S. HRG. 106–913

EPA'S FISCAL YEAR 2001 BUDGET FOR OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

HEARING

BEFORE THE

SUBCOMMITTEE ON
SUPERFUND, WASTE CONTROL, AND RISK
ASSESSMENT

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

MARCH 30, 2000

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

U.S. GOVERNMENT PRINTING OFFICE
68–417CC WASHINGTON : 2001

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington DC 20402

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C O N T E N T S

EPA'S FISCAL YEAR 2001 BUDGET FOR OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

THURSDAY, MARCH 30, 2000

U.S. SENATE,
SUBCOMMITTEE ON SUPERFUND, WASTE CONTROL AND RISK ASSESSMENT,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
Washington, DC.

The subcommittee met, pursuant to notice, at 10:30 a.m. in room 406, Senate Dirksen Building, Hon. Lincoln Chafee (chairman of the subcommittee) presiding.

Present: Senators Chafee, Inhofe and Crapo.

OPENING STATEMENT OF HON. LINCOLN CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Good morning.

Today the Subcommittee on Superfund, Waste Control, and Risk Assessment is conducting an oversight of the President's fiscal year 2001 budget request for programs that fall under the Environmental Protection Agency's Office of Solid Waste and Emergency Response, or OSWER. EPA Assistant Administrator Tim Field will testify regarding the budget request for programs such as Superfund, brownfields, and underground storage tanks. This is Tim Fields' second appearance before the subcommittee in as many weeks.

Don't worry, Tim, we'll let you have a few weeks off before the next hearing.

Under the leadership of Chairman Bob Smith, each subcommittee is conducting oversight hearings on EPA's budget. EPA Administrator Carol Browner testified on EPA's overall budget before the full committee last month. Today we will have the opportunity to review OSWER's budget and priorities in greater detail.

It is important that this subcommittee focus on OSWER's priorities so that Congress can make informed decisions on EPA's overall needs.

I hope that Mr. Fields will address criticisms that some have made of EPA's spending habits. Critics have claimed that EPA funds new initiatives before it has completed work at existing priorities, and that EPA spends too much money on administrative costs and too little on cleanup. But we must strike a delicate balance between our constrained resources and our top priorities.

For example, the Centredale Manor Superfund site in North Providence, Rhode Island was added to the National Priorities List just this year. This site contains high-rise apartment buildings for handicapped and elderly citizens. Significant levels of dioxin were found in the cellars at the site, and in sediments in the Woonasquatucket River. You can only imagine the high level of emotion that exists when residents learn that toxic chemicals are present in the ground near their homes. This is certainly not a unique situation in Rhode Island. Using their emergency response authorities, EPA did respond swiftly and effectively to the relief of everyone in the community.

I want to ensure that EPA has sufficient funds to carry out emergency response actions and other necessary functions, but I also want to know that each dollar is spent appropriately.

I am also looking forward to Mr. Fields' testimony regarding underground storage tanks. Public attention has focused on the discovery of MTBE in groundwater resources. Since leaking underground storage tanks are the primary pathway for MTBE to reach groundwater, it is imperative that EPA maximize its underground storage tank funding to ensure compliance with the Federal requirements.

Establishing priorities and balancing the needs of all programs within OSWER and EPA is a difficult task. Given unlimited resources, there will always be projects that we could fund. However, today's fiscal environment demands that we establish priorities and fund those priorities first. I hope that today's hearing will provide a forum for EPA to identify its priorities and that we can have an open discussion among members of this subcommittee. Thank you very much.

Senator CHAFEE. Senator Inhofe?

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

Senator INHOFE. Thank you, Mr. Chairman. First let me congratulate you on having chaired your first meeting, and now your second one, and each one gets easier.

Senator CHAFEE. I hope so.

Senator INHOFE. So you will enjoy it, and it's such an honor to be serving with you on this committee and with you in Congress, as it was with your father.

Mr. Fields, thank you for appearing before the subcommittee today. As I know you are well aware, the EPA is under a court-mandated order to make a determination as to whether combustion waste, such as fly ash, should be regulated as hazardous waste under RCRA.

Originally, the EPA was supposed to announce a determination by March 10, and then got a 30-day extension to April 10. I have some very serious concerns about this course of action, Mr. Fields. In 1999, the EPA—the Agency that you represent—recommended to Congress that these wastes not be regulated by RCRA. In fact, the report came out of your department, Mr. Fields; your scientists reported that the States were doing an adequate job in regulating and managing these wastes. That report represents 19 years of research by the EPA, and many of the scientists—I'll be asking you

later how many scientists you have in your department; you might be thinking about that—but now this year, less than a year after the report was submitted, I hear that you have proposed a rule to OMB that would regulate these wastes as hazardous, and would be making that determination, what, 10 days from now, I guess.

During many of the debates up here I have emphasized and reemphasized the use of sound science. You can recall when we did this during the ambient air fight that we went through. Does that concept mean anything to the folks at EPA? I really don't know. And the reason I ask is because I know there is a serious problem when you can't even agree with a report that your own Agency, your own scientists, released. I guess I don't understand why you all keep doing this. We saw the same thing in the ozone fight, and the EPA ignored CASAC, and that's 21 scientists, of which only 2 out of 21 scientists agreed with Carol Browner on ambient air changes, and yet they are just totally ignored. And these are scientists who were appointed for that purpose from the private sector, who work in the private sector, on a staggered basis—not Democrats, not Republicans. Totally ignored.

We see it today with the MTBE and the EPA ignoring the Blue Ribbon Panel and their recommendation. What makes the EPA think these recommendations are just beyond consideration?

I am very concerned that issues like this seem to be taking such a political tone. They are beyond scientific justification because the scientists believe that these wastes should be left to the States to regulate.

Let me just remind you of what your own report says on pages 3 to 5, "Subtitle (c) is inappropriate to address any problems associated with disposal of these wastes, and the continued use of site- and region-specific approaches by the State is more appropriate for addressing the limited human health and environmental risk that may be associated with the disposal of these wastes."

So let me just make one reference to the costs. It is my understanding—I'm not sure it's your Agency I ought to be asking this question—that came up with between $3.5 billion to $5 billion, but that will be along the line of questioning that I will have, and I'm going to talk about just what these costs include and what they don't include.

So again, Mr. Chairman, I thank you for having this hearing. I know this is a budget hearing, but I can tell you right now if they go ahead and do what I think they're going to do, that is going to affect the budget.

So I thank you very much for having this.

[The prepared statement of Senator Inhofe follows:]

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

Thank you Mr. Chairman. Let me take a minute to congratulate you for holding your first hearing. I know that hearing took place last week and I wasn't able to attend, but never-the-less, it is an important milestone and you should be recognized for it. After the first one, they only get easier.

Mr. Fields, thank you for appearing before the subcommittee today. Now, as I know you are well aware, the EPA is under a court ordered mandate to determine whether low level combustion wastes should be regulated as hazardous waste under the Resource Conservation and Recovery Act. Originally, the EPA was supposed to announce a determination by March 10, but I understand that you were granted a 30-day extension so the final determination from you isn't required until April 10.

I have some serious, serious concerns about this course of action Mr. Fields. In 1999, the EPA, the Agency that you represent, recommended to Congress that these wastes not be regulated by RCRA. In fact, this report came out of your department, Mr. Fields. Your scientists reported that the States were doing an adequate job in regulating and managing these wastes. That report represents 19 years of research by the EPA. But now, this year, less than a year after the report was submitted, I hear that you have proposed a rule to OMB that would regulate these wastes as hazardous.

During many of the debates up here, I have emphasized and re-emphasized the use of sound science. Does that concept mean anything to you folks at EPA? The reason I ask is because I know there is a serious problem when you can't even agree with a report that your own Agency, your own scientists, release.

I guess I don't understand why you all keep doing this. We saw the same thing in the Ozone/PM debate when the EPA ignored CASAC's recommendations. We see it today with MTBE and the EPA ignoring the Blue Ribbon panel and their recommendation. What makes the EPA think that these recommendations are beyond your consideration?

I am angry that issues like this seem to be taking a political tone. They are obviously beyond scientific justification because the scientists clearly believe that these wastes should be left to the States to regulate. Let me just remind you of what your report says. On page 3–5 your scientists state that " . . . Subtitle C is inappropriate to address any problems associated with disposal of these wastes and that the continued use of site and region specific approaches by the States is more appropriate for addressing the limited human health and environmental risks that may be associated with disposal of these wastes."

Finally, let's talk about cost for this regulation. Your Agency concluded in the report that the total cost could be between $3.5 and $5 billion, or even more. I know how these things work and I am assuming that your numbers will fall far below the actual costs.

Thank you Mr. Chairman. I look forward to addressing these issues in more depth during the question period.

Senator CHAFEE. Thank you, Senator.

Senator Crapo?

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

Senator CRAPO. Thank you very much, Mr. Chairman. I, too, appreciate your attention to these issues in holding these hearings. Unfortunately, I have a speaking engagement that is going to take me away immediately; I won't be able to be here for the rest of the hearing, probably, but I do have folks here watching it carefully, and we will be very focused on these issues. It is very important to us that we address the budget issues relating to the management of the funds that the EPA utilizes, especially in these critical areas that you've indicated, like Superfund and brownfields.

So I just wanted again to thank you for the hearing and indicate that my failure to attend the rest of the hearing is not because of lack of interest. I will be very interested in the testimony that is presented here today.

Thank you.

Senator CHAFEE. Thank you very much for coming down and showing your interest in these issues.

Senator Lautenberg is detained at a budget hearing and has submitted a statement for the record.

[The prepared statement of Senator Lautenberg follows:]

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

Mr. Chairman, I thank you for the opportunity to review EPA's budget for the Office of Solid Waste and Emergency Response in the authorizing committee. And

since I also sit on the Appropriations Committee, these are issues I have long been interested in.

As you know, during the years I've served as the ranking Democrat and before that, chair on this subcommittee, I've been very involved in the programs under your purview, and I am proud to say that there have been many accomplishments over the years.

Just about half of the Superfund sites on the National Priorities List are completely cleaned up. And final cleanup plans have been approved for more than 1,000 other sites. Over 90 percent of the sites on the National Priorities List have cleanups underway or completed.

Now that Superfund is really hitting its stride, we need to keep that momentum going.

I am extremely supportive of brownfields and the progress of the brownfields assessment pilot projects. EPA has signed more than 300 agreements for brownfields assessment pilots. These, and other EPA brownfields projects, are enhancing the abilities of communities all across our nation to redevelop abandoned properties for productive reuse.

The Underground Storage Tank Program has also made progress over the years, and we have increasing evidence that this is a very important program and critical to protecting our groundwater. For example, from the beginning of the program in the late 1980's through late 1999, approximately 400,000 leaks were detected, and approximately 230,000 cleanups were completed.

The RCRA program, addressing ongoing facilities has also been vastly improved over the last few years, including the recent reforms to the RCRA cleanup program. I applaud the Administration for proposing additional funding for this program and hope it continues to get our attention.

All of these programs have a tremendous influence on the health and quality of life for our constituents. I am proud of the role we on this committee have played in bringing these programs into law, and I am committed to making sure that they are funded adequately.

Mr. Chairman, I look forward to an excellent presentation from Assistant Administrator Timothy Fields and I thank him and the committee for this opportunity to review the OSWER budget.

Thank you, Mr. Chairman.

Senator CHAFEE. And now, the Honorable Tim Fields, if you could give the introduction to your budget?

STATEMENT OF HON. TIMOTHY FIELDS, ASSISTANT ADMINISTRATOR FOR SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. FIELDS. Thank you very much, Mr. Chairman, Senator Inhofe, Senator Crapo. We appreciate the opportunity to be here today to talk about the programs under our purview in the Office of Solid Waste and Emergency Response within the EPA that involve mainly the cleanup and waste management programs within EPA. It is a pleasure to again be before this subcommittee to discuss these important programs and, more importantly, be able to respond to your questions about these programs.

EPA's overall Agency budget is $7.3 billion, and it reflects the Administration's priorities. For the programs within the Office of Solid Waste and Emergency Response, I am pleased to say that the President's budget provides the necessary funding to continue the Agency's success in protecting public health and the environment through the Superfund, brownfields, Resource Conservation and Recovery Act, and the Underground Storage Tank Programs, as well as other program areas within environmental cleanup and waste management.

Let me start with Superfund. The President's budget requests $1.45 billion for the program, an increase of $50 million over the fiscal year 2000 enacted budget of $1.4 billion. The President's re-

quest will allow EPA to stay on track to complete 900 toxic waste cleanups by the year 2002.

We believe the Superfund program has turned around and has become a real success story. Roughly three times as many Superfund sites have had cleanup construction completed in the past 7 years than in all the prior 12 years of the program combined. More than 92 percent of the sites are now in construction completion or have cleanup construction under way.

More than 1,000 sites have all cleanup decisions already approved. We have done more than 6,000 removal actions. We have allowed 70 percent of the cleanup work to be done by the responsible parties; 21,000 small party contributors have been eliminated from Superfund liability, and $16 billion has been provided by responsible parties to do the work of toxic waste cleanup. We think that's a real success.

In brownfields, the budget provides for roughly $92 million to fund the continued need to do brownfields assessments, brownfields cleanup, and redevelopment activities to help take the more than 450,000 brownfields sites across America and turn them back into some productive use.

Third, the Resource Conservation and Recovery Act budget is roughly $224 million for the fiscal year 2001 request, which is a $17 million increase over the fiscal year 2000 budget. Most of that increase goes to RCRA corrective action, and we believe that is a major priority. We have begun to implement a series of reforms to allow RCRA corrective action to be done in a more accelerated, more efficient way. We think that's a major priority that we share with this subcommittee.

Finally, the President's budget requests $91 million for the Underground Storage Tank Program, with $72 million going toward the Leaking Underground Storage Tank Trust Fund expenditures to support EPA, the States, and the tribes in the cleaning up of underground storage tank contamination.

Mr. Chairman, Mr. Inhofe, we believe the President's budget continues to support our mission to protect public health and the environment and our environmental cleanup and waste management programs, while providing innovative funding to improve the quality of life for communities throughout the country. With the help of members of this subcommittee and others, we have made tremendous progress in our efforts to clean up sites and properly manage waste. However, although tremendous progress has been made, much more still needs to be done. That's why this fiscal year 2001 budget request is important to continue this job and continue the momentum of environmental cleanup and proper waste management.

That concludes my prepared remarks. I will be happy to answer any questions that the subcommittee may have.

Senator CHAFEE. I know Senator Inhofe has an Armed Services Committee meeting. Are you ready for coal ash and budget waste?

[Laughter.]

Senator INHOFE. Thank you very much.

First of all, Mr. Fields, let me thank you for the way that you responded to the questions that we had back during the propane hearing that we had—my committee did—because you answered in

a straightforward manner and very honestly, and it wasn't an easy answer to give. I remember when I just asked you point-blank, "Do you consider propane to be a hazardous substance," and you said, "No." So I do appreciate that, and I'm sure that you will be just as straightforward in this line of questioning.

I understand that the EPA received a report from the environmentalists regarding this new regulation—or determination, I guess I should say. I would ask, first of all, was there any new scientific evidence in that report?

Mr. FIELDS. The report provided additional damage cases involving coal ash waste that we are still investigating. It included comments and concerns about the management of certain coal ash wastes, particularly in mine-filling of certain of these wastes, as well as information about certain surface impoundments that were not properly lined. That is information that was contained in that report.

Senator INHOFE. Was there anything in that report that contradicted what your own scientists came up with in their report a year ago?

Mr. FIELDS. Well, it raised some new concerns. I want to make sure I put this in context.

The report to Congress issued in March 1999 was, as the report that you quoted from indicates, a tentative conclusion. I've talked to the technical staff, the scientists who were involved——

Senator INHOFE. Tentative conclusion?

Mr. FIELDS. Yes.

Senator INHOFE. You worked 19 years on it, and it's still "tentative"?

Mr. FIELDS. Well, if you read the report, we say that it was a tentative conclusion for comment. The March 1999 report to Congress was a report where we reached a tentative conclusion that we would not regulate certain coal ash wastes under subtitle (c) of RCRA. We made clear that we would be taking comment on that over the next 6 months. We said in that report, as you recall, that this report and those recommendations did not address mine-filling operations. We said in that report that we did not have enough information to conclude whether or not mine-filling waste should be regulated. We indicated that we did not have sufficient information on mine-filling, and we requested comment from the public on whether or not mine-filling operations should be regulated under subtitle (c).

Regarding what we know now versus March 1999, that report you referred to from some of the environmentalists did provide information on additional damage cases——

Senator INHOFE. Before getting into all this, let me just ask you this. On that report that you were referring to that came from the environmentalists, I have heard it is flawed, so that implies to me that somebody has seen it; obviously, you've seen it. My staff informs me they haven't seen it. This committee's staff, apparently, has not seen it.

Mr. FIELDS. We'd be happy to share that with you.

Senator INHOFE. Well, yes, but with 10 days to go? This is really disturbing to me, but let me go ahead.

I guess the next question I was going to ask is, was that report available to the public and open for public comment?

Mr. FIELDS. The reports that we have received were in response to comments that EPA requested from the public. I don't know——

Senator INHOFE. No, no——

Mr. FIELDS.—I don't know——

Senator INHOFE. The procedure, Mr. Fields, is that you come out with a report, then you have a comment period, you have hearings—that's what I'm asking. Was this done?

Mr. FIELDS. I don't know whether that report——

Senator INHOFE. Well, if it were done, it would seem that this committee would know something about it, unless our staff is just grossly inadequate.

Mr. FIELDS. Well, we have received hundreds of comments since March 1999 from a variety of parties, including——

Senator INHOFE. How about on this report? On this report? On the environmentalists' report?

Mr. FIELDS. Well, we did not—we didn't seek comment on anybody's comments. The comments came in from hundreds of people——

Senator INHOFE. I think your answer is no.

Who were the groups who filed the report? Who made this report?

Mr. FIELDS. Various environmentalist groups. I would be happy to provide for the record——

Senator INHOFE. I think I have the list of them right here. I'll just read the list that I have here, and you can tell me whether or not you think that my list is accurate:

- The National Environmental Trust;
- U.S. PIRG, which is Public Interest Research Group;
- National Resources Defense Council;
- Environmental Defense Fund;
- The Clean Air Task Force; and
- The Isaak Walton League. Does that sound right?

