eastern and western regions of the United States and Canada, respectively. These measurements represent the average annual fourth-highest daily maximum 8-hour ozone for 1999-2001(see **http://www.epa.gov/airmarkets/usca/**). The annual fourth-highest daily maximum 8-hour ozone is illustrative of the ambient air quality standard for 8-hour ozone.

The Convention on Long-Range Transboundary Air Pollution (LRTAP), under the United Nations Economic Commission for Europe, establishes a broad framework for cooperative action on air pollution in North America and Europe. The Convention establishes a process for negotiating specific measures to control air pollution through legally binding protocols. LRTAP initially focused on reducing the effects of acid rain through control of sulfur emissions. Later protocols have addressed the formation of ground-level ozone, persistent organic pollutants (POPs), and heavy metals. These multilateral efforts have established a foundation of international cooperation and understanding that has significantly advanced our ability to understand and address transboundary air pollution (see **http://www.unece.org/env/lrtap/**).

The United States is also actively leading, with other countries, global efforts to address POPs and mercury, pollutants that persist and are readily transported via air pollution pathways across borders and oceans. In 2001, the United States joined 151 other countries in signing the Stockholm Convention on Persistent Organic Pollutants. This treaty will help reduce the public health and environmental effects of pollutants such as DDT, chlordane, dioxins, and PCBs (see **http://www.pops.int**). Also in 2003, the United States joined the international community in endorsing a global effort to address mercury.

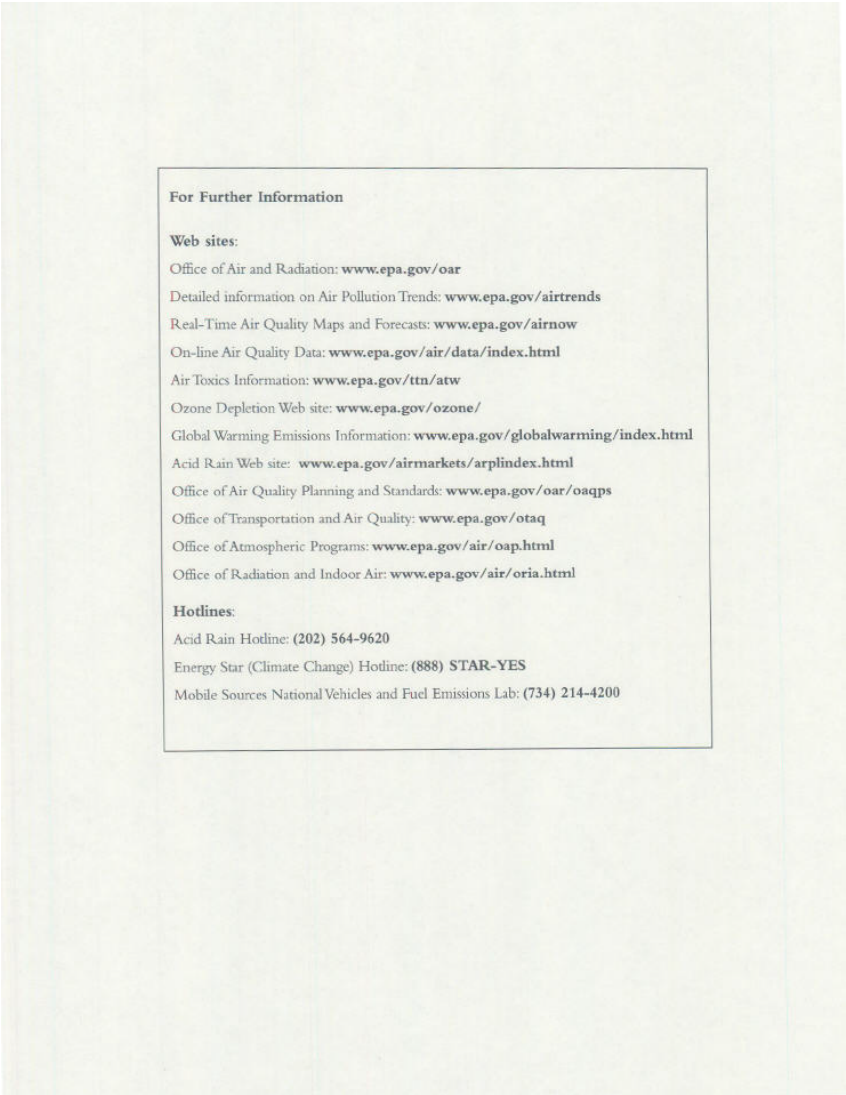
Conclusions

The Clean Air Act has resulted in many improvements in the quality of the air in the United States. Scientific and international developments continue to have an effect on the air pollution programs that are implemented by the U.S. Environmental Protection Agency and state, local, and tribal agencies. New data help identify sources of pollutants and the properties of these pollutants. Although much progress has been made to clean up our air, work must continue to ensure steady improvements in air quality, especially because our lifestyles create more pollution sources. Many of the strategies for air quality improvement will continue to be developed through coordinated efforts with EPA, state, local, and tribal governments, as well as industry and other environmental organizations.