Mr. FIELDS. That sounds right.

Senator INHOFE. Let me ask you a question. Do these groups receive any money from the EPA?

Mr. FIELDS. I don't know precisely——

Senator INHOFE. Could you ask your staff?

Mr. FIELDS. We don't know, sir. Certain environmental groups do receive money from the EPA. I don't know whether U.S. PIRG or NRDC are receiving funding.

Senator INHOFE. For the purpose of the hearing today, even though I am sure you will supply that answer for the record, is it safe to say that you cannot tell us at this time that they do not receive funds from the EPA, grants or otherwise?

Mr. FIELDS. I cannot say that.

Senator INHOFE. All right.

Mr. FIELDS. You are correct. I cannot tell you whether they are receiving funding from EPA.

Senator INHOFE. All right.

This study that we have was done by your scientists. How many scientists do you have—I really don't know; I'm asking for information——

Mr. FIELDS. Well, in terms of the scientists who have actually been working on this fossil fuel issue, we have about 10 technical scientific staff who have been working on this issue. I will be happy to provide for the record the names——

Senator INHOFE. You have about 10 staff scientists?

Mr. FIELDS. Right.

Senator INHOFE. OK. And they came out with this report?

Mr. FIELDS. Well, yes. They worked on that report, yes, that came out in March 1999. Yes, sir.

Senator INHOFE. All right. Have you done any cost-benefit analysis on the environmentalists' report?

Mr. FIELDS. We have factored that report into our review. We looked at what that report had in it, versus other reports. That was just one source of information. We still have not made any final decision on——

Senator INHOFE. But if you make a decision predicated on the recommendation of that report, it is very significant, I would think, that you would want to answer to the affirmative that you will have done cost-benefit analyses on that report.

Mr. FIELDS. Well, we will make sure that we do all the appropriate analysis. We will assess the costs of any kind of regulation that might be looked at. We will look at what the benefits might be.

Senator INHOFE. Isn't that the cart before the horse a little bit, Mr. Fields? I mean, if we say that we're going to make, first of all, a declaration 10 days from today that is going to declare that this substance is hazardous, and therefore it's going to have to be treated differently, it's going to have an effect on a lot of things like electrical rates and all of that.

Mr. FIELDS. Right.

Senator INHOFE. And that's what I'm talking about in cost-benefit analysis. Do you think it's prudent to do that before—to make the declaration before we conduct that cost-benefit analysis?

Mr. FIELDS. Well, Senator, I might just reply that we've done a lot of analyses, like you said; a lot of study has been done on this over many years. This began when I worked on that sort of regulations back in 1986.

Senator INHOFE. Well, I'm aware of that. In fact——

Mr. FIELDS. We have estimates as to what the costs would be. We have a lot of analyses that were done prior to any comments from any parties, including that environmental group that you referred to.

Senator INHOFE. Yes. I remember the Bevill amendment that gave birth to all of this back in 1980; in fact, Tom Bevill and I served together in the House of Representatives. I called and talked to Tom Bevill this morning down in Alabama. He's practicing law now; he's retired from the House. And he said, "You mean nothing has happened to my amendment in 20 years? Nothing has come from that?" And he informed me that at that time—he had the amendment, because they were actually going to make this declaration before they had any scientific evidence. So I said, how long did you think it would take for them to make this determination? He said, "Well, normally you do a study, and in a year or two it's done." Now, that was Tom Bevill in my conversation just this

morning, and he was in shock. So I know it's been around for a long time.

In my opening statement I used the range of between $3.5 billion and $5 billion. I'm not even sure where I came up with that. Does that sound familiar to you as to the cost that this would incur?

Mr. FIELDS. Those costs are high based on preliminary estimates that I've seen. I've seen numbers up to around $1 billion in terms of the costs to industry of complying with regulatory requirements under RCRA. I have not seen a cost as high as $3.5 billion.

Senator INHOFE. When you make evaluations of costs like that and come up with estimates, you are doing it internally, is that correct?

Mr. FIELDS. Yes.

Senator INHOFE. I would remind you that back 3 years ago when we started with Administrator Browner's proposed ambient air changes and particulate matter and ozone, her cost estimate first—not this committee, but the subcommittee that I chair on air—it was $6 billion. Then just a short while later, the President's Council on Economic Evaluations came up with $60 billion. And then the Reasoner Foundation out in California came up with a range between $120 billion and $150 billion a year. Now, if we apply that same thing to your $1 billion here, it's getting pretty expensive.

I have to ask you, when you come up with a figure do you consider what the capital costs to the facilities would be that would result from this for retrofitting and so forth?

Mr. FIELDS. That is considered, yes, sir. But keep in mind, Senator, that we have not implemented any regulatory program——

Senator INHOFE. I understand that. My concern is, we can sit here and not talk about this and then find 10 days from now that this declaration is made, and then we're going to start—and in the meantime, what's going to happen to all this stuff? Let me finish.

Retrofitting the leachate collection system—any consideration for that?

Mr. FIELDS. Those impacts are being considered.

Senator INHOFE. How are they being considered, when you came up with your estimate about approximately $1 billion? Is that a part of that $1 billion?

Mr. FIELDS. Those were factored in, the cost of retrofitting liners to surface impoundments, the cost of upgrading landfill marking systems. That was all——

Senator INHOFE. All right. How about the cost of disposal? The disposal of fly ash?

Mr. FIELDS. Yes.

Senator INHOFE. That's considered, too?

Mr. FIELDS. That's considered.

Senator INHOFE. What about the lost revenue from not being able to sell this material, where it is currently being sold—concrete, building roads—is that a part of the consideration?

Mr. FIELDS. Yes, sir. We believe—again, no decision has been made there—certain coal combustion wastes that are being used for beneficial uses would be able to continue, even if we made certain determinations of what would be covered under RCRA. Not everything would be covered.

Senator INHOFE. OK. Let me ask you this, then. If your determination 10 days from now is that this is hazardous, and that material is already existing in buildings and streets and all that, would we need to perform remedial action on these sites?

Mr. FIELDS. Like I said, we are looking carefully at the reuse issue. I'm just saying that an option would be to exclude certain reuse practices from a regulatory determination. That's an issue we're looking at.

Senator INHOFE. Let me wind this up, Mr. Fields.

I know, Mr. Chairman, that I've taken more time than you normally have in a round, but as you pointed out I do have my Armed Services commitment that I have to make, have to keep.

The EPA, the DOE, the Army Corps of Engineers, the Federal Highway Administration have all endorsed the use of coal combustion products. Now, by regulating this as hazardous, don't we create serious shortfalls in the use of this material while we wait for utilities to ensure that no low-volume waste is included in the high-volume waste? Isn't that going to be a problem that we're going to have deal with?

Mr. FIELDS. Well, we would look at how we carefully construct any regulatory determination if we decide to go with subtitle (c), but we can make very clear that certain very beneficial uses, like use as concrete and cement and roadbeds, etc., could continue and not be included as hazardous waste. Those practices would be excluded from any regulatory determination. That is an option that we are considering.

Senator INHOFE. Are you aware that there is a bipartisan letter that is circulating through the Senate, Democrats and Republicans alike that are just as shocked as I am at the procedure that has brought us to this point today?

Mr. FIELDS. I would not be surprised. We've gotten letters already from members of both Houses of Congress, Senators as well as Congressmen, Democrats as well as Republicans, on this issue. I was not aware of that letter but that type of letter does not surprise me.

Senator INHOFE. One thing I learned a long time ago, when you see a train coming, you do everything you can at the last minute. But you know, this train has been coming for 20 years now. As I mentioned, I talked to Tom Bevill this morning; he was as shocked as others out in the real world are, that he could have an amendment and not have a response for 20 years.

To have something out there that we've had access to to make a determination for 20 years, Mr. Chairman, and then we find out that there's some report that this committee has not read, that our staff hasn't read, Oversight hasn't read, and yet if you follow that—you're not saying that you're going to follow that recommendation and make that declaration 10 days from now, but if you do, I can't imagine that—this is unconscionable to think that you would base it on this, when this, I repeat, contradicts what you have in this report right here that came out of your own shop, only a year before. And it can't be—if you're talking about a 20-year span, all these findings that would have challenged the findings of your scientists last year could not have happened in the last year of a 20-year time span.

And so I would just conclude by saying that I know this is an appropriations hearing, but I can tell you right now that if that declaration is made, it's going to have an effect on the appropriations. I don't know whether it's going to mean that if you're not going to listen to your own scientists, that we "de-fund" those positions; I'm not sure how we'll have to look at it. I will be talking to Ted Stevens about this, and we will be anxious to see what your findings are on April 10.

Thank you, Mr. Fields.

Mr. FIELDS. I thank you.

Mr. Chairman, if I could just respond briefly, I thank you, Senator Inhofe, for your comments. I assure you that any decision we make by April 10—the current order is April 10—will not be based on just that one report from the "enviros." We have done a year's worth of analyses subsequent to March 1999. We looked at additional damage cases. We have looked at surveys of waste management practices in various States——

Senator INHOFE. And you have considered also your own scientists' report?

Mr. FIELDS. Right. And everything since that March 1999 report, those analyses of various State programs—we're looking at whether or not coal ash should be regulated or not. That's an open question. Even if we decide that certain parts of coal ash should be considered for regulatory inclusion, certain coal ash practices may be excluded from that determination; other parts could be included. And that only means that we have determined that we ought to consider developing a regulatory proposal. That regulatory proposal then has to go through several years of development of a proposal, notice and comment, rulemaking——

Senator INHOFE. Except that in the meantime, you've got this out there. What are you going to do with it?

Mr. FIELDS. If we made a regulatory determination that we ought to consider developing a rulemaking, it has no impact——

Senator INHOFE. So you're saying then, in this meeting, that if you make that determination, that there would be no change in the treatment of fly ash and other comparable types of materials——

Mr. FIELDS. Right. Absolutely not.

Senator INHOFE.—that they could continue to use them as they are, that they could continue to use them as byproducts in other substances?

Mr. FIELDS. That's true. That's true. The regulatory determination does not in any way impact current practices for this industry. It does not in any way——

Senator INHOFE. And it would not affect their current disposal practices in any way?

Mr. FIELDS. It should not.

Senator INHOFE. Good. Thank you very much for that clarification.

Mr. FIELDS. We will try to clarify this in writing further. But no, that is definitely——

Senator INHOFE. No, that's clear enough. I don't want it in writing; it might change.

[Laughter.]

Senator INHOFE. Thank you very much.

Mr. FIELDS. Thank you, Senator.

Senator CHAFEE. I will also just add that we are both former Mayors, and as Mayor—Senator Inhofe was Mayor of Tulsa, Oklahoma, and I was Mayor of Warrick, Rhode Island, and we had EPA levels for asbestos in our schools being violated. And we had to spend $2 million in our community, $2 million that we couldn't afford, because EPA standards on asbestos were so low—they said you could get the same levels of asbestos in the air as if you stood on the street corner from brake linings, and the chance of getting asbestosis was lower than getting struck by lightning, by these levels of asbestos in schools. So I think what Senator Inhofe is saying about it——

Senator INHOFE. Mr. Chairman, I think that's significant. You and I both were Mayors. I tell my colleagues up here, if you want a hard job, be a Mayor. There's no hiding place; you're right out there where everybody knows. And we're having a hearing in my Clean Air Subcommittee that is going to bring the Mayors in, talk about the effects of these regulations. Because as you know, the biggest problem that you dealt with in being a Mayor was not necessarily crime or all these other things; it was unfunded mandates, and that's what we're going to try to correct from here.

Senator CHAFEE. Yes. So these are legitimate concerns, and I appreciate your honest answers. As you know, as Senator Inhofe said, this is a hearing on appropriations, but these are important issues. So someday we will have to readdress those asbestos standards. I think New York City went through a similar asbestos crisis, generated by a long winter with the windows closed. And I believe it was from the students with the dirt and grime and the sand being put down for the icy sidewalks, getting on the linoleum, with the asbestos in the linoleum kicking up the fibers into the air. Then we tested and came up high; the parents thought everyone was going to die. A crisis ensued and we had to shut the schools for a week and go through this cleanup, which I thought was a complete waste of money and time. We should have just opened the windows and let the air clean up from the outdoors.

But my question has to do with my appropriation for brownfields, almost $92 million. Do you think that's enough to address in the coming year all the cleanups we have to conduct around the country?

Mr. FIELDS. We had requested $92 million, roughly the same as we requested for fiscal year 2000. We believe that is what we need to implement an effective program. It provides funding for 50 Brownfields Assessment Demonstration Grants; 70 Brownfields Cleanup Revolving Loan Fund Grants; 10 Job Training and Development Fund Grants; and provides approximately $10 million for our State Voluntary Cleanup Programs.

We have found historically that the proposed budget for brownfields is what we need, based on the demand out there from cities that are applying for brownfields assistance annually. The funding proposal for State Voluntary Cleanup Programs is the level of funding we have provided in the last 3 years. We have found that the $90-plus million level for brownfields overall is adequate to meet the brownfields needs of the local governments and the States.

Senator CHAFEE. We'd have to take that money from your scientists and put it into——

[Laughter.]

Senator CHAFEE. The last question I have is regarding MTBE. Do you consider that level of funding to address the concerns that have been raised, the leakage of MTBE into the groundwater?

Mr. FIELDS. We are working carefully with the air program, obviously. As you know, the Administrator announced recently some actions she is taking to try to take MTBE out of the air. We are obviously working very closely with the air program, and we are working with the States. We are working in the States through monitoring to determine how much MTBE is leaking from underground storage tanks that we're out there assessing and cleaning up.

We are finding that right now 85 percent of the underground storage tanks are in compliance with our upgrade requirements of December, 1998. We expect to be at 90 percent by the end of the year. Studies that were done or supported by the University of California at Davis found that for tanks that are properly retrofitted, very low leakage occurs. Less than 1 percent of the tanks that were properly retrofitted with the 1988 requirements, that had to be in place by December 22, 1998, very low leakage is occurring. So, in those cases where people have properly complied with our underground storage tank regulations, we're not finding very much leakage of MTBE or any other contamination.

We're hoping that we can bring the remainder of those tanks over the next couple years so that we have roughly 100 percent of the tanks in compliance. But what we're also doing on a parallel track is, we are reviewing our current regulatory requirements which were put into place 12 years ago. We're looking, Senator, at whether or not we want to make any modifications to those regulations to make sure that MTBE is not causing unique problems that require a modification of the regulations.

We are cleaning up tanks, with State assistance, with the roughly $72 million that have been appropriated in the last 3 years, from the Leaking Underground Storage Tank (LUST) Trust Fund. With that oversight money we are cleaning up roughly 21,000 leaking underground storage tanks a year. Many of those include tanks that are leaking MTBE.

We do recognize that MTBE does cost more money to clean up when it is in groundwater. It is more difficult to remove than some of the other contaminants. So the cost of remediation does go up. But the money that Congress provides to us for underground storage tanks is not provided as cleanup dollars. It is provided as oversight dollars for the States, primarily, and the tribes, and EPA to oversee the cleanups that are being done. The cleanups are done primarily by responsible parties and by the States. Most of the funding for cleanup comes from State assurance funds. The States annually accumulate about $1.3 billion in cleanup dollars that they utilize to clean up leaking underground storage tanks. That's where most of the money that is utilized for underground storage tank cleanups, including MTBE, comes from. However, we are cognizant of the increasing threat posed by MTBE. That's why the Administrator wants to get it out of the air as quickly as possible, so

that we don't have the problem of it getting into the groundwater. We're trying to do all that we can to prevent it from getting into the groundwater, and when it does get there, we think that our LUST Trust Fund dollars that are being used to oversee these cleanups will help States in making sure that MTBE remediation does occur efficiently and effectively.

To respond directly to your question about the current need, we think we have enough money for fiscal year 2001. We are looking now, with our Air Office, as to whether or not we want, in subsequent years—2002 and beyond—to seek additional funding out of the LUST Trust Fund due to the additional threat and new challenge posed by MTBE contamination.

Senator CHAFEE. Well, thank you very much.

Maybe just in conclusion, I suppose every Department director that puts together a budget has regrets that there wasn't more funding for certain areas. Assuming you're no different, what areas do you especially regret not having more money for as you put together this budget?

Mr. FIELDS. That's a good question.

One regret I have that has been a "combination issue" for 2 years, the 2000 and 2001 issue—I just can't divorce it—I regret that we don't have what we really wanted to have for Superfund for fiscal year 2000. That reverberates in 2001 and 2002, because I only have $1.4 billion in fiscal year 2000, and that means that I will not be able to start about 15 new construction site projects that I would like to have started this year. That means that although for the last 3 years we have achieved 85 or more construction completions, we believe we can get 85 this year because construction is funded on a 2-year cycle. You start a project 1 year and you finish it the second year. Because I will not be able to start those projects in fiscal year 2000 because of the $100 million budget cut, it means that I will only be able to achieve an overall number of construction completions which is about 75 constructions being completed in fiscal year 2001.

My regret over the last year is that we have not had the level of funding that we really need for Superfund, because I would like to have been able to continue to do 85 or more construction completions. I think everybody who lives around a Superfund site wants to get that site cleaned up as quickly as possible. So obviously a major priority of mine and this Administration is to continue to do, with the resources we have available, as many construction completions as we can do. Within the limitations of the budget we have, we will produce as many cleanups as we can under the Superfund Program.

Senator CHAFEE. Thank you very much, sir.

Mr. FIELDS. Thank you, Mr. Chairman.

Senator CHAFEE. Any other comments?

[No response.]

Senator CHAFEE. The meeting is adjourned.

[Whereupon, at 11:20 a.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Additional statements submitted for the record follow:]

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

Good morning. I would like to thank Senator Chafee for holding today's oversight hearing on the President's fiscal year 2001 budget request for the Office of Solid Waste and Emergency Response. As chairman of the committee, I held the first of a series of oversight hearings on EPA's hearings and asked that each of the subcommittee chairmen followup with detailed hearings on the programs within their jurisdiction. Senator Chafee's hearing today is a critical one in that process.

I am particularly interested in looking at how EPA manages risk in both the Superfund and RCRA programs. In past years, I often questioned the level of funding for the Superfund program, the cost of Superfund cleanups, the slow pace of cleanups, and the relative lack of attention to or funding for RCRA corrective action cleanups. It seemed to me then, and it still does, that EPA invests too much of its limited resources on Superfund remedial actionsites, as compared to other remediation programs that yield more risk reduction per dollar invested, such as RCRA corrective action and the Superfund removal program.

Similarly, on the RCRA corrective action side, hundreds of thousands of sites aren't being cleaned up because EPA's regulations would require expensive cleanups that are not necessary because of the low risk involved at most of these sites. The bottom line is that we're spending too many of our limited resources on cleanups without targeting the greatest risks. EPA's approach seems to be technology driven, rather than risk driven. We need a better system to prioritize the use of funds and resources. I hope to do just that through these kinds of oversight hearings and then later through an EPA authorization bill.

I also plan to take the first legislative step toward a risk-based approach to cleanup by releasing a remediation waste bill. The committee has been working for 2 years now to craft a bill that will make it easier and less costly to remediate old dirt. The bill would facilitate the cleanup of 6,000 hazardous waste sites, and 450,000 brownfields sites across the country, removing regulatory obstacles under RCRA that act as a disincentive to cleanup and helping target resources on the sites that present the greatest risk. My goal is to ensure that more of these sites get cleaned up. I believe that EPA shares that goal and hope that we will be able to work together to improve the RCRA corrective action program and bring back these contaminated sites into productive use.

To the extent that EPA has requested additional funds for these sites through the RCRA corrective action program, I applaud that. I remain concerned, however, that the funds requested are still not enough to address high priority risks or even the Agency's GPRA goals. I'll look forward to hearing Mr. Fields address that issue.

I have been working for years to achieve reform in the Superfund Program; however, I recognize that there are numerous issues still outstanding. I will note that the funding requested for the Superfund program is $1.45 billion which is more than the whole budget requested for OSWER. We need to set priorities for the money appropriated to EPA to implement Superfund. If we can't reach consensus on Superfund reform, we should ensure that the money appropriated actually goes to cleanup instead of administrative costs.

I look forward to hearing about the Office of Solid Waste and Emergency Response budget request for fiscal year 2001 and hope to work with you in setting priorities for the coming years.

STATEMENT OF TIMOTHY FIELDS, JR., ASSISTANT ADMINISTRATOR, OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVIRONMENTAL PROTECTION AGENCY

Introduction

Good morning, Mr. Chairman and members of the subcommittee. I am pleased to have this opportunity to appear before you today to discuss the state of EPA programs. I will give a brief overview of the Agency's fiscal year 2001 budget and address the current status and future direction of the Superfund, Resource Conservation and Recovery Act (RCRA), brownfields, and Underground Storage Tank (UST) programs.

EPA and its partners have made significant strides in providing some of the best environmental and public health protections in the world, while maintaining a strong economy. Building on this record of success, the fiscal year 2001 budget charts a course designed to meet the environmental challenges of the 21st century. The President's fiscal year 2001 budget for EPA requests a total of $7.3 billion to protect public health and the environment. It builds on environmental progress made under the Clinton-Gore Administration and addresses our country's greatest

environmental challenges, such as, providing our children and communities with cleaner air, cleaner water, cleaner lands, and improved quality of life. Major environmental initiatives and on-going priorities include:

- Cleaner Water. The budget provides $762 million for the Administration's Clean Water Action Plan, with an additional $22 million in related spending, designed to finish the job of cleaning up America's waters. These funds will ensure that Federal agencies, States, tribes, and local communities can work together in unprecedented ways to improve access to environmental information, enhance natural resource stewardship, protect public health, and restore the full use of America's lakes, rivers and bays.
- Cleaner Air. The President is requesting $215 million in fiscal year 2001 to support partnerships with States, tribal governments and local communities so that we collectively can work together to improve air quality across the nation. $85 million is requested for the Clean Air Partnership Fund to provide a magnet for local innovation and investment in clean air. The President's request also includes $227 million for the Climate Change Technology Initiative to expand voluntary programs that save energy costs and reduce global warming.
- Protecting our Children. The President's fiscal year 2001 budget for EPA provides $68 million for children's health, in order to target environmental threats to children such as lead contamination and air pollution that causes asthma. $75 million also is dedicated to implementation of the Food Quality Protection Act, which for the first time sets food safety standards designed specifically to protect children.
- Providing for Communities. The Information Integration Initiative, which is funded by $30 million in the President's fiscal year 2001 budget, represents a fundamentally new approach to ensuring broad and immediate public dissemination of environmental data through the Internet and by other means. The Better America Bonds initiative is an innovative financial tool to provide communities with the resources necessary to address problems like brownfields, threatened water quality, shrinking parkland, and traffic congestion. Through $690 million in tax credits over 5 years, Better America Bonds will support $10.8 billion in bond authority over 5 years for investments by State, local, and tribal governments.

These innovative and cost-effective approaches to the protection of public health and the environment for all Americans and their communities represent an important investment in the 21st century.

Office of Solid Waste and Emergency Response

EPA plays a critical role both in preventing and responding to waste-related or hazardous substance releases. The Superfund, brownfields, RCRA and UST programs share an important common goal of ensuring that America's wastes will be managed and cleaned up in ways that prevent harm to people and to the environment. As EPA cleans up previously polluted sites, the Agency works to assist surrounding communities in restoring them to appropriate uses. I am pleased to report to the subcommittee on the significant progress we have made in achieving our goals for these programs under the Government Performance and Results Act.

Superfund Program

The Administration is requesting $1.45 billion in discretionary budget authority and $150 million in mandatory budget authority in support of the Superfund program for fiscal year 2001. The Agency and its State and tribal partners have achieved significant progress in cleaning up hazardous waste sites. More than three times as many Superfund sites have had construction completed in the past 7 years than in all of the prior 12 years of the program combined. As of March 7, 2000, 92 percent of sites on the final NPL are either undergoing cleanup construction (remedial or removal) or are completed. More than 1,000 NPL sites have final cleanup plans approved, and approximately 6,000 removal actions have been taken at hazardous waste sites to immediately reduce the threat to public health and the environment. Responsible parties continue to perform approximately 70 percent of new remedial work at NPL sites, and more than 32,000 sites have been removed from the Superfund inventory of potentially hazardous waste sites in order to help promote the economic redevelopment of these properties.

Environmental indicators show that the Superfund program continues making significant progress, reducing both ecological and human health risks posed by dangerous chemicals in the air, soil, and water. The Superfund program has cleaned over 232 million cubic yards of hazardous soil, solid waste and sediment, and over 349 billion gallons of hazardous liquid-based waste, groundwater, and surface water.

The Superfund Administrative Reforms have been successful in ensuring a fairer, more effective, and more efficient program. Among the noteworthy achievements are: 43 site decisions have been reviewed by the National Remedy Review Board,

resulting in an estimated savings of $70 million; 300 remedies have been updated based on changes in science and technology, resulting in a projected savings of over $1.4 billion; more than 300 projects have been evaluated since the establishment of the Risk-Based Priority Panel; and Community Advisory Groups have been established at 51 non-Federal sites (more than 100 already exist at Federal facilities).

In fiscal years 2000 and 2001, the Superfund program will continue to emphasize the completion of construction at NPL sites and the use of removal actions to protect human health and the environment. Although EPA will maintain its current construction completion goal of 85 sites for fiscal year 2000, the goal will be 75 sites in fiscal year 2001. The cumulative cleanup target for construction completions by the end of 2001 is 830. The President's goal of 900 construction completions is still scheduled to be achieved by the end of fiscal year 2002. The fiscal year 2001 construction completion target is principally a consequence of the $100 million reduction (from $1.5 billion to $1.4 billion) in fiscal year 2000. The fiscal year 2001 budget request for Superfund reflects tough choices the Administration had to make in balancing its environmental priorities and fiscal responsibility.

The President's fiscal year 2001 budget requests reinstatement of all Superfund taxes (including excise taxes on petroleum and chemicals, and a corporate environmental tax). The Superfund tax authority expired December 31, 1995. The Trust Fund balance (unappropriated balance) was roughly $1.5 billion at the end of fiscal year 1999 and if the Superfund taxes are not reinstated, the Fund balance is projected to be $200 million at the end of fiscal year 2001. The President's budget also requests $150 million in mandatory budget authority to pay for orphan shares at Superfund sites.

Brownfields Initiative

The Agency is requesting $91.7 million in fiscal year 2001 to support the Brownfields Initiative. This initiative empowers States, local governments, communities, and other stakeholders interested in environmental cleanup and economic redevelopment to work together to prevent, assess, safely clean up, and reuse brownfields. Brownfields are abandoned, idled, or under-used industrial and commercial properties where expansion or redevelopment is complicated by real or perceived contamination. The General Accounting Office has estimated that there are over 450,000 brownfields properties across America.

Since EPA Administrator Carol Browner announced the Agency's Brownfields Initiative on January 25, 1995, significant results have already been achieved. The Agency has awarded 307 assessment pilots to local communities. These pilots have resulted in the assessment of 1,687 brownfields properties, cleanup of 116 properties, redevelopment of 151 properties, and a determination that 590 properties did not need additional cleanup. The Brownfields Initiative has also generated significant economic benefit for communities across America. To date 1,580 cleanup jobs and 4,300 redevelopment jobs have been generated as a result of the program. In addition, pilot communities have already reported a leveraged economic impact of over $1.8 billion.

In fiscal year 2000, the Agency will fund as many as 50 additional Brownfields Site Assessment Demonstration Pilots for up to $200,000 each. In addition, EPA will provide funding to 50 existing Brownfields Site Assessment Demonstration Pilots for up to $150,000 each for continuation and expansion of their brownfields efforts. In fiscal year 2001, the Administration has requested $8 million to provide supplemental funding and technical support to 40 assessment pilots at up to $200,000 each. New and ongoing pilots will continue to provide EPA, States, local governments, and federally recognized Indian tribes with useful information and new strategies for promoting a unified approach to environmental site assessment and characterization, and redevelopment. These demonstration pilots are estimated to address 5 to 15 potentially contaminated properties in the participating communities.

The Agency has developed a "second-stage" type of brownfields pilot program, known as the Brownfields Cleanup Revolving Loan Fund (BCRLF) Pilots. These pilots are designed to enable eligible States, Tribes and political subdivisions to capitalize revolving loan funds for use in the cleanup and reuse of brownfields. To date, 68 BCRLF pilots have been awarded. These pilots represent 88 communities and include pilot awards to individual eligible entities and coalitions. Three BCRLF loans have been made. The Agency has requested funding to support more BCRLF pilots in fiscal year 2001

The centerpiece of the Brownfields National Partnership is the Brownfields Showcase Communities project. Under this program, the Federal partners designated 16 communities in 1998 to serve as national models demonstrating the benefits of collaborative activity to clean up and redevelop brownfields. The Partnership is provid-

ing a range of technical, financial, and staffing support, depending on the particular needs of each community. These showcases are beginning to yield results, and the Federal partners are planning to designate an additional 10 new Showcase Communities in fiscal year 2001.

In fiscal year 2001, EPA will continue to implement its Brownfields Job Training Pilot program to help local citizens take advantage of the new jobs created by assessment and cleanup of brownfields. To date, EPA has awarded 21 pilots to community-based organizations, community colleges, universities, States, tribes, political subdivisions and non-profit groups. The Agency plans to award 10 additional pilots in fiscal year 2001.

RCRA Program

The Administration is requesting $224 million to support the RCRA program in fiscal year 2001. The RCRA program protects human health and the environment from hazardous wastes by reducing or eliminating the amount of waste generated, and encouraging waste recycling and recovery; ensuring that wastes are managed in an environmental safe manner, and cleaning up contamination resulting from past mismanagement of industrial wastes.

Some of the efforts the Agency is planning for 2001 for waste minimization are to continue to provide leadership, technical assistance and support for recycling and source reduction through voluntary programs such as our WasteWise and Jobs Through Recycling programs. In 1998, the fifth year of the program, WasteWise partners reduced over 7.7 million tons of waste through prevention and recycling.

In 2001, EPA plans to remove barriers to recycling through efforts such as our streamlined regulations for recycling lead-contaminated cathode ray tubes found in many electronic products. The Agency will help improve the market for products made from recycled materials by developing guidelines for Federal and State purchasing of these products. And, EPA will focus waste minimization on persistent, bioaccumulative and toxic (PBT) chemicals in hazardous wastes.

In the area of safe waste management, EPA has a number of efforts planned for 2001, such as examining whether to regulate certain wastes from the inorganic chemical and paint industries. The Agency is also developing concentration-based exemptions to exclude lower risk wastes from hazardous waste regulation, and is studying the impact of waste management units such as surface impoundments, and developing guidance for the management of non-hazardous industrial solid wastes. EPA is working to improve test methods and streamline permitting requirements, and is re-examining requirements for ''hard-to-treat'' wastes such as mercury, arsenic and other toxic heavy metals.

The RCRA Corrective Action Program is the cleanup program under RCRA, and is administered by EPA and authorized States. Approximately 3,500 facilities must undergo RCRA cleanup. The focus is currently on the 1,714 highest priority facilities, where people or the environment are likely to be at significant current or potential risk. In July 1999, EPA announced a series of RCRA reforms that are already producing faster and more flexible cleanup actions. Specifically, the cleanup reforms reduce impediments to achieving effective and timely cleanups, enhance State and stakeholder involvement, and encourage innovative approaches. However, as progress is being made, the Agency is beginning to address increasingly complex cleanups. The Administration's fiscal year 2001 request includes additional resources that are absolutely necessary to implement these reforms, and to stay on track to meet the goals. Most of the increase will go to State implementors.

The Agency has been a leader in working with tribes on environmental issues. Waste management, particularly open dumps, is a significant environmental concern for tribes across the country. In fiscal year 2001, EPA will provide funding and technical assistance to at least 10 tribes to assist them in developing and implementing solid waste management programs, and closing their open dumps. EPA will also continue to provide assistance for hazardous waste management.

Finally, since the RCRA program is predominantly implemented by authorized States, one of the Agency's highest priorities continues to be providing funding and assistance to State programs, and working with States to remove any Federal barriers to making progress in State solid and hazardous waste programs.

Underground Storage Tank Program

The Agency is requesting $90.9 million in fiscal year 2001 to support Underground Storage Tank (UST) and Leaking Underground Storage Tank (LUST) programs. Of this amount, $18.8 million will support EPA, the States' and tribal UST programs in reducing the annual number of confirmed releases for USTs, and $72.1 million will support EPA, the States and tribes to clean up LUST contamination.

The Agency's goal is to prevent, detect, and correct leaks from USTs containing petroleum and hazardous substances. The strategy for achieving this goal is to promote and enforce compliance with the regulatory requirements aimed at preventing and detecting UST releases and taking corrective action where necessary.

EPA and States have made significant progress in addressing the UST problem. For example, since the inception of the UST program in the late 1980's, more than 1.3 million substandard USTs have been closed. As a result of those closures, these tanks are no longer sources of actual or potential leaks which could contaminate groundwater and soil. Currently, the Federal UST requirements apply to approximately 760,000 active USTs. From the beginning of the program through the end of September 1999, approximately 400,000 releases have been discovered from tanks and approximately 230,000 cleanups have been completed. In fiscal year 2001, EPA expects to complete approximately additional 21,000 cleanups.

EPA will continue to work with the States in fiscal year 2001 to increase the compliance rate with the spill, overfill, and corrosion portion of the regulations which require all substandard USTs be upgraded, closed, or replaced. These regulations have improved the quality of USTs, which is leading to a reduction in the number of new releases, and the States and EPA are continuing inspections and enforcement efforts, striving to reach 90 percent compliance by the end of fiscal year 2000 and 99 percent by the end of fiscal year 2003.

EPA will also continue to work with the States to improve the compliance rate with the leak detection requirements. One of EPA's highest priorities for fiscal year 2001 is to work in conjunction with the States, undertaking a major multi-year effort to increase owners' and operators' compliance rates with the leak detection requirements. This will include compliance assistance, inspections, and enforcement.

Conclusion

EPA's priorities and budget request for fiscal year 2001 focus on the importance of building strong and healthy communities for the 21st century. I believe this goal holds particularly true for the cleanup programs described in my testimony today. The fiscal year 2001 budget reflects the Administration's continuing commitment to address environmental problems posed by Superfund sites, brownfields properties, RCRA facilities and LUSTs. Environmental problems don't just exist in the abstract; they affect thousands of communities across the Nation. While we have made great progress in addressing these environmental problems, more needs to be done.

RESPONSES BY TIMOTHY FIELDS TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1a. There is accumulating evidence that the Superfund National Priorities List cleanup program is "ramping down" or will do so soon. For example, the General Accounting Office reported in October 1999 that 545 sites will be completed between 1999 and 2008. Since the Agency is removing 85 sites per year and adding about 30 sites, for a net reduction of about 55 sites per year, why is the Superfund budget request increasing instead of decreasing especially considering that the majority of the sites on the NPL will be coming to completion by 2008?

Response. The budget for fiscal year 2001 maintains EPA's pace to achieve 900 completions by the end of fiscal year 2002. EPA expects to list approximately 40 NPL sites in fiscal year 2000, roughly the same number as the Agency listed in 1999. Our workload remains steady as we continue work at ongoing sites, and as a result of the approximately 40 new sites added to the NPL each year. While EPA has achieved 685 construction completions as of 4/25/00, more than 500 sites will not be construction complete by fiscal year 2003. The workload at these sites covers all pipeline activities, and steady funding is required to continue our current pace of cleanup. It is important to continue funding for all phases of the remediation pipeline, including funding necessary at sites after "construction completion" in order to ensure proper post-cleanup management.

Question 1b. What are the Agency's current plans for NPL listing?

Response. EPA expects to list approximately 40 NPL sites in fiscal year 2000, roughly the same number as the Agency listed in 1999. EPA and most States view the NPL as one among a number of options for cleaning up hazardous waste sites and releases. In addition to Federal actions at NPL sites, sites are being cleaned up by States using enforcement actions, voluntary cleanup programs, and State cleanup funds. EPA is addressing others sites through Fund-lead removals, through enforcement actions under CERCLA, and under other environmental statutes. One common theme among many of these cleanups is that the alternative of NPL listing is often important to inducing cleanups by the responsible parties.

Question 1c. When is the program anticipated to have a decrease in funding needs commensurate with the net decrease in sites listed on the NPL?