Acronyms

AQI	Air Quality Index
CFCs	chlorofluorocarbons
CO_2	carbon dioxide
CO	carbon monoxide
DU	Dobson units
dv	deciviews
EPA	U.S. Environmental Protection Agency
FCCC	Framework Convention on Climate Change
ha	hectare
IMPROVE	Interagency Monitoring of Protected Visual Environments
IQ	intelligence quotient
kg	kilograms
km	kilometers
LRTAP	Long-Range Transboundary Air Pollutants
NAAQS	National Ambient Air Quality Standards
NATTS	National Air Toxic Trend Site
NEI	National Emissions Inventory
NO_2, NO_x	nitrogen dioxide, nitrogen oxides
NO	nitric oxide
NOAA	National Oceanic and Atmospheric Administration
O_3	ozone
OAQPS	Office of Air Quality Planning and Standards
Pb	lead
PM_{10}, $PM_{2.5}$	particulate matter (10 μm or less, 2.5 μm or less in diameter)
POPs	persistent organic pollutants
ppm	parts per million
SO_2, SO_x	sulfur dioxide, sulfur oxides
VOCs	volatile organic compounds
UV	ultraviolet



For Further Information

Web sites:

Office of Air and Radiation: **www.epa.gov/oar**

Detailed information on Air Pollution Trends: **www.epa.gov/airtrends**

Real-Time Air Quality Maps and Forecasts: **www.epa.gov/airnow**

On-line Air Quality Data: **www.epa.gov/air/data/index.html**

Air Toxics Information: **www.epa.gov/ttn/atw**

Ozone Depletion Web site: **www.epa.gov/ozone/**

Global Warming Emissions Information: **www.epa.gov/globalwarming/index.html**

Acid Rain Web site: **www.epa.gov/airmarkets/arplindex.html**

Office of Air Quality Planning and Standards: **www.epa.gov/oar/oaqps**

Office of Transportation and Air Quality: **www.epa.gov/otaq**

Office of Atmospheric Programs: **www.epa.gov/air/oap.html**

Office of Radiation and Indoor Air: **www.epa.gov/air/oria.html**

Hotlines:

Acid Rain Hotline: **(202) 564-9620**

Energy Star (Climate Change) Hotline: **(888) STAR-YES**

Mobile Sources National Vehicles and Fuel Emissions Lab: **(734) 214-4200**

STATEMENT OF THE SKULL VALLEY BAND OF GOSHUTE INDIANS

On November 8, 1984, Administrator William D. Ruckelshaus promulgated an EPA Policy for the Administration of Environmental Programs in Indian Reservations. This Policy recognized Tribal Governments as sovereign entities with the primary authority and responsibility for tribal lands and their residents. It stated: "EPA will work directly with Tribal Governments as the independent authority for reservation affairs, and not as political subdivisions of States or other local governmental units."

The Policy also recognized Tribal Governments as the appropriate entities to be making program decisions for Indian reservation lands. This longstanding EPA Policy was reaffirmed by Administrator Christine Todd Whitman on July 11, 2001.

Governor Leavitt's actions toward the Skull Valley Band and other Utah Tribes bear no resemblance to the EPA Indian Policy, and many Tribes share our concern that he will not reaffirm this national policy, and that he will undermine tribal gov-

ernments in their decisionmaking relative to the development and environmental protection of their own lands.

Examples of Governor Leavitt's actions as Governor include:

- Supporting State legislation, enacted in 2001, which asserts Utah State regulatory jurisdiction over all Indian reservations within the State of Utah. That legislation was declared unconstitutional by a U.S. District Judge in July 2002, and the Governor's appeal is pending in the U.S. Court of Appeals. Among other things, the legislation purported to impose State permitting requirements on "any source of air pollution proposed to be located . . . within the boundaries of any Indian reservation . . ." And on "any facility which will potentially or actually have a significant impact on the State's surface or groundwater resources . . . even if located within the boundaries of an Indian reservation." U.C.A. 19–3–302(7)(b) and (c). The ostensible purpose of the legislation was to prohibit the Skull Valley Band from hosting a federally licensed storage project for spent nuclear fuel rods on its Reservation, but the breadth of the legislation was much greater. Neither Governor Leavitt, nor any official of the State, made any effort to consult with Utah Indian tribes regarding this legislation.
- Failing to take any action to resolve longstanding claims against the State by Navajo Indians residing in San Juan County, Utah, for whom the State of Utah holds in trust revenues from oil and gas leases from Navajo tribal land under a 1933 Act of Congress. Litigation has been pending in Federal court for over a decade, but the only response of the Governor has been to suggest that the State divest itself of this statutory responsibility. No effort has been made to account fully to the Navajo beneficiaries.
- Providing State taxpayer funding of over one half million dollars to private attorneys to represent various dissident factions of Goshutes to oppose their tribal government by:
- Creating an ostensibly "traditional" Indian organization, made up of Goshutes and non-Goshutes, to speak out against the Band's government, including venues in Washington, DC.
- Filing numerous frivolous lawsuits and administrative appeals, none of which have been successful, to challenge a tribal lease of reservation lands, the Bureau of Indian Affairs' recognition of the Band's Executive Committee as the legitimate governing Body of the Band, and the actions of various Federal agencies which have been supportive of the Band.
- Withdrawing $42,000 from a tribal bank account, using a phony court order, and successfully freezing hundreds of thousands of dollars of Federal program funds held in Salt Lake City banks. Three different sets of attorneys, funded by the State, are now filing briefs to prevent the bank from releasing these funds back to the Band.
- Supporting both Federal and State legislation to build a "moat" (Governor Leavitt's chosen words) around the Skull Valley Reservation. Federal legislation, passed by the House of Representatives last year, but not enacted, would have prevented the Secretary of the Interior from issuing rights-of-way for any industrial access across public lands in Utah to reach either of the two Goshute Reservations in the Utah West Desert—unless the Governor of the State of Utah concurred in allowing the land use planning process to begin. The Skull Valley Reservation has no industrial development on its Reservation, which is surrounded by toxic waste depots, including military installations where biological and chemical weapons have been developed. Tooele County, Utah, has zoned this region as a toxic waste dump. But the Governor wants veto power over any access to the Reservation, and has endeavored to build a "moat" around the Reservations. He has publicly stated that he will not consult with Skull Valley leaders on these issues until they give up their multi-million dollar (and lawful) opportunity to store civilian nuclear fuel rods on their Reservation.
- Holding secret meetings with high-ranking Federal officials in Washington, DC, asking them to take actions to withdraw or suspend approvals of tribal leases, to withdraw recognition of the leadership of the Skull Valley Band, to support legislation which would build a "moat" around the Skull Valley Reservation, and to oppose an ad judicatory licensing process at the Nuclear Regulatory Commission.