Response. EPA believes that funding levels consistent with the current budget request will be required for at least the next 5 years. Given current site completion projections, EPA will still have the responsibility for cleanup work at over 500 existing NPL sites in fiscal year 2003. At the same time, EPA will continue to need resources to clean up sites newly listed on the NPL. As before, we will focus any listing decisions on those sites that States agree should be added to the NPL—such as those that have recalcitrant PRPs or where cleanup is needed and is not occurring. In recent years, State governments have requested that EPA add over 170 new sites to the NPL. We listed 43 sites on the NPL in 1999, and this year we expect to list roughly the same number.

Predicting the resource needs for the Superfund program beyond 5 years is much more difficult. The pace of cleanup will be substantially affected by the resources appropriated during the next 5 years for the Superfund program. We already anticipate that the fiscal year 2000 budget cut to the Superfund program will have an impact on future funding needs. Funding needs will depend greatly on the number and character of sites requiring a Federal Government role in cleanup. As States, PRPs, and EPA further enhance their abilities to achieve successful cleanups at sites without resorting to NPL listing, a larger proportion of Federal cleanup resources may be needed for these cleanup activities.

Question 2. Several years ago, EPA proposed and then withdrew a Voluntary Cleanup Guidance effort for the States. The issue that caused the negotiation of the guidance to break down was how to address finality for State decisions. Does the Agency plan any further efforts to revive such a guidance?

Response. You are correct that on November 25, 1997, EPA withdrew draft guidance on developing Superfund Memoranda of Agreement (MOAs) concerning State voluntary cleanup programs (VCPs). At the time the draft guidance was withdrawn, EPA Regions were asked to continue to work with their States to support effective State VCPs, including entering into VCP MOAs. Since November 1997, EPA and States have signed an additional three Memoranda of Agreement, which brings the total number of signed MOAs regarding State VCPs to fourteen. EPA plans to continue negotiating VCP MOAs under the current process. EPA Regions are advised to look to the November 14, 1996, memorandum entitled "Interim Approaches for Regional Relations with State Voluntary Cleanup Programs" as a framework for these negotiations. EPA has no plans to revive the draft guidance that was withdrawn at the end of 1997.

Question 2a. If so, how does the Agency intend to address the issue of State finality?

Response. As stated in the response to Answer 2 above, EPA has no plans to revive the draft guidance that was withdrawn at the end of 1997. EPA plans to continue negotiating VCP MOAs under the current process.

Question 3a. Is the EPA Brownfields Program specifically authorized by an Act of Congress?

Response: The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) section 104 grants the President broad authority (delegated to the EPA Administrator) to take response actions whenever there is a release or substantial threat of release of hazardous substances, and permits the EPA Administrator to undertake certain investigative and planning activities deemed necessary and appropriate to plan and direct response actions. These are the authorities EPA uses to provide cooperative agreements to assist States, political subdivisions, and Indian Tribes in assessing (brownfields assessment pilots) and/or cleaning up brownfields facilities by capitalizing revolving loan funds (Brownfields Cleanup Revolving Loan Fund Pilots). CERCLA section 311(b) authorizes EPA to conduct a training program in which participants are trained in the procedures for the handling and removal of hazardous substances (Brownfields Job Training Pilots). EPA's Office of General Counsel (OGC) has provided legal opinions in each of these Brownfields Pilots areas. The detailed OGC opinions are attached.

July 7, 1994.

MEMORANDUM

SUBJECT: Legal Authorities to Conduct and Fund "Brownfield" Projects

FROM: Earl Salo, Assistant General Counsel for Superfund, Solid Waste and Emergency Response Division

TO: Marjorie Buckholtz, Director Office of External Relations Office of Solid Waste and Emergency Response

You have asked for our opinion on whether CERCLA [1] provides legal authority to fund various "brownfield" pilot projects. While brownfield projects will vary in the methods and activities implemented, their ultimate objective remains the same—to return contaminated inner city properties to productive use. It is our understanding that the sites productive for inclusion under the "brownfield" projects program present either an actual, threatened or suspected release of a hazardous substance for which the various section 104 response authorities could, as appropriate, be invoked (section 104(a) requires a release, or threatened release, while section 104(b) provides authority to act whenever there is a reason to believe a release has occurred or is about to occur.[2]

If the activities proposed under a "brownfield" project are authorized under section 104, they would be appropriate for a section 104(d)(1) contract or cooperative agreement, and may be funded by the Superfund.

Section 104 Authorities

Section 104(a) grants the President [3] broad authority to take response actions whenever there is a release or substantial threat of a release of hazardous substances. The Administrator may:

"remove or arrange for removal . . . provide for remedial action . . . or take any other response measure *consistent with the National Contingency Plan* [NCP] . . . deem[ed] necessary to protect the public health or welfare or the environment." (emphasis added)

Section 101(23) defines removal actions to include, without limitation:

> such actions as may be necessary to monitor, access, and evaluate the release or threat of release of hazardous substances, disposal of removed material . . . security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for action taken under section 104(b) of this title, and any emergency assistance which may be provided under the Disaster Relief and Emergency Assistance Act [41 U.S.C.A. § 5121 et seq.]

While section 101(24) defines remedial actions to include:

> those actions consistent with permanent remedy taken instead of or in addition to removal actions . . . such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, onsite treatment or incineration, provision of alternative water supplies, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. The term includes the costs of permanent relocation of residents and businesses and community facilities . . . offsite transport and offsite storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials.

Section 104(b) permits the Administrator to:

> "undertake such investigations, monitoring, surveys, testing and other information gathering as he any deem necessary or appropriate. . . In addition the [Administrator] may undertake such planning; legal, fiscal, economic, engineering, architectural, and other studios or investigations as he may deem necessary and appropriate to plan and direct response actions . . . ."

This authority is triggered where the Administrator is authorized to act under section 104(a) or when the Administrator has reason to believe that a release has occurred or is about to occur. [4]

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[1] Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601, et seq., as amended by the Superfund Amendments and Authorization Act of 1986 (SARA), P.L. 99–299.

[2] Sections 104 and 111 allow EPA to address pollutants and contaminants as well as hazardous substances. This memorandum, however, addresses only hazardous substances.

[3] The President has delegated these authorities to the Administrator through Executive Order 12580, section 2(g), dated January 23, 1987.

[4] The authorities in section 104(b) relating to "illness, disease, or complaints thereof" have delegated to the Secretary or Health and Human Resources. E.O. 12580, section 2(a) (Jan. 23, 1987).

"Brownfield" project proposals submitted to the Agency cover a broad spectrum of activities. One project proposes acquiring an abandoned industrial and railway site, removing existing structures, remediating any environmental hazards and developing a comprehensive civic, municipal services and recreation complex in the center of the community. Another pilot project proposes setting up a "brownfields" policy development forum, creating an electronic "brownfields" catalog, and conducting economic analysis of specific sites. Several other projects propose educating stakeholders about the Superfund process, developing a mechanisms to involve community leaders in the site screening and selection process, and forming strategies to remove environmental and financial barriers to development. These general activities should be evaluated on a case by case basis to determine whether they constitute response actions authorized under section 104.

Section 104(d) Cooperative Authorization Criteria

Section 104(d)(1) authorizes the award of contracts or cooperative agreements to States, political subdivisions, or Indian tribes to carry out actions authorized in section 104. Through cooperative agreements, EPA would be authorizing a State, political subdivision, or Indian tribe to undertake activities that EPA itself has the authority to pursue under sections 104(a} or 104(b), thus satisfying the requirements of section 104(d)(1).

However, before a contract or cooperative agreement is awarded, the applicant must satisfy the eligibility criteria of section 104(d) and 40 CFR Part 35, Subpart O.

Use of Superfund to Support "Brownfield" Projects

Section 111 of CERCLA specifies the purposes for which the Superfund any be used, and supports the use of the Superfund for the section 104(d)(1) cooperative agreements. Section 111(a)(1) authorized the "[p]ayment of governmental response costs incurred pursuant to section 104 of CERCLA. The proposed "brownfield" projects would qualify for such funding where the activities involved, as described above, constituted response actions.

We note that, under the NCP, the Superfund cannot be used to pay for remedial actions at non-NPL sites. See 40 CFR § 300.425. Thus, the Agency must ensure that any Superfund money provided through any cooperative agreement not be used for remedial action at non-NPL sites.[5] Since the "brownfield" project proposals cover a spectrum of sites and activities, the Agency must be mindful of this limitation in accepting applications, and entering into cooperative agreements for those projects.

Conclusion

Our analysis is limited to the authorities available to conduct, under section 104, and fund, under section 111, proposed "brownfield" projects. We would be happy to provide you and your staff with more specific advice on individual projects.

Please contact me at 202–260–7698, or Rich Albores of my staff, at 202–260–7981 should you have any, comments or additional questions.

U.S. ENVIRONMENTAL PROTECTION AGENCY,
OFFICE OF GENERAL COUNSEL,
Washington, DC 20460, April 25, 1997.

ATTORNEY-CLIENT PRIVILEGED

MEMORANDUM

SUBJECT: Legal Authority to Provide Financial Assistance to Capitalize Brownfields Revolving Loan Fund Programs

FROM: Stephen G. Pressman, Assistant General Counsel, Finance and Operations Division (2377)

TO: Linda Garczynski, Director, Outreach/Special Project Staff, Office of Solid Waste and Emergency Response (5101)

You have asked whether CERCLA[1] provides legal authority to award cooperative agreements to assist States, political subdivisions, and Indian Tribes ("CA recipients") in cleaning up brownfields facilities by capitalizing revolving loan funds

[5] This limitation on Superfund use does not apply to removal actions (including pre-remedial actions, such as PA/SI RI/FSs, RD, and other section 104(b) activities.

[1] CERCLA is the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601, et seq., as amended.

(RLFs). It is our understanding that the CA recipients will loan RLF moneys to public and private parties, such as non-profit community development corporations, for-profit companies, and similar organizations, to conduct environmental response activities (specifically, removal actions) at brownfields facilities.

Under CERCLA §104(d)(1), EPA may enter into cooperative agreements with States, political subdivisions, and Indian tribes to carry out environmental response activities at brownfields facilities. It is our opinion that CA recipients may carry out such response activities by means of RLFs capitalized with CA funds, as described below.

Use of Funds to Carry Out Removal Activities

CERCLA §104(d)(1) authorizes EPA to award cooperative agreements to States, political subdivisions, or Indian tribes to carry out actions authorized in §104. The July 7, 1994 Memo, "Legal Authorities to Conduct and Fund 'Brownfield' Projects" (Earl Salo to Marjorie Buckholtz), provides a complete discussion of EPA's authority under CERCLA to support environmental response activities at brownfields sites.

As that memo explains, CERCLA §104(a) provides broad authority to take response actions whenever there is a release, or substantial threat of release, of a hazardous substance [2], or pollutant or contaminant [3], including the authority to "remove or arrange for removal . . . [of] such hazardous substance, pollutant, or contaminant . . . consistent with the National Contingency Plan . . . ." "Removal" is defined in CERCLA §101(23). This definition includes actions taken pursuant to CERCLA §104(b)(1); if EPA is authorized to act pursuant to CERCLA §104(a) or has reason to believe that a release has occurred or is about to occur, EPA may, under §104(b)(1), undertake "investigations, monitoring, surveys, testing, and other information gathering," and conduct "such planning, legal, fiscal, economic, engineering, architectural, and other studies or investigations . . . necessary and appropriate to plan and direct response actions .

Thus, EPA may award cooperative agreements to States, political subdivisions, and Indian tribes to carry out removal activities at brownfields facilities.

Use of Funds to Capitalize Revolving Loan Fund Programs

The purpose of the RLF cooperative agreements is to carry out removal activities at brownfields facilities, therefore the awards are for an authorized purpose. At issue is whether EPA may award a cooperative agreement to support the recipient's accomplishment of that purpose by means of a revolving loan fund.

EPA could not establish its own revolving loan fund for brownfields cleanups because the Agency is not authorized to do that under CERCLA. CERCLA does not authorize EPA to make loans. Nor does it authorize EPA to establish and implement its own revolving fund. Without specific statutory authority, a Federal agency cannot operate a revolving fund, i.e., a fund into which receipts may be credited and from which the receipts may be expended by the Federal agency, without further appropriation by Congress, to carry out the purposes of the fund. 44 Comp. Gen. 87 (1964). [4]

However, in this case, it is not EPA, but the CA recipients that will be establishing and implementing revolving loan funds. There is no general prohibition in Federal law on an assistance recipient using assistance funds to make loans. [5] It is well established that the expenditure of assistance funds by a recipient of a Federal grant or cooperative agreement for the purposes of the award is not subject to the various restrictions of Federal law that apply to a Federal agency's expenditure of appropriated funds, unless otherwise provided in the program statute, regulations, or assistance agreement. See 44 Comp. Gen. 87 (1964); 43 Comp. Gen. 697, 699 (1964).

When a grant or cooperative agreement is awarded for a valid, authorized purpose, the recipient has discretion in choosing the means to implement the project, and is not necessarily subject to restrictions that would apply to direct expenditures

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[2] As defined in CERCLA §101(10) and identified in 40 C.F.R. §302.4.

[3] As defined in CERCLA §101(33). The release, or threat of release, of a pollutant or contaminant triggers CERCLA response authority only if it may present an imminent and substantial danger to the public health or welfare. CERCLA §104(a)(1)(B).

[4] In the absence of specific statutory authority, money collected by a Federal agency "for the Government" generally must be deposited in the Treasury as miscellaneous receipts under 31 U.S.C. §3302(b). See 69 Comp. Gen. 260 (1990); 67 Comp. Gen. 443 (1988). If EPA could make loans with money from Superfund appropriations, repayments might go into the Superfund rather than into the general account of the Treasury as miscellaneous receipts. See SARA §517(b), 26 U.S.C. §9507(b)(1996). In any event, the repayments would not "revolve," i.e., they would not be available to EPA for additional expenditure without further appropriation by Congress.

[5] In fact, EPA's general grant regulations, which are a codification of an OMB common rule, contemplate recipients making loans. See 40 C.F.R. §31.25(a).

of the awarding agency. For example, a recipient of a valid training grant may use the grant funds to pay for the travel costs of persons attending a conference, even though Federal agencies are prohibited under 31 U.S.C. §1345 from paying the travel expenses of non-Federal personnel to attend a meeting. 62 Comp. Gen. 531 (1983); 55 Comp. Gen. 750 (1976).

In a case similar to this one, the State Department awarded a grant to the University of Hawaii for the establishment of the East-West Center. The Center set up a publishing operation ("the Press") which was intended to operate on a revolving fund basis, i.e., the Press would establish a revolving fund which would collect receipts from the sale of publications and expend the receipts to finance additional publications. The State Department informed its appropriations committees of this intent in its budget justifications. GAO concluded that, although the miscellaneous receipts statute would prohibit a Federal agency from using a revolving fund, the grantee's revolving fund was proper, because the grant agreement did not prohibit it and because grant funds in the hands of the grantee are "free from the statutory restrictions generally applicable to the expenditure of appropriated moneys by the . . . Government." 44 Comp. Gen. 87 (1964).

EPA's funding of brownfields RLFs is proper for the same reasons. The cooperative agreements will not prohibit the recipients from establishing revolving funds, but rather will explicitly approve that use of the assistance funds. The Agency has informed its appropriations committees of its intent to support brownfields RLFs in its budget justifications.[6] Congress's subsequent lump sum Superfund appropriation is deemed to include funding for this program.[7] Under these circumstances, once the CA recipients take the funds, they may use them without regard to the restrictions on EPA's use of the funds.

CERCLA Cooperative Agreements

Before a CERCLA cooperative agreement is awarded, the applicant must satisfy the criteria of 40 C.F.R. Part 35, Subpart O. including section 35.6200, which details the specific requirements for removal response cooperative agreements. The cooperative agreement should contain specific terms and conditions to ensure that the Federal interests and objectives are carried out, including the requirement that loans support removal activities authorized by CERCLA §104.

The cooperative agreements are also subject to the Agency's general grant regulations at 40 C.F.R. Part 31. These include the requirement that the Agency use payment methods that minimize the time elapsing between transfer of funds to the recipient to capitalize the RLF and subsequent disbursement from the RLF. 40 C.F.R. §31.21(b). Once the funds have been loaned or otherwise applied to the purposes authorized in the cooperative agreement, repayments of principal plus interest are "program income" to the recipient. 40 C.F.R §35.6290; 40 C.F.R. §31.25(a).[8] See also 71 Comp. Gen. 387, 388 (1992).

Program income ordinarily is deducted from a recipient's allowable costs and therefore reduces the amount due a recipient under a cooperative agreement.[9] 40 C.F.R. §31.25(g)(1). However, EPA may include a term and condition in the cooperative agreement that authorizes the CA recipient to retain and use program income to further the purposes of the cooperative agreement. 40 C.F.R. §31.25(g)(2). Such a provision should be included in the brownfields RLF cooperative agreements so that program income in the form of principal and interest repayments can be used for additional loans for removal activities at brownfields facilities. The Agency will have to consider how that provision should address repayments of principal and interest after the project period has expired.

Program income does not include interest earned by the recipient on cooperative agreement funds prior to their disbursement or expenditure for purposes of the cooperative agreement. 40 C.F.R. §31.25(a). Such interest is governed by 40 C.F.R.

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[6] In EPA's fiscal year 1997 "Justification of Appropriation Estimates for the Committees on Appropriations," p. 6–3, the Agency stated that it would "initiate followup cleanup grants of up to $350,000 each to capitalize revolving loan funds for 29 pilot recipients who completed the initial brownfield pilot stage."

[7] The Conference Report that accompanied EPA's fiscal year 1997 appropriation, H.R. Rep. No. 104–812, at 71 (Sept. 20, 1996), simply stated that the appropriated amount for Superfund included the amount requested in the Agency's budget request for brownfields activities.

[8] Program income is "gross income received by the grantee or subgrantee directly generated by a grant supported activity, or earned only as a result of the grant agreement during the grant period." 40 C.F.R. §31.25(b).

[9] Allowable costs for tribes, State, and local governments are determined in accordance with OMB Circular A–87, "Cost Principles for State and Local Governments" and the terms of the cooperative agreement.

§ 31.21(i), under which the recipient must, under certain circumstances, remit to the Federal grantor agency interest earned on advances of funds.

Care must be taken to ensure that the Agency does not use financial assistance to undertake indirectly an activity that it cannot carry out directly. Consistent with the Federal Grant and Cooperative Agreement Act, 31 U.S.C. S6305, EPA can be substantially involved in the activities supported by a cooperative agreement (in contrast to the Agency's more limited role under a grant agreement). Nonetheless, assistance—whether in the form of a cooperative agreement or a grant—can be awarded only if the principal purpose is to support activities that CA recipients carry out for their own purposes. See EPA Order 5700.1, "Policy on Distinguishing Between Acquisition and Assistance," p. 7 (March 24, 1994). Consequently, although EPA can be substantially involved, the Agency cannot use the cooperative agreements to indirectly establish Federal revolving loan funds by dictating the priorities of CA recipients for RLF supported removal actions.

Individual brownfields RLF programs may raise additional legal issues, including how to address program income in the close-out of cooperative agreements. We will be glad to provide advice on them as needed. Please contact Jim Drummond (260–6316) or me (260–7725) if you have any questions.

U.S. ENVIRONMENTAL PROTECTION AGENCY,
OFFICE OF GENERAL COUNSEL,
Washington, DC 20460, May 29, 1997.

MEMORANDUM

ATTORNEY-CLIENT PRIVILEGED

SUBJECT: CERCLA § 311(b)(9)(A) Training Grants

FROM: Leslie Darman, Finance and Operations Division

TO: Linda Garczynski, Director, Outreach/Special Projects Office of Solid Waste and Emergency Response

This memorandum responds to your question as to the scope of training activities authorized under § 311(b)(9)(A) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), which provides:

> The Administrator is authorized and directed to carry out, through the Office of Technology Demonstration, a program of training and an evaluation of training needs for each of the following:
>
> (A) Training in the procedures for the handling and removal of hazardous substances for employees who handle hazardous substances.
>
> (B) Training in the management of facilities at which hazardous substances are located and in the evaluation of the hazards to human health presented by such facilities for State and local health and environment agency personnel.

Specifically, you asked whether a § 311(b)(9)(A) training program would have to train workers in alternative and innovative treatment technologies since subsection (b) of § 311 is entitled "Alternative or innovative treatment technology research and demonstration program," and the majority of subsection (b)'s provisions are devoted to that program.

For the reasons discussed below, I conclude that § 311(b)(9) authorizes EPA to conduct a training program not limited to training in alternative and innovative technologies. This authority is separate and distinct from that provided to the Department of Heath and Human Services (HHS) under other subsections of § 311.

Scope of training activities authorized by § 311(b)(9)

Although other interpretations are conceivable, the better reading of § 311(b)(9) is that the training programs authorized by it are not limited to training in alternative or innovative treatment technologies. An examination of subsections (b)(1), (9) and (10) together warrants this conclusion. Subsection (b)(10) provides such a narrow definition of alternative or innovative treatment technologies that if it applied to the training programs under (b)(9) it would give rise to an inconsistency between the plain language of the two subsections.[1] Training in "the procedures for the handling

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[1] "Alternative or innovative treatment technologies" is defined in § 311(b)(10):

> For the purposes of this subsection, the term "alternative or innovative treatment technologies" means those technologies, including proprietary or patented methods, which permanently alter the composition of hazardous waste through chemical, biological, or physical means so as to significantly reduce the toxicity, mobility, or volume (or any combination thereof) of the

and removal of hazardous substances" or in the "management of facilities at which hazardous substances are located and in the evaluation of the hazards to human health presented by such facilities" as provided by (b)(9) contemplates training in a wider range of activities than those contemplated by (b)(10). Most significantly, however, the plain language of subsection (b)(9) does not indicate that the training authorization is limited only to training in alternative and innovative treatment technologies. Thus, the training activities authorized under subsection (b)(9)—"in the procedures for the handling and removal of hazardous substances" and "in the management of facilities at which hazardous substances are located" are not limited to training in alternative and innovative treatment technologies.

This reading of § 311(b)(9) is corroborated by the language of § ill(n) which specifies authorized uses of appropriations from the Hazardous Substance Superfund. Section 111(n)(1) specifies a limit on the amount available "for the purposes of carrying out the applied research, development and demonstration program for alternative or innovative technologies *and training program authorized under section [311(b)] of this title* . . ." (emphasis added). By referring to two programs under the authorization of appropriations for § 311(b), Congress acknowledges both a relationship and a distinction between the training program described in § 311(b)(9) and the alternative or innovative treatment technology program described in other subsections of 311(b).

Role of EPA in § 311 training programs

Both the statute itself and the legislative history indicate that Congress intentionally gave similar training authority to both EPA and HHS. First, § 311(b)(9) expressly provides that the Administrator of EPA is authorized and directed to carry out a training program whereas HHS, through the National Institute for Environmental Health Sciences (NIEHS) is also given authority to conduct a training program under § 311(a) and 42 U.S.C. § 9660a. Similarly, two separate subsections of § 111 (Uses of the Fund) cover the two training programs, affirming that Congress intended HHS to have training authority under § 311(a) and EPA to have training authority under § 311(b). Section 111(n)(1) authorizes using the Fund for the purpose of § 311(b), including the "training program authorized under section [311](b)" whereas § 111(n)(2) provides a separate authorization for training activities under § 311(a).

The legislative history, although sparse on this point, leads to the same conclusion. Senator Stafford, who first introduced a research and training amendment to CERCLA remarked that the amendment is designed to "*provided research and training authority to both EPA and HHS* . . . . [since they] have the broad range of experience necessary to plan and implement the variety of activities that are needed to strengthen current research efforts and to increase . . . the cadre of appropriately trained personnel." Congressional Record, September 16, 1985; reprinted in Congressional Research Service, A Legislative History of the Superfund Amendments and Reauthorization Act of 1986, at 1118 (1990) (emphasis added) [hereinafter Legis. History]. Furthermore, in commenting on the language of the amendment, Senator Stafford explained that it "acknowledges the important health-related research and training expertise that reside within [NIEHS] and the National Institute for Occupational Safety and Health [NIOSH], but in no way does the amendment imply that these two institutes are or should be the only sources of awards." Id.

Limitations and Requirements of Training Programs under § 311(b)(9)

The following list sets forth some of the limitations and requirements of a training program authorized by § 311(b)(9) and funded by a grant under the authority of § 311(b)(3): [2]

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hazardous waste or contaminated materials being treated. The term also includes technologies that characterize or assess the extent of contamination, the chemical and physical character of the contaminants, and the stresses imposed by the contaminants on complex ecosystems at sites.

[2] The requirements of § 311(b)(3) apply because that is the source of EPA's authority to award training grants under § 311(b)(9); subsection (b)(9) does not itself authorize EPA to award grants. The Agency has long interpreted § 311(b)(3) to provide EPA with authority to award grants and enter into contracts to carry out all of the activities authorized under § 311(b), including (b)(9). The Agency views the training program under subsection (b)(9) as a program within the larger program described in § 311(b). This interpretation is consistent with one of the stated purposes of § 311: "[t]o establish a comprehensive and coordinated Federal program of research, development, demonstration, and training for the purpose of promoting the development of alternative and innovative treatment technologies . . ." Pub. L. No. 99–499, § 209(a)(1), 100 Stat. 1613, 1708 (1986). It also comports with § 111(n)(1), which provides a single authorization

Continued

1. The program must train participants in "the procedures for the handling and removal of hazardous substances," which includes training for jobs in sampling, analysis, and site remediation, for example.[3] § 311(b)(9)(A).

2. The recipients of grants, cooperative agreements, or contracts must be "persons, public entities, and nonprofit private entities which are exempt from tax under section 501(c)(3)" of the Internal Revenue Code. § 311(b)(3).

3. "To the maximum extent possible," the Agency is to enter into "appropriate cost share arrangements." § 311(b)(3).

4. The Administrator has delegated the authority to carry out the training program under § 311(b) to the Assistant Administrator for Research and Development, to be exercised in accordance with plans and priorities developed in consultation with the Assistant Administrator for Solid Waste and Emergency Response or designee. Delegations Manual, 14-18-A, 1200 TN 168 (September 13, 1987).

If you have any further questions, please feel free to contact me.

U.S. ENVIRONMENTAL PROTECTION AGENCY,
OFFICE OF ADMINISTRATION AND RESOURCE MANAGEMENT,
Washington, DC 20460, July 8, 1998.

MEMORANDUM

SUBJECT: Response to OIG's Draft Audit Report on Statutory Authority for EPA Assistance Agreements, Draft Audit Report No. E3AMF8–11–0008

FROM: Alvin M. Pesachowitz, Acting Assistant Administrator for Administration and Resources Management (3101)

TO: Elissa R. Karpf, Deputy Assistant Inspector General for External Audits (2421)

Thank you for the opportunity to provide comments on the Draft Audit Report on Statutory Authority for EPA Assistance Agreements E3 AMF8–11–0008. This audit raised some very important issues and we appreciate the chance to respond to your findings, We also appreciate your office's professional attitude and thoughtful approach in alerting us to your concerns.

The Office of Grants and Debarment (OGD) has worked with the Office of General Counsel (OGC), the Office of Prevention, Pesticides and Toxic Substances (OPPTS), and the Outreach and Special Projects Staff (OSPS) within the Office of Solid Waste and Emergency Response (OSWER) to provide comments on the OIG's findings and recommendations. All of the offices were very cooperative and helpful, and each reviewed ant provided comments on the Draft Report. As indicated below, contrary to many of the audit findings, the Agency believes that the activities questioned in the

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of appropriations for all of the activities authorized under § 311(b), including training. The broad authority in § 311(b)(9) to carry out a training program is complementary to—but not limited by—the more narrow alternative and innovative treatment technology program also established under § 311(b). To be sure, the statute is ambiguous as to whether the grant authority in § 311(b)(3) applies to the training program in § 311(b)(9). While the legislative history does not completely clarify the ambiguity, it indicates that it is reasonable for the Agency to interpret § 311 as providing for one overarching program to promote alternative and innovative treatment technologies that includes within it a training program not limited to training in alternative and innovative treatment technologies, and therefore the grant authority in subsection (b)(3) extends to the training program in (b)(9). In the conference report, the substitute for the House and Senate versions of § 311 is described as creating "four new programs" identified as "the hazardous substance research and training program . . . the alternative and innovative treatment technology research and demonstration program . . . the hazardous waste research program . . . [and] a program for university hazardous substances research." Legis. History at 5093–94. These programs correspond to the four programs described in subsections (a) through (d) of § 311. If Congress intended the training program authorized under § 311(b)(9) to be completely separate from the alternative and innovative treatment technology research and demonstration program under § 311(b), presumably it would have described a fifth program. Furthermore, as noted above, in commenting on an earlier version of the amendment, Senator Stafford explained that "in no way does the amendment imply that [NIEHS and NIOSH] are or should be the only sources of awards" for research and training activities. Legis. History at 1118. Because the Agency's interpretation is reasonable and otherwise permissible, it is entitled to deference under Chevron USA v. NRDC, 467 U.S. 837 (1984). Nonetheless, it would be helpful if the Agency's authority to award grants under subsection (b)(9) could be clarified during the reauthorization of CERCLA.

[3] In addition, section 311(b)(9)(B) authorizes training in "the management of facilities at which hazardous substances are located and in the evaluation of the hazards to human health presented by such facilities for State and local health and environment agency personnel." These training activities are not discussed here based on your description of the proposed training program.

Draft Report are authorized by EPA's statutes. Although we disagree with many of the audit findings, we concur with the audit recommendations. The actions recommended will help ensure that our assistance programs continue to be administered properly and that activities funded by EPA are within the Agency's assistance authorities.

Set forth below are our comments an the scope of the Agency's grant making authorities and the Agency's response to the recommendations contained in the Draft Report. Attached are memoranda containing the specific comments made by OPPTS and OSWER on the Draft Report.

I. STATUTORY AUTHORITIES

The Draft Report identifies 25 assistance agreements the OIG believes are not authorized by the statutes cited in the respective award documents. focusing in particular on the grant authorities provided in CERCLA § 311(c), TSCA § 10(a), FIFRA § 20, and FIFRA § 23. These statutes authorize grants for activities such as "research," "development," "monitoring," "enforcement," and "training". None of these terms are defined in their respective statutes; nor, as the OIG acknowledges, do the legislative histories of these provisions provide evidence as to how Congress intended these terms to be interpreted. As a result, the OIG's interpretations are based on its opinions and beliefs as to their meanings. As the Draft Report indicates, the issues involved in the interpretation of these provisions are not clear-cut, and reasonable people may have differing opinions regarding the scope of these authorities.

When, as here, there are a range of permissible legal interpretations, it is within the Agency's discretion to adopt the interpretation that it believes will best enable it to meet statutory goals and objectives. As discussed below, in the absence of statutory definitions or clarifying legislative history, the Agency has adopted what it believes are permissible interpretations of the terms that further the goals and objectives of CERCLA, TSCA, and FIFRA. While the Agency believes that the statutes permit these grants, we concur with the recommendation that EPA should seek broader authority to clarify that supported activities are authorized and to permit the Agency to provide financial assistance for a wider range of activities.

Awards Made Under CERCLA

CERCLA § 311(c)

The Draft Report concludes that nine assistance agreements were not authorized by CERCLA § 311(c), which provides for grants to "support. . . research with respect to the detection, assessment, and evaluation of the effects on and risks to human health of hazardous substances and detection of hazardous substances in the environment." Based on the discussion in the Draft Report and the analysis provided in Appendix A, it appears the OIG objects to these grants on two grounds. The first is that the term "research" as used in CERCLA, § 311(c) cannot be interpreted to include socio-economic research. The second is that improper methodologies were used to conduct the research, e.g., the use of meetings, conferences, and newsletters.

This provision was added to CERCLA in 1986 as part of the Superfund Amendments and Reauthorization Act of 1980 (SARA), but, as the OIG indicates, the legislative history of the provision offers no insight with regard to the scope of the term "research." In the absence of such guidance, the Draft Report Dates that the OIG bases its opinion regarding the interpretation of the statute upon what it considers to be the "historical context in which CERCLA was passed, i.e., that Congress was concerned about contamination from manufacturing, municipal landfills, mining, and Federal defense and energy activities." Based on this "historical context," the OIG believes CERCLA § 311(c) authorizes research "aimed at understanding and mitigating the effects of pollutants on human health" and objects to awards to "fund technical assistance to State and local government officials, address environmental justice issues, study the effects of and regulations on the economic redevelopment of brownfields sites, and fund meetings and conferences."

The Agency believes that the scope of CERCLA § 311(c) research, even as defined by the OIG, would encompass what is referred to in the Draft Report as socio-economic research as this research is aimed at understanding and mitigating the effects of pollutants on human health. The types of research projects that the OIG question—projects addressing environmental justice issues, studying the effects of law and regulations on the economic redevelopment of brownfields sites, and funding meetings and conferences—may very well be aimed at "understanding and mitigating the effects of pollutants on human health," depending on the specific activities involved. Thus, under the OIG's standards those projects arguably would be au-

thorized under CERCLA § 311(c). (We agree that technical assistance generally is not research).

More importantly, the plain language of the statute does not limit the term "research" to exclude the activities funded under these agreements. EPA has interpreted "research" to include study that extends to the social sciences, including socio-economic, institutional, and public policy issues, as well as the "natural" sciences. CERCLA § 311(c) includes two separate clauses modifying the term "research": research with respect to the detection assessment, and evaluation of the effects on and risks to human heals of hazardous substances" and research with respect to the "detection of hazardous substances in the environment." Nothing in either of these clauses limits the research to the "natural" sciences. Furthermore, limiting the definition to include only research on the effects on "human health" would render superfluous a second phrase that modifies the term "research" i.e., "detection of hazardous substances in the environment," Pursuant to principles of statutory construction, the statute thus carries a broader meaning than the one advanced by the OIG. This interpretation of "research" under CERCLA § 311(c) is consistent with § 102(2)(A) of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(2)(A) (directing agencies to use an interdisciplinary approach ensuring the integrated use of the natural and social sciences),

The OIG's second objection to these awards is that research under CERCLA § 311(c) cannot include the funding of meetings, conferences, and workshops. "Research," however, can be carried out through a range of activities, including not only "bench" science but also other forms of information gathering and exchange, such as conferences and newsletters. Among other things, conferences can be used to obtain additional information, refine methodologies and findings, and stimulate further research through dialogs with affected groups, as well as to publicize or explain the results of a research project. Research encompasses more than theoretical inquiries characteristic of a laboratory or academic setting.

However, we agree with the OIG's assessment that the Agency could do a better job of ensuring that recipients explain how funded activities further the research objective of the agreement. As the OIG notes, additional training and guidance for program offices would be useful, and we will consider including a provision in the guidance about linking conference funding with the research aims of the award. Additionally, OSWER has begun requiring that CERCLA § 311(c) recipients agree to a term and condition, ensuring that their activities remain focused on research authorized by the statute.

The Draft Report notes several instances in which OGC advised OSWER that while CERCLA § 311(c) could be interpreted to encompass a broad range of research activities, because certain activities were not explicitly authorized, they might be challenged if audited. OIG interprets this advice as barring the awards. OGC, however, did not say that the activities were not legally supportable. Given several legally supportable positions, OSWER made a reasoned judgment, within its discretion, to award the grants.

Finally, the OIG recommends that, in order to comply with CERCLA § 311(c), all awards must be coordinated with the Secretary of Health and Human Services (HHS). While the statute requires the Agency to coordinate its research with HAS to avoid duplication of effort, the statute does not require that each award must be coordinated with HHS, As indicated in the attached response from OSWER, they will undertake additional efforts to better coordinate their CERCLA § 311(c) research with HHS.

CERCLA §§ 311(b)(3) and (b)(9)(A)

In an addendum to the statutory authority report, the OIG questioned whether CERCLA §§ 311(b)(3) and (9) authorize grants for Brownfields Job Training and Development Demonstration Pilots. CERCLA § 311(b)(3) provides:

> In carrying out the program, the Administrator is authorized to enter into contracts and cooperative agreements with, and make grants to, persons, public entities, and nonprofit private entities which are exempt from tax under section 501(c)(3) of Title 26. The Administrator shall, to the extent possible, enter into appropriate cost sharing arrangements under this subsection.

CERCLA § 311(b)(9) provides:

> The Administrator is authorized and directed to carry out, through the Office of Technology Demonstration, a program of training and an evaluation of training needs for each of the following:
>
> (A) Training in the procedures for the handling and removal of hazardous substances for employees who handle hazardous substances.