Governor Leavitt's approach to the Skull Valley Band is to force it to be dependent upon the charity of their non-Indian neighbors, which is the historical policy in Utah for dealing with Indian tribes.

RESPONSES TO HEARING QUESTIONS FOR GOVERNOR LEAVITT FROM SKULL VALLEY TRIBE

Question 1. If confirmed as the Administrator of the Environmental Protection Agency, will you immediately reaffirm the EPA Indian Policy, followed by previous Administrators, dating back to 1984?

Response. The introductory statement provided with these questions does not accurately reflect actions taken by the State of Utah.

The statements regarding the Skull Valley Band of Goshutes, individual members of the Band, and the Goshute Reservation are related to a proposal by Private Fuel Storage, LLC, a consortium of nuclear power companies, to build a privately owned, for-profit, above-ground storage facility for high-level nuclear waste on the Skull Valley Band of Goshutes Indian Reservation. No other facility of this nature has ever been licensed, and the proposal raises several legal, public policy, and practical questions. Utah does not itself generate high-level nuclear waste, and it has been the policy of the State to oppose the proposal in a vigorous but legitimate way. Several members of the Skull Valley Band have also opposed the waste facility, because, among other reasons, they see it as a form of environmental discrimination against them. The license application is pending before the U. S. Nuclear Regulatory Commission and the State of Utah is an admitted party to that administrative process. The State is also a party in two judicial appeals, one with the U.S. Court of Appeals, D.C. Circuit, and one with the U.S. Court of Appeals, 10th Circuit. Because I have been Governor of Utah during the entire period of these matters and have taken specific positions on these matters, I will follow Federal procedures to avoid a conflict of interest in these matters, if confirmed as Administrator of EPA.

The statements regarding Navajos living in Utah also misrepresent the facts. Utah and a class of individual plaintiffs have been engaged for several years in a complex lawsuit. The plaintiffs do not represent the Navajo Nation, whose interests are, in fact, adverse to those of the plaintiffs. The State of Utah has taken many steps to resolve the dispute, including by compiling and turning over to the court more than 40 volumes of financial accounting. The court has not yet determined that the State is liable to the plaintiffs. Because this issue concerns matters that I have worked on during my terms as Governor of Utah, I will follow Federal procedures to avoid a conflict of interest in this matter, if confirmed as Administrator of EPA.

I look forward to working with Tribal Governments to protect the environment. If confirmed, I look forward to learning about the policy and establishing the appropriate relationship with sovereign Tribal Governments.

Question 2. Will you personally direct employees of EPA to follow the policy, by respecting the decisions made by Indian tribal governments to develop, regulate, and administer their own Indian tribal lands?

Response. If confirmed, I expect to be briefed on the policy and will implement EPA laws and regulations regarding work with Tribal Governments. I will also follow Federal procedures to avoid a conflict of interest.

Question 3. Will you direct EPA employees to support the imposition of State regulatory and permitting requirements on Indian tribal and allotted lands?

Response. It is my understanding that EPA employees are responsible for implementing Federal environmental laws. If confirmed, I expect to be briefed on this issue. I will also follow Federal procedures to avoid a conflict of interest in this matter.

Question 4. Will you direct Agency lawyers to take legal positions, contrary to prior Agency legal positions, supporting State environmental regulation of Indian lands, without the consent of the governing Indian tribes?

Response. If confirmed, I expect to be fully briefed on Agency positions. In dealing with all matters, I will follow Federal procedures to avoid a conflict of interest.