(B) Training in the management of facilities at which hazardous substances are located and in the evaluation of the hazards to human health presented by such facilities for State and local health and environment agency personnel,

CERCLA § 311(b)(10) provides:

For the purposes of this subsection, the term "alternative or innovative treatment technologies" means those technologies, including proprietary or patented methods, which permanently alter the composition of hazardous chaste through chemical, biological, or physical means so as to. significantly reduce the toxicity, mobility, or volume (or any combination thereof) of the hazardous waste or contaminated materials being treated. The term also includes technologies that characterize or assess the extent of contamination, the chemical and physical character of the contaminants, and the stresses imposer by the contaminants on complex ecosystems at sites.

The OIG considered an OGC memorandum of May 39, 1997, in which OGC concluded that § 311(b)(9) authorizes EPA to conduct a training program not limited to training in alternative and innovative technologies ant to make grants for that purpose under § 311(b)(3). The OIG disagreed with that conclusion, maintaining that the better interpretation of CERCLA § § 311(b)(3) and (b)(9) is that they authorize the Agency to make grants for training but only insofar as the training is related to alternative or innovative treatment technologies. The Brownfields Training and Development Pilots, according to the OIG, "have nothing to do with alternative or innovative technologies and are not targeted at the audience (personnel handling hazardous waste and/or managing hazardous waste facilities) that Congress contemplated when it passed § 311(b)(9)." The OIG believes that EPA is only authorized to make grants for training "related to alternative or innovative treatment technologies, i.e., training intended to acquaint personnel handling hazardous waste and/or managing hazardous waste facilities with changed procedures wrought by alternative or innovative treatment technologies." Subsequently, In a meeting attended by the OIG, OGC, and OSWER, it became clear that the OIG also believes that the training programs funded by grants under CERCLA § § 311(b)(3) and (9) can only be for individuals already employed in handling hazardous substances at the time they receive the training.

Eligible Training Activities

As a result of the OIG memo, OGC has reevaluated its interpretation of CERCLA § § 311(b)(3) and (9) and has identified what it now believes is a more defensible interpretation. OGC does not believe that the following interpretation of the statute is the only one possible; other broader interpretations could also be defended. Nonetheless, OGC will, as a prudential matter, encourage programs to adhere to its new interpretation.

The context in which alternative or innovative technologies are implemented—hazardous waste site cleanups—is the same context in which non-alternative or innovative treatment technologies are used. Consequently, if the training authorized by § 311(b)(9) were limited to training in skills that are only used in the implementation of alternative or innovative treatment technologies, then only a very limited range of skills could be taught to trainees. Such a narrow interpretation 311(b)(9) would be difficult to defend, particularly because § 311(b)(9) does not make any reference to a requirement that authorized activities be limited to training in alternative or innovative treatment technologies and the plain language of § 311(b)(9) authorizes training in a much broader range of activities—"the handling and removal of hazardous substances." Moreover, there is nothing in the legislative history that suggests that Congress intended the training to be limited to training in skills that have an exclusive relationship to alternative or innovative treatment technologies.

Therefore, OGC interprets CERCLA § § 311(b)(3) and (b)(9)(A) to authorize grants for training in "the handling and removal of hazardous substances" which bears a relationship to the use of alternative or innovative treatment technologies in the context of a cleanup, Under this interpretation, grantees could teach trainees skills that would be applicable both to cleanups employing an alternative or innovative treatment technology and to cleanups employing non-alternative or innovative treatment technology For example, training programs could teach the following skills that are needed to carry out alternative/innovative bioremediation of contaminants for either on- or offsite treatment of contaminated soils; excavation skills for removing contaminated soils to the treatment area, use of heavy equipment skills for fuming of contaminated soils to ensure bioremediation occurs, and monitoring skills to determine levels of toxic materials. These same skills would be useful in non-alternative or innovative treatment technologies.

Accordingly, in awarding training grants under CERCLA §§311(b)(3) and (b)(9), the program office would have to determine that the training activities could be usefully applied to a cleanup employing an alternative or innovative technology. The determination would be documented in the decision memorandum associated with the assistance award. In addition, a term and condition would be included in each assistance agreement so that the grantee would be adequately informed of this limitation on the types of activities for which training could be provided. Both the decision memorandum and the assistance agreement would include a statement or condition such as:

> The training provided by tile recipient must be training in the handling and removal of hazardous substances related to the implementation of alternative or innovative treatment technologies as defined in section 311(b)(10) of CERCLA. The recipient may teach trainees skills that are relevant to the implementation of both alternative or innovative treatment technologies and non-alternative or innovative treatment technologies.

Eligible Trainees

In its memorandum, the OIG does not discuss the issue of eligible trainees. In a subsequent meeting, however, the OIG asserted that the training authorized under §311(b)(9) may only be provided to individuals already employed in the field at the time they receive the training.

The Agency disagrees. CERCLA §311(b)(9) authorizes training "for employees who handle hazardous substances." There is nothing in §311(b)(9), however, that requires that trainees must be currently employed in handling hazardous substances before they receive training in the handling and removal of hazardous substances. The requirement that the training be "for employees" is satisfied if the training is provided for the purpose of training individuals to *become employed* in the field of handling hazardous substances. This is consistent with one of the goals Congress sought to accomplish by enacting §311 of CERCLA: "to *increase* . . the cadre of appropriately trained personnel." Congressional Record, September 16, 1985; reprinted Congressional Research Service, A Legislative History of the Superfund Amendments and Reauthorizarion Act of 1986, at 1118 (1990)(emphasis added).

Awards Made Under TSCA

TSCA §10(a)

The OIG objects to three awards made under TSCA §10(a) to support training and public outreach activities, two of which involve environmental justice initiatives TSCA §10(a) authorizes the award of grants for "research, development and monitoring" as is necessary to carry out the purposes of TSCA, The OIG objects that training and public outreach are not research, development, or monitoring.

The Agency interprets the term "development" to include may training and public outreach activities. In the absence of a statutory definition or any legislative history regarding the term, the Agency has adopted a permissible interpretation that is consistent with the dictionary definition of the term. Included within that definition are activities that expand the capability or capacity of an individual or an organization. Training and outreach activities expand the capability and capacity of individuals by broadening their knowledge base and thus the Agency has determined that they are activities encompassed under the term "development." As under CERCLA §311(c), "environmental justice activities" may or may not be eligible, depending on the specific activities).

In support of its objection, the OIG states that the only training authorized in TSCA §10 is the training for Federal laboratory and technical personnel authorized by TSCA §10(f). This provision requires EPA to train and facilitate the training of Federal workers, an activity directly benefiting the Federal Government and one properly funded through a contract. This is a separate, distinct requirement that is unrelated to the Agency's grant-making authority under TSCA. The requirement that the Agency train its own personnel does not limit its authority to provide grants to support other types of development, including training, under TSCA §10(a).

With regard to the TSCA §10(a) requirement for consultation with RHS and other agencies, as indicated in the attached OPPTS response, although some areas of activity have diminished, others have expanded and OPPTS continues to consult and coordinate its activities with HHS and other Federal agencies.

TSCA §28(a)

The OIG objected to two awards made under TSCA §28(a), which authorizes grants to States for the "establishment and operation of programs to prevent or eliminate unreasonable risks within the States to health or the environment which

are associated with a chemical substance or mixture and with respect to which the Administrator is unable or is not likely to take action under [TSCA] for their prevention or elimination." The OIG objects that the grantees' work plans did not establish that the States mill address chemicals with respect to which EPA is unable or unlikely to take action.

However, the plain language of the statute does not require a grantee to affirmatively demonstrate in its work plan that the Administrator is unable or unlikely to take action. In most cases, the grantee cannot be expected to know whether the Agency is unable or unlikely to address a particular risk. The Agency interprets the statute as requiring the grant program to be administered in a manner that complements, but avoids duplication of, Federal action. Under this interpretation, EPA does not award grants to address risks that the Agency expects to "address itself. However, given the standard in the statute—"not likely to take action"—there is a possibility that changed conditions might result in a decision by the Agency to take an action in the future with regard to a particular risk, even though at the time of the award it did not appear likely. Furthermore, there is no indication in the Draft Report that at the time of the questioned awards or, subsequently, that the particular risks addressed in the grants were or were likely to become the subject of Federal action, For these reasons, we disagree with the OIG's position.

The Agency concurs that the proper authority for providing grants to States to develop and implement CAA § 112(r) programs is CAA § 122(l)(4).

Awards Made Under FIFRA

FIFRA § 20(a)

The OIG objects to the funding of what it terms "training" and the "assessment of training programs" under FIFRA § 20 which authorizes grants for research necessary to carry out the purposes of FIFRA and for research into integrated pest management The Agency concurs that the term "research" generally does not include training. However, as discussed above with regard to CERCLA § 311(c), the term is not restricted to "bench science" and may be carried out through a variety of methodologies, including workshops and conferences. Furthermore, with regard to the specific activities questioned by the OIG, the Agency believes that research on and the evaluation of a training program are types of research and thus are within the scope of the authority.

FIFRA 423(a)

The Draft Report questions five awards made under FIFRA § 23(a) because the OIG believes they are "neither enforcement activities nor applicator training," but, instead, research authorized under FIFRA § 20, FIFRA § 23(a) authorizes cooperative agreements with States and Tribes:

> (1) to delegate to any State or Indian tribe the authority to cooperate in the enforcement of this subchapter through the use of its personnel or facilities, to train personnel of the State or Indian tube to cooperate in the enforcement of this subchapter, and to assist States and Indian tribes in implementing cooperative enforcement programs through grants-in-aid; and
>
> (2) to assist States in developing and administering State programs, and Indian tribes that enter into cooperative agreements, to train and certify applicators consistent with the standards the Administrator prescribes.

This provision authorizes assistance awards for a comprehensive enforcement program. The Agency has interpreted this broad authority reasonably to include a wide variety of activities, including those that when accomplished would preclude the need to take additional enforcement actions. However, consistent with the OIG's recommendation, the Agency has requested in the President's Fiscal Year 1999 Budget Request enactment of the following clarifying language;

> "Provided further, that beginning in fiscal year 1999 and thereafter, pesticide program implementation grants under section 23(a)(1) of the Federal Insecticide, Fungicide and Rodenticide Act, as amended, shall be available for pesticide program development and implementation, including enforcement and compliance activities."

Awards Made Under CAA § 103, CWA § 104, and SWDA § 8001

Although not addressed in the text of the Draft Report, Appendix A indicates the OIG also objects to an award to the Global Environment and Trade Study for research on environmental regulation and competitiveness, eco-labeling, use of trade measures in environmental treaties, and the environmental impacts of regional trade agreements. The OIG objects on the grounds that the grant authorities cites,

CAA § 103, CWA § 104, and SWDA § 8001, authorize only what the OIG terms "scientific" research and not what it terms "socio-economic" research.

As discussed these statutory provisions do not require, and the Agency does not interpret, the term "research" to be confined to the "natural" sciences. Furthermore, as the Draft Report acknowledges, these three statutes are so broadly worded that they authorize many types of activities, not just research, and certainly not just "scientific" research. For example, § 104 of the Clean Water Act authorizes grants to "conduct and promote the coordination and acceleration of, research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution." Such activities are not limited to the "natural" sciences, but may include a variety of socio-economic, institutional, and public policy issues that relate to the "causes, effects, extent, prevention, reduction and elimination of pollution." A similar enumeration of authorized activities under CAA § 103 includes the following phrase: ". . . studies relating to the causes, effects (including; health and welfare effects), extent, prevention, and control of air pollution" (emphasis added), indicating that the activities include, but are not limited to, "scientific," "health effects" research.

II. RESPONSE TO RECOMMENDATIONS

Recommendation 1 (to Assistant Administrator for OARM): Coordinate with the Assistant Administrators for OSWER and OPPTS and the Associate Administrator for Congressional and Intergovernmental Relations to obtain clear statutory authority to fund assistance agreements for the types of activities questioned in this report, i.e., technical assistance, environmental justice, and economic redevelopment studies under CERCLA, public outreach, training and environmental justice activities under TSCA; and training and training assessments under FIFRA.

OARM Response: OARM agrees with this recommendation. We will work with the program offices and OGC to obtain the statutory changes necessary to clarify and expand the existing grant authorities.

Beginning in 1994, OSWER requested that Administration proposals for Superfund Reauthorization include a provision which would have clarified the types of activities that could be funded under CERCLA § 311(c). OSWER has continued to seek this clarification through successive rounds of proposed legislation, and they agree to continue to work with OARM and OCIR toward this end.

In addition, as indicated previously, in the President's Fiscal Year 1999 Budget Request EPA requested enactment of the following clarifying language:

> "Provided further, that, beginning in fiscal year 1999 ant thereafter, pesticide program implementation grants under section 23(a)(i) of the Federal Insecticide, Fungicide and Rodenticide Act, as amended, shall be available for pesticide program development and implementation? including enforcement and compliance activities."

Recommendation 2 (to Assistant Administrator for OARM): Clarify existing policies and guidance, EPA Order 5730.1 requires program offices to designate the program element, statutory authority, and delegation of authority in the decision memorandum. Rather than merely citing a statute, the program offices should be required to briefly explain how the proposed work relates to the authorizing statute. Grants Management Offices should return any funding package missing this information.

OARM Response: We agree with the OIG recommendation. We will modify EPA Order 5730.1 to include language that specifically requires that all future funding packages include an explanation of how the proposed grant award relates to the authorizing statute. As a component of the current assistance funding packages, the decision memorandum must cite the statutory authority which authorizes proposed grant activities. The Grants Specialist reviews the decision memorandum to ensure the proposed project objectives are consistent with the intent of the statutory authority In the fixture we will require the program offices to provide written clarification of how the award relates to the statutory authority and, if necessary, forward it to OGC for their review and opinion.

OPPTS has already taken action to implement this recommendation. In December 1997, they issued guidance to all their grants project officers requiring detailed information in grant decision memoranda. They have also established a single point of contact within each pace to review all grants and ensure the proposed activities are authorized under EPA's grant authorities.

Recommendation 3 (to Assistant Administrator for OARM): Work with Senior Resource Officials [SRO] to issue interim guidance to clarify the types of activities that their respective program offices will and will not fund, including examples of the types of projects the Agency should not fund.

OARM Response: OARM agrees with the recommendation and will work with OSWER and OPPTS to develop guidance to clarify the types of activities that the Agency will and will not fund under the grant authorities.

In addition, working in close coordination with each of their cooperative agreement recipients, OSPS will develop an additional term and condition for all cooperative agreements, which will require recipients to establish administrative controls to ensure that all CERCLA § 311(c) fields are spent only to conduct and disseminate research "including scientific, socioeconomic, institutional and public policy research) relating to the effects and risks of hazardous substances and detection of hazardous substances in the environment.

Recommendation 4 (to Assistant Administrator for OARM): Require the Grants Administration Division, in coordination with Senior Resource Officials, to incorporate into project officers and managers training, information on the types of awards the Agency should, and should not, fund.

OARM Response: We agree that grants training material should be modified to incorporate specific information about grant authorities. We will add these changes to the project officer training classes and to the 1-day project officer refresher course which will begin next year. We will also include the modified EPA Order 5730.1 as part of the handout materials. OPPTS Ad OSWER training will also be tailored to emphasize issues specific to their statutory authorities.

Recommendation to the Assistant Administrator for OSWER: We recommend that the Assistant Administrator for OSWER coordinate all CERCLA § 311(c) assistance awards with the Secretary of HHS, as required by the statute.

OSWER Response: OSWER has been unable to confirm the existence of the "advisory council" referred to in CERCLA § 311(c), Nonetheless, in recognition of the importance of avoiding duplication of effort in our research activities, OSPS will work with the SRO for OSWER to establish better coordination of our CERCLA § 311(c) research efforts win HHS. This coordination may occur rough OSWER's existing relationships untie the National Institute for Environmental Health Sciences (NIEHS) and the Agency for Toxic Substances and Disease Registry (ATSDR), whose activities we already evaluate through the annual Superfund budget formulation process, or we may choose to coordinate through other means.

Thank you again for providing us with the opportunity to comment on the Draft Report. If you or your staff have any questions or need additional information, please contact Bruce Feldman at 202–564–5325.

Question 3b. Your March 21 testimony states that environmental protection and economic progress are inextricably linked. Can EPA participate in economic development at Superfund sites under current authority?

Response. CERCLA section 104(b) provides broad authority for the Agency to conduct studies, "undertake investigations [and] other information gathering," as well as "undertake planning" and "other studies or investigations as he may deem necessary or appropriate to plan and direct response actions. . . ." In addition, CERCLA section 104(d) provides authority for the Agency to enter into contracts or cooperative agreements with States and their political subdivisions, as well as Indian tribes, "to carry out actions authorized in this section [104]." We believe the current statutory authority to study and investigate a site, combined with authority to enter into cooperative agreements with State, local and tribal governments, provides the basic underlying legal authority to achieve a better understanding of local community plans and preferences for future land use at Superfund sites.

One of the key factors in EPA's remedy selection decision process is future land use considerations (See attached "Land Use in the CERCLA Remedy Selection Process," OSWER Directive No. 9355.7–04, which elaborates other Agency statements made in the National Contingency Plan, risk assessment guidance and RI/FS guidance). The potential for redevelopment and reuse of a contaminated site after it has been cleaned up under the Superfund program is relevant to future land use considerations. As such, land reuse assessments and planning, intergovernmental cooperation, public outreach (including support for citizen advisory groups and third-party neutral facilitation services), and other technical assistance can be key components in projecting future uses of a Superfund site (especially where there are many diverse stakeholders). Land use determinations and the development of property are principally the domain of local government, citizens and the private sector. The earlier EPA seeks the involvement of local government and other stakeholders and takes into consideration potential future uses of the land, and the more accurately we can anticipate what the future use may be, the better our risk assessment and remedy selections will be at sites.

EPA has identified 170 sites where protective remedies have led to productive uses. These include all types of uses: commercial/industrial, recreational, ecological, residential, and governmental. Reuses at these sites have supported or will support over 14,000 jobs, resulting in millions of dollars in income and taxes. Over 13,000 acres have been or will be converted to open space for recreational and ecological uses. Through the recently announced Superfund Redevelopment Initiative, we hope to extend these successes to many more sites.

U.S. ENVIRONMENTAL PROTECTION AGENCY,
OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE,
Washington, DC 20460, May 25, 1995.

OSWER DIRECTIVE NO. 9355.7–04

MEMORANDUM

SUBJECT: Land Use in the CERCLA Remedy Selection Process

FROM: Elliott P. Laws, Assistant Administrator

TO: Director, Waste Management Division Regions I, IV, V, VII
Director, Emergency and Remedial Response Division Region II
Director, Hazardous Waste Management Division Regions III, VI, VIII, IX
Director, Hazardous Waste Division, Region X
Director, Environmental Services Division Regions I, VI, VII

Purpose.—This directive presents additional information for considering land use in making remedy selection decisions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) at National Priorities List (NPL) sites. The U.S. Environmental Protection Agency (EPA) believes that early community involvement, with a particular focus on the community's desired future uses of property associated with the CERCLA site, should result in a more democratic decisionmaking process; greater community support for remedies selected as a result of this process; and more expedited, cost-effective cleanups.

The major points of this directive are:

- Discussions with local land use planning authorities, appropriate officials, and the public, as appropriate, should be conducted as early as possible in the scoping phase of the Remedial Investigation/Feasibility Study (RI/FS). This will assist EPA in understanding the reasonably anticipated future uses of the land on which the Superfund site is located;
- If the site is located in a community that is likely to have environmental justice concerns, extra efforts should be made to reach out to and consult with segments of the community that are not necessarily reached by conventional communication vehicles or through local officials and planning commissions;
- Remedial action objectives developed during the RI/FS should reflect the reasonably anticipated future land use or uses;
- Future land use assumptions allow the baseline risk assessment and the feasibility study to be focused on developing practicable and cost effective remedial alternatives. These alternatives should lead to site activities which are consistent with the reasonably anticipated future land use. However, there may be reasons to analyze implications associated with additional land uses;
- Land uses that will be available following completion of remedial action are determined as part of the remedy selection process. During this process, the goal of realizing reasonably anticipated future land uses is considered along with other factors. Any combination of unrestricted uses, restricted uses, or use for long-term waste management may result.

Discussions with local land use authorities and other locally affected parties to make assumptions about future land use are also appropriate in the RCRA context. EPA recognizes that RCRA facilities typically are industrial properties that are actively managed, rather than the abandoned sites that are often addressed under CERCLA. Therefore, consideration of nonresidential uses is especially likely to be appropriate for RCRA facility cleanups. Decisions regarding future land use that are made as part of RCRA corrective actions raise particular issues for RCRA (e.g., timing, property transfers, and the viability of long-term permit or other controls) in ensuring protection of human health and the environment. EPA intends to address the issue of future land use as it relates specifically to RCRA facility cleanups in subsequent guidance and/or rulemakings.

This guidance is also relevant for Federal Facility sites. Land use assumptions at sites that are undergoing base closure may be different than at sites where a Fed-

eral agency will be maintaining control of the facility. Most land management agency sites will remain in Federal ownership after remedial actions. In these cases, Forest Land Management Plans and other resource management guidelines may help develop reasonable assumptions about future uses of the land. At all such sites, however, this document can focus the land use consideration toward appropriate options. [1]

Background

Reasonably anticipated future use of the land at NPL sites is an important consideration in determining the appropriate extent of remediation. Future use of the land will affect the types of exposures and the frequency of exposures that may occur to any residual contamination remaining on the site, which in turn affects the nature of the remedy chosen. On the other hand, the alternatives selected through the National Oil and Hazardous Substance Contingency Plan (NCP) [55 Fed. Reg. 8666, March 8, 1990] process for CERCLA remedy selection determine the extent to which hazardous constituents remain at the site, and therefore affect subsequent available land and ground water uses.

The NCP preamble specifically discusses land use assumptions regarding the baseline risk assessment. The baseline risk assessment provides the basis for taking a remedial action at a Superfund site and supports the development of remedial action objectives. Land use assumptions affect the exposure pathways that are evaluated in the baseline risk assessment. Current land use is critical in determining whether there is a current risk associated with a Superfund site, and future land use is important in estimating potential future threats. The results of the risk assessment aid in determining the degree of remediation necessary to ensure long-term protection at NPL sites.

EPA has been criticized for too often assuming that future use will be residential. In many cases, residential use is the least restricted land use and where human activities are associated with the greatest potential for exposures This directive is intended to facilitate future remedial decisions at NPL sites by outlining a public process and sources of information which should be considered in developing reasonable assumptions regarding future land use.

This directive expands on discussions provided in the preamble to the National Oil and Hazardous Substance Contingency Plan (NCP); "Risk Assessment Guidance for Superfund Vol. I, Human Health Evaluation Manual" (Part A) (EPA/540/1–89/002, Dec. 1989); "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (OSWER Directive 9355.3–01, Oct. 1988); and "Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions" (OSWER Directive 9355.0–30, April 22, 1991).

This land use directive may have the most relevance in situations where surface soil is the primary exposure pathway. Generally, where soil contamination is impacting ground water, protection of the ground water may drive soil cleanup levels. Consideration of future ground water use for CERCLA sites is not addressed in this document. There are separate expectations established for ground water in the NCP rule section 300.430 (a)(1)(iii)(F) that "EPA expects to return usable ground waters to their beneficial uses wherever practicable, within a timeframe that is reasonable given the particular circumstances of the site."

Objective

This directive has two primary objectives. First, this directive promotes early discussions with local land use planning authorities, local officials, and the public regarding reasonably anticipated future uses of the property on which an NPL site is located. Second, this directive promotes the use of that information to formulate realistic assumptions regarding future land use and clarifies how these assumptions fit in and influence the baseline risk assessment, the development of alternatives, and the CERCLA remedy selection process.

Implementation

The approach in this guidance is meant to be considered at current and future sites in the RI/FS pipeline, to the extent possible. This directive is not intended to suggest that previous remedy selection decisions should be re-opened.

Developing Assumptions About Future Land Use

In order to ensure use of realistic assumptions regarding future land uses at a site, EPA should discuss reasonably anticipated future uses of the site with local

[1] Federal agency responsibility under CERCLA 120(h)(3), which relates to additional clean up which may be required to allow for unrestricted use of the property, is not addressed in this guidance.

land use planning authorities, local officials, and the public, as appropriate, as early as possible during the scoring phase of the RI/FS. EPA should gain an understanding of the reasonably anticipated future land uses at a particular Superfund site to perform the risk assessment and select the appropriate remedy.

A visual inspection of the site and its surrounding area is a good starting point in developing assumptions regarding future land use. Discussions with the local land use authorities and appropriate officials should follow. Discussions with the public can be accomplished through a public meeting and/or other means. By developing realistic assumptions based on information gathered from these sources early in the RI/FS process, EPA may develop remedial alternatives that are consistent with the anticipated future use.

The development of assumptions regarding the reasonably anticipated future land use should not become an extensive, independent research project. Site managers should use existing information to the extent possible, much of which will be available from local land use planning authorities. Sources and types of information that may aid EPA in determining the reasonably anticipated future land use include, but are not limited to:

- Current land use
- Zoning laws
- Zoning maps
- Comprehensive community master plans
- Population growth patterns and projections (e.g., Bureau of Census projections)
- Accessibility of site to existing infrastructure (e.g., transportation and public utilities)
- Institutional controls currently in place
- Site location in relation to urban, residential, commercial, industrial, agricultural and recreational areas
- Federal/State land use designation (Federal/State control over designated lands range from established uses for the general public, such as national parks or State recreational areas, to governmental facilities providing extensive site access restrictions, such as Department of Defense facilities
- Historical or recent development patterns
- Cultural factors (e.g., historical sites, Native American religious sites)
- Natural resources information
- Potential vulnerability of ground water to contaminants that might migrate from soil
- Environmental justice issues
- Location of onsite or nearby wetlands
- Proximity of site to a floodplain
- Proximity of site to critical habitats of endangered or threatened species
- Geographic and geologic information
- Location of Wellhead Protection areas, recharge areas, and other areas identified in a State's Comprehensive Ground-water Protection Program

These types of information should be considered when developing the assumptions about future land use. Interaction with the public, which includes all stakeholders affected by the site, should serve to increase the certainty in the assumptions made regarding future land use at an NPL site and increase the confidence expectations about anticipated future land use are, in fact, reasonable.

For example, future industrial land use is likely to be a reasonable assumption where a site is currently used for industrial purposes, is located in an area where the surroundings are zoned for industrial use, and the comprehensive plan predicts the site will continue to be used for industrial purposes.

Community Involvement

NPL sites are located in diverse areas of the country, with great variability in land use planning practices. For some NPL sites, the future land-use of a site may have been carefully considered through local, public, participatory, planning processes, such as zoning hearings, master plan approvals or other vehicles. When this is the case, local residents around the Superfund site are likely to demonstrate substantial agreement with the local land use planning authority on the future use of the property. Where there is substantial agreement among local residents and land use planning agencies, owners and developers, EPA can rely with a great deal of certainty on the future land use already anticipated for the site. For other NPL sites, however, the absence or nature of a local planning process may yield considerably less certainty about what assumptions regarding future use are reasonable. In some instances the local residents near the Superfund site may feel disenfranchised from the local land use planning and development process. This may be an especially important issue where there are concerns regarding environmental justice in

the neighborhood around the NPL site. Consistent with the principle of fairness, EPA should make an extra effort to reach out to the local community to establish appropriate future land use assumptions at such sites.

Land Use Assumptions in the Baseline Risk Assessment

Future land use assumptions allow the baseline risk assessment and the feasibility study to focus on the development of Practicable and cost-effective remedial alternatives. leading to site activities which are consistent with the reasonably anticipated future land use.

The baseline risk assessment generally needs only to consider the reasonably anticipated future land use; however, it may be valuable to evaluate risks associated with other land uses. The NCP preamble (55 Fed. Reg. 8710) states that in the baseline risk assessment, more than one future land use assumption may be considered when decisionmakers wish to understand the implications of unexpected exposures. Especially where there is some uncertainty regarding the anticipated future land use, it may be useful to compare the potential risks associated with several land use scenarios to estimate the impact on human health and the environment should the land use unexpectedly change. The magnitude of such potential impacts may be an important consideration in determining whether and how institutional controls should be used to restrict future uses. If the baseline risk assessment evaluates a future use under which exposure is limited, it will not serve the traditional role, evaluating a "no action" scenario. A remedy, i.e. institutional controls to limit future exposure, will be required to protect human health and the environment. In addition to analyzing human health exposure scenarios associated with certain land uses, ecological exposures may also need to be considered.

Developing Remedial Action Objectives

Remedial action objectives provide the foundation upon which remedial cleanup alternatives are developed. In general, remedial action objectives should be developed in order to develop alternatives that would achieve cleanup levels associated with the reasonably anticipated future land use over as much of the site as possible. EPA recognizes, however, that achieving either the reasonably anticipated land use, or the land use preferred by the community, may not be practicable across the entire site, or in some cases, at all. For example, as RI/FS data become available, they may indicate that the remedial alternatives under consideration for achieving a level of cleanup consistent with the reasonably anticipated future land use are not cost-effective nor practicable. If this is the case, the remedial action objective may be revised which may result in different, more reasonable land use(s).

EPA's remedy selection expectations described in section 300.430(a)(1)(iii) of the NCP should also be considered when developing remedial action objectives. Where practicable, EPA expects to treat principal threats, to use engineering controls such as containment for low-level threats, to use institutional controls to supplement engineering controls, to consider the use of innovative technology, and to return usable ground waters to beneficial uses to protect human health and the environment. (Some types of applicable or relevant and appropriate requirements (ARARs) define protective cleanup levels which may, in turn, influence post-remediation land use potential.)

In cases where the future land use is relatively certain, the remedial action objective generally should reflect this land use. Generally, it need not include alternative land use scenarios unless, as discussed above, it is impracticable to provide a protective remedy that allows for that use. A landfill site is an example where it is highly likely that the future land use will remain unchanged (i.e., long-term waste management area), given the NCP's expectation that treatment of high volumes of waste generally will be impracticable and the fact that EPA's presumptive remedy for landfills is containment. In such a case, a remedial action objective could be established with a very high degree of certainty to reflect the reasonably anticipated future land use.

In cases where the reasonably anticipated future land use is highly uncertain, a range of the reasonably likely future land uses should be considered in developing remedial action objectives. These likely future land uses can be reflected by developing a range of remedial alternatives that will achieve different land use potentials. The remedy selection process will determine which alternative is most appropriate for the site and, consequently, the land use(s) available following remediation.

As discussed in "Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions" (OSWER Directive 9355.0–30, April 22, 1991), EPA has established a risk range for carcinogens within which EPA strives to manage site risks. EPA recognizes that a specific cleanup level within the acceptable risk range may be associated with more than one land use (e.g., an industrial cleanup to 10^{-6} may

also allow for residential use,at a 10^{-4} risk level.) It is not EPA's intent that the risk range be partitioned into risk standards based solely on categories of land use (e.g., with residential cleanups at the 10^{-6} level and industrial cleanups at the 10^{-4} risk level.) Rather, the risk range provides the necessary flexibility to address the technical and cost limitations, and the performance and risk uncertainties inherent in all waste remediation efforts.

Land Use Considerations in Remedy Selection

As a result of the comparative analysis of alternatives with respect to EPA's nine evaluation criteria, EPA selects a site-specific remedy. The remedy determines the cleanup levels, the volume of contaminated material to be treated, and the volume of contaminated material to be contained. Consequently, the remedy selection decision determines the size of the area that can be returned to productive use and the particular types of uses that will be possible following remediation.

The volume and concentration of contaminants left onsite, and thus the degree of residual risk at a site, will affect future land use. For example, a remedial alternative may include leaving in place contaminants in soil at concentrations protective for industrial exposures, but not protective for residential exposures. In this case, institutional controls should be used to ensure that industrial use of the land is maintained and to prevent risks from residential exposures. Conversely, a remedial alternative may result in no waste left in place and allow for unrestricted use (e.g., residential use).

Results of Remedy Selection Process

Several potential land use situations could result from EPA's remedy selection decision. They are:

- The remedy achieves cleanup levels that allow the entire site to be available for the reasonably anticipated future land use in the baseline risk assessment (or, where future land use is uncertain, all uses that could reasonably be anticipated).
- The remedy achieves cleanup levels that allow most, but not all, of the site to be available for the reasonably anticipated future land use. For example, in order to be cost effective and practicable, the remedy may require creation of a long-term waste management area for containment of treatment residuals or low-level waste on a small portion of the site. The cleanup levels in this portion of the site might allow for a more restricted land use.
- The remedy achieves cleanup levels that require a more restricted land use than the reasonably anticipated future land use for the entire site. This situation occurs when no remedial alternative that is cost-effective or practicable will achieve the cleanup levels consistent with the reasonably anticipated future land use. The site may still be used for productive purposes, but the use would be more restricted than the reasonably anticipated future land use. Furthermore, the more restricted use could be a long-term waste management area over all or a portion of the site.

Institutional Controls

If any remedial alternative developed during the FS will require a restricted land use in order to be protective, it is essential that the alternative include components that will ensure that it remain protective. In particular, institutional controls will generally have to be included in the alternative to prevent an unanticipated change in land use that could result in unacceptable exposures to residual contamination, or, at a minimum, alert future users to the residual risks and monitor for any changes in use. In such cases, institutional controls will play a key role in ensuring long-term protectiveness and should be evaluated and implemented with the same degree of care as is given to other elements of the remedy. In developing remedial alternatives that include institutional control to be used, the existence of the authority to implement the institutional control, and the appropriate entity's resolve and ability to implement the institutional control. An alternative may anticipate two or more options for establishing institutional controls, but should fully evaluate all such options. A variety of institutional controls may be used such as deed restrictions and deed notices, and adoption of land use controls by a local government. These controls either prohibit certain kinds of site uses or, at a minimum, notify potential owners or land users of the presence of hazardous substances remaining onsite at levels that are not protective for all uses. Where exposure must be limited to assure protectiveness, a deed notice alone generally will not provide a sufficiently protective remedy. While the ROD need not always specify the precise type of control to be imposed, sufficient analysis should be shown in the FS and ROD to support a conclusion that effective implementation of institutional controls can reasonably be expected.

Suppose, for example, that a selected remedy will be protective for industrial land use and low levels of hazardous substances will remain onsite. An industry may still be able to operate its business with the selected remedy in place. Institutional controls, however, generally will need to be established to ensure the land is not used for other, less restricted purposes, such as residential use, or to alert potential buyers of any remaining contamination.

Future Changes in Land Use

Where waste is left onsite at levels that would require limited use and restricted exposure, EPA will conduct reviews at least every 5 years to monitor the site for any changes. Such reviews should analyze the implementation and effectiveness of institutional controls with the same degree of care as other parts of the remedy. Should land use change, it will be necessary to evaluate the implications of that change for the selected remedy, and whether the remedy remains protective. EPA's role in any subsequent additional cleanup will be determined on a site-specific basis. If landowners or others decide at a future date to change the land use in such a way that makes further cleanup necessary to ensure protectiveness, CERCLA does not prevent them from conducting such a cleanup as long as protectiveness of the remedy is not compromised. (EPA may invoke CERCLA section 122(e)(6), if necessary, to prevent actions that are inconsistent with the original remedy.) In general, EPA would not expect to become involved actively in the conduct or oversight of such cleanups. EPA, however, retains its authority to take further response action where necessary to ensure protectiveness.

Further Information

If you have any questions concerning this directive, please call Sherri Clark at 703–603–9043.

Notice.—The policies set out in this memorandum are intended solely as guidance. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the United States. EPA officials may decide to follow the guidance provided in this memorandum, or to act at variance with the guidance, based on an analysis of specific site circumstances. Remedy selection decisions are made and justified on a case-specific basis. The Agency also reserves the right to change this guidance at any time without public notice.

Question 3b. Your March 21 testimony states that environmental protection and economic progress are inextricably linked. Can EPA participate in economic development at Superfund sites under current authority?

Response. CERCLA section 104(b) provides broad authority for the Agency to conduct studies, "undertake investigations [and] other information gathering," as well as "undertake planning" and "other studies or investigations as he may deem necessary or appropriate to plan and direct response actions. . . ." In addition, CERCLA section 104(d) provides authority for the Agency to enter into contracts or cooperative agreements with states and their political subdivisions, as well as Indian tribes, "to carry out actions authorized in this section [104]." We believe the current statutory authority to study and investigate a site, combined with authority to enter into cooperative agreements with state, local and tribal governments, provides the basic underlying legal authority to achieve a better understanding of local community plans and preferences for future land use at Superfund sites.

One of the key factors in EPA's remedy selection decision process is future land use considerations (See attached "Land Use in the CERCLA Remedy Selection Process," OSWER Directive No. 9355.7–04, which elaborates other Agency statements made in the National Contingency Plan, risk assessment guidance and RI/FS guidance). The potential for redevelopment and reuse of a contaminated site after it has been cleaned up under the Superfund program is relevant to future land use considerations. As such, land reuse assessments and planning, intergovernmental cooperation, public outreach (including support for citizen advisory groups and third-party neutral facilitation services), and other technical assistance can be key components in projecting future uses of a Superfund site (especially where there are many diverse stakeholders). Land use determinations and the development of property are principally the domain of local government, citizens and the private sector. The earlier EPA seeks the involvement of local government and other stakeholders and takes into consideration potential future uses of the land, and the more accurately we can anticipate what the future use may be, the better our risk assessment and remedy selections will be at sites.

EPA has identified 170 sites where protective remedies have led to productive uses. These include all types of uses: commercial/industrial, recreational, ecological, residential, and governmental. Reuses at these sites have supported or will support over 14,000 jobs, resulting in millions of dollars in income and taxes. Over 13,000

acres have been or will be converted to open space for recreational and ecological uses. Through the recently announced Superfund Redevelopment Initiative, we hope to extend these successes to many more sites.

Question 4a. As part of the omnibus appropriations bill signed into law last year, an effort was made by the National Association of Home Builders (NAHB) and EPA to include a Superfund liability exemption for developers of contaminated properties and certified State brownfields programs. This bill was never introduced, drafted hastily, full of errors, and circumvented the usual congressional process. Explain the benefit to society of a piece of legislation that serves a narrow group and was negotiated outside of the committee framework.

Response. The legislative proposal incorporates brownfields provisions with widespread Congressional support, including Federal grants and loans to encourage the assessment and cleanup of brownfields, and liability protection for innocent landowners, contiguous property owners, and prospective purchasers. Under the proposal, this liability protection is available only to parties that-did not cause or contribute to contamination at the site and clean ups in accordance with State requirements. EPA does not limit any of its enforcement authorities for parties that previously owned or operated a site or generated or transported waste to a site. Further, EPA would retain its enforcement authority when a site poses an imminent and substantial endangerment.

Question 4b. Do you still support the language you negotiated with NAHB?

Response.EPA continues to support the provisions of the proposal.

Question 4c. Environmentalists have criticized the Administration for brokering deals without extensive public comment and discussion. In the instance of the NAHB/EPA brownfields deal, minority and low-income areas would have been particularly affected. Does the Administration support making deals at the cost of cutting out public participation?

Response. As you know, EPA frequently is approached by Members of Congress, their staff, or stakeholder groups to provide technical assistance or enter into discussions about legislative matters. Last year, the President of the NAHB asked to meet with the EPA Administrator to discuss several issues of concern to the Association's members, including the cleanup and development of brownfields. The Administrator met with the President of the NAHB in September 1999. NAHB had developed a brownfields legislative proposal, and the Administrator agreed to have Agency staff review the proposal and provide technical assistance. EPA long has supported efforts that would encourage the cleanup and development of brownfield properties.

During October and November 1999, EPA staff met on a number of occasions to provide technical assistance to NAHB. Over that period, discussion drafts were shared with a representative of the Environmental Defense Fund and a representative of U. S. PIRG to help determine whether the preliminary discussions associated with EPA's technical assistance could produce a proposal that would develop stakeholder support. Prior to the discussions, a number of Congressional staff were made aware that the Agency had offered to provide technical assistance to NAHB. The technical assistance provided to NAHB ultimately produced a draft proposal that EPA and the Administration could support. The draft proposal was shared with House and Senate majority and minority staff in November.

Question 5. The budget request for the Office of Solid Waste and Emergency Response is $1.423 billion, of which $995.5 million is apportioned for Superfund. The total request for Superfund is $1.45 billion. That makes the Superfund budget request $270,000 more than the total budget request for OSWER. Every dollar committed to Superfund is a dollar that cannot be committed to some other environmental priority. Should some of the money Apportioned for Superfund be directed to RCRA corrective action where money would go directly to cleanup costs instead of administration and litigation costs?

Response. The Agency's fiscal year 2001 budget request includes a redirection of $10.0 million from Superfund to RCRA corrective action. This redirection supports implementation of the RCRA corrective action reforms.

Question 6. Every year EPA requests less money for the National Institute of Environmental Health Sciences (NIEHS) than Congress provides in previous years. NIEHS's Superfund Basic Research Program provides multi-disciplinary grants for scientists from the biomedical sciences, engineering, ecology, and the geosciences to explore the scope of Superfund problems and seek solutions. The program is well aligned with the goals espoused in the EPA Budget of forming partnerships and working with academia. Why does EPA continue to under request for that portion of the budget?

Response. The National Institute of Environmental Health Sciences conducts valuable basic research on the effects of hazardous waste on human health. NIEHS's fiscal year 2001 budget request of $62.2 million is higher than EPA's President's request of $48.5 million. The President's request of $48.5 million for fiscal year 2001 is consistent with past requests and supports basic research, worker safety training, and minority worker programs. It reflects a focused research program to meet the cleanup needs of the Superfund program.

Resources

	FY1999 President's	FY199 Enacted	FY2000 President's	FY2000 Enacted	FY2001 President's
Total NIEHS	$48,500,000	$60,000,000	$48,500,000	$60,000,000	$48,500,000

Question 7. The Superfund removal program is an area that has been very successful—it achieves a great amount of risk reduction for a minimal amount of dollars and involves less bureaucracy than the remedial program. We have an important ongoing removal in New Hampshire at the Surrette America Battery Site in Northfield. EPA has committed an additional $750, 000 to the site; however it has been estimated that an additional $900,000 will be needed to complete the cleanup. EPA Region I is looking at ways to identify that fading This site is located in close proximity to an elementary school, a playground, athletic fields and the Winnipesaukee River and contamination lead and asbestos has been found at the site. Will make a commitment to continue work at this site and to make available sufficient resources to finish the cleanup?

Response. EPA Region I estimates the total cost of the necessary removal action at the Surrette America Battery Site to be approximately $2,600,000. EPA Region I has committed additional resources to fund the restart for the removal action this spring, and the EPA Headquarters office recently approved a Region I request to reprogram resources to fund the remainder of the work at the site. These reprogrammed funds will be available to the Region later this fiscal year.

Question 8a. EPA management of Superfund cleanups is an integral part of making the Superfund program work. The Agency has undertaken administrative reforms in the past years to address outstanding issues in the Superfund reform debate. One issue that is important to recognize is that differences exist between the Regions of EPA in negotiating and cleaning up Superfund sites. In September 1988, the Inspector General for Audits of the Southern Division completed an audit of Region IV's management of significant Superfund removal actions and sent the Report to the Regional Administrator. Another Inspector General Report was sent to the Regional Administrator in 1990. These Reports, taken together, conclude that Region IV has not managed removals efficiently or effectively and has inadequately implemented the management of removal cleanups. This inefficient or inadequate implementation has resulted in prolonged cleanup actions, limited State and community participation in cleanup decisions, and unnecessary costs. Axel Johnson, Jr. has been involved with EPA Region IV regarding two sites in North Carolina, the Old AT Refinery in Wilmington and the Potter's Septic Tank Service Pits site in Sandy Creek and has informed the committee that the management problems originally reported continue. Has the Agency investigated the allegations in the 1988 and 1990 Inspector General Reports within Region IV?

Response. EPA Region IV responded to the Inspector General's 1988 investigation and subsequent 1990 report on large removal actions undertaken at eight NPL sites. EPA Region IV agreed with some of the IG's findings and recommendations, such as the need to develop guidance and procedures for large removal actions that ensure cooperation and coordination between remedial and removal program staffs. However, EPA disagreed with other findings, such as the finding of questionable response actions at sites. EPA stated that the IG failed to recognize positive aspects of these removal actions, namely their achievement of expediting cleanup through source removals at several NPL sites.

EPA believes it has improved both community and State involvement procedures for its removal program. The removal program provides cost-effective and timely responses to imminent threats posed by hazardous waste sites. As Chairman Smith notes in question #7 above, the Superfund removal program is very successful: "The Superfund removal program is an area that has been very successful—it achieves a great amount of risk reduction for a minimal amount of dollars and involves less bureaucracy than the remedial program."

Question 8b. If not, does the Agency intend to investigate these allegations?

Response. Please see the response to question 8(a) above.

Question 8c. Over the past years, EPA has initiated numerous administrative reforms in administering the Superfund Program. Some of these reforms have been targeted at "getting the little guy out," as it was stated in the Agency's Superfund Reforms, Annual Report fiscal year 1998. EPA touts this reform as a Superfund Program Accomplishment and has estimated that thousands of small waste contributors from the Superfund liability scheme have been removed. However, this reform does not seem to be utilized uniformly throughout the Regions. De minimis contributors are generally defined as those parties who have contributed 1 percent or less of the wastes at a site. Despite this policy, EPA Region IV settled with the owner and operator of the Potters Septic Tank Service Pits site in Sandy Creek, N. C. on favorable terms. The Agency gave notice to Axel Johnson that it was liable for 100 percent of the cleanup costs at the site. However, after depositions were taken, it is clear that Axel had sent only one shipment of waste to the Potter Site and that it had played a "minor role" at the Potters Site. Axel believes that the shipment involved was not sent to the site, and EPA bases its contention on information from a former employee of the company, not on written documentation. The amount of Axel Johnson oil that would have been addressed during the Superfund removal and remedial actions at the Potter Site would have been between 0.1 percent and 4. 4 percent of the total waste oil removed remediated. Nevertheless, the Department of Justice has demanded that Axel pay the majority of the more than $13 million in cleanup costs that EPA has incurred at the site. Can you explain how a party that might have contributed 0.1 percent–4. 4 percent of the total waste at a site could be required to pay for the majority of the cleanup costs incurred at the site?

Response. According to section 122(g)(1) of CERCLA, which governs de minimis settlements, the volume of the waste sent to a site is not the sole factor to be used in determining whether a party qualifies for a de minimis settlement. In addition to the small volume requirement, the waste must also have a low toxicity. In many cases, parties are ineligible for de minimis settlements, even though they sent minute amounts of waste, because of the toxic nature of that waste. These parties would be held jointly and severally liable for the cost of cleanup. Furthermore, at certain sites, even 1 percent of the volume represents a very large volume in absolute terms. For example, at the Tonolli Site in Pennsylvania, 1 percent of the volume would represent over one million gallons of waste. Small percentages do not necessarily equate with small volumes.

At the Potter's Septic Tank Service Pits Superfund Site in Brunswick County, North Carolina, from the late 1960's through the mid-1970's, several unlined pits were found on the Site property which were used for the disposal of petroleum-related wastes, creosoting wastes and septic tank wastes. Contamination at this site consists of soil contaminated with heavy metals, chloroform, and phenolic compounds, all of which are hazardous substances. Groundwater at the site is contaminated with volatile organic compounds, including benzene, xylene, phenols, and other hazardous substances. Excavation and treatment of contaminated soils at the site were substantially completed in 1996. The groundwater cleanup remedy for the site, extraction and treatment of the contaminated water, has not yet been initiated. Due to preliminary indications that the level of contamination in the groundwater may be decreasing, additional studies and sampling may be necessary. EPA will reevaluate the groundwater remedy in light of any new information revealed through these additional studies.

EPA has referred this matter to the Department of Justice to seek recovery of costs from parties found to be responsible for sending hazardous substances to the site. EPA's investigations have identified Axel Johnson, Inc., as a potentially responsible party. Although the matter has been referred to the Department of Justice, the United States and Axel Johnson, Inc., are currently discussing means of resolving these matters without resorting to formal litigation.

Question 9a. Last March EPA submitted a Report to Congress on Wastes from the Combustion of Fossil Fuels. In the report, EPA tentatively concluded that, "co-managed wastes generated at coal-fired utilities. . . generally do not present a risk to human health and the environment," and that Subtitle C of RCRA is "inappropriate to address any problems associated with the disposal of these wastes." EPA is currently revisiting this issue and may be considering a regulatory determination that would regulate these wastes under Subtitle C of RCRA notwithstanding the Agency's findings in March 1999. If this is true, it will have a significant effect on New Hampshire. What is the status of EPA's regulatory determination?

Response. EPA issued a regulatory determination applicable to co-managed coal combustion wastes on April 25, 2000. In that regulatory determination, we an-

nounced our decision that we would retain the hazardous waste exclusion for all fossil fuel combustion wastes, including co-managed coal combustion wastes. We also announced that we would develop regulations under Subtitle D (nonhazardous) authority for management of coal combustion wastes in landfills and surface impoundments and when used to fill surface or underground mines.

Question 9b. EPA staff has been working on the issue now for several months. What information have they been reviewing and what is the nature of their recommendations on this issue?

Response. EPA reviewed all available information, including new information submitted on the March 1999 Report to Congress. Industry commenters urged EPA to retain the hazardous waste exclusion. States primarily commented that coal combustion waste is very effective in reclaiming abandoned and existing mines. Public interest groups stated that EPA should regulate coal combustion wastes as hazardous wastes and described instances where these wastes were being deposited directly into ground water at mine sites.

Staff presented a variety of options, ranging from retention of the exemption from Subtitle C regulation with an active outreach program to ensure that problems associated with management of coal combustion wastes are corrected, retention of the exemption and development of regulations under Subtitle D of RCRA, to elimination of the exemption and regulation under Subtitle C authority (using an approach similar to that used in the recently proposed regulations applicable to cement kiln dust). In all instances, EPA envisioned an active governmental role in ensuring improved management of fossil fuel combustion wastes. Ultimately, we decided to announce that we would retain the exemption from Subtitle C regulation and develop regulations under Subtitle D authority.

Question 9c. Is there any information that the Agency now has that it did not have in March 1999 to justify changing its direction with respect to the management of combustion wastes?

Response. Commenters submitted additional information related to 59 possible damage cases involving coal combustion wastes, mostly at utility landfills and surface impoundments. Additionally, we received a substantial amount of new information on the use of coal combustion wastes to fill surface and underground mines. Ultimately, we decided to retain the exemption from regulation of coal combustion wastes under Subtitle C authority.

Question 9d. If so, what is the information?

Response. Please see the answer to Question 9c above.

Question 10a. Many utilities and others recycle large quantities of the combustion ash they generate. Public Services of New Hampshire, for example, recycles over 75 percent of the waste it generates—over 75, 000 tons of ash—into grit and cement-based products. It still spends over $1 million to manage its waste. There is a concern that if combustion wastes are regulated under Subtitle C, recycling opportunities will be lost or substantially limited and that disposal costs could increase dramatically. Has the Agency looked at the potential economic impact on the public utilities, universities, and other users of industrial boilers of a hazardous waste determination?

Response. EPA was especially concerned about any possible spillover effects of regulation of disposal and minefilling under Subtitle C authority on beneficial uses and was committed to eliminating or substantially reducing such spillover effects. This was a factor that we took into account in making our regulatory determination. We also estimated the costs associated with regulation of disposal of fossil fuel combustion wastes and found that they would be considerable, but a relatively small percentage of industry revenues. As stated above, on April 25, 2000, EPA announced its decision to retain the exemption from regulation under Subtitle C.

Question 10b. How will it effect the cost of disposal?

Response. As explained above, EPA decided to retain the exemption for co-managed coal combustion wastes from regulation as hazardous waste. Thus, disposal costs will not be affected by Subtitle C regulation.

Question 10c. The committee has been informed of one estimate, that suggests that it could increase disposal or management cost by a factor of five. Would you agree with that estimate?

Response. In that EPA has decided to retain the exemption from regulation for co-managed coal combustion wastes as a hazardous waste, such estimated increases in the cost of management or disposal will not occur.

Question 11. EPA has set the goal of addressing 172 high-priority RC.RA corrective actionsites in fiscal year 2001. In fiscal year 2000, EPA was to address 170 high-priority RCRA corrective actionsites. However, the Agency has requested an in-

crease of $3.4 million from last year, yet it only intends to address two additional high-priority sites than last year. Where will the $3.4 million be targeted in the RC.RA Corrective Program?

Response. It will take between one and 2 years for the additional $3.4 million requested in fiscal year 2000 to yield significant increases in the number of facilities achieving environmental indicators. Lead time is necessary to hire and train an additional FTE per region that the new money allows, and then to have an impact on efforts by facilities to reach program goals. Annual program accomplishment are expected to increase beginning in 2003, when the RCRA target for control of human exposure jumps from 172 to 257 sites for each of the 3 years until 2005. Without the requested funding increase, it is unlikely that this higher annual number can be sustained. The annual target for control of groundwater contamination, which remains constant at 172 for the years 2001–2005, reflects the relative difficulty facilities will have in meeting this goal. The requested funding increase is necessary for the program to sustain current progress in meeting the groundwater contamination annual goal.

Question 12a. Congress has been working on removing MTBE from gasoline and will continue to do so, however, it is time to look at the problem of MTBE in groundwater. The first estimates of potential drinking water contamination on a national scale were released last week in the Environmental Science and Technology Journal. The study estimated that about one-third of drinking water wells in 31 States have the potential to be contaminated with MTBE (this figure does not even include California or Texas) and does not include private wells. This is an alarming figure. The committee is already working to address the MTBE in gasoline issue, but should start looking ahead to groundwater contamination. Has EPA done any independent work to determine the scope of the MTBE groundwater contamination problem, and the scale of possible remedial costs?

Response. To clarify, the article states that approximately 9,000 community water supply (CWS) wells in 31 States have a leaking underground storage tank (UST) within 1 km. It points out that not all leaking UST sites will be a significant source of MTBE to groundwater and to CWS wells. In addition, the study referenced in the Environmental Science and Technology Journal is based on 31 States which contributed data to the U. S. Geological Service. EPA does not currently have data for the remaining 19 States.

EPA is working to develop cost estimates for remediating releases of MTBE from underground storage tanks. To date, from the limited amount of data available, there is apparently very little experience nationwide in addressing MTBE contamination. A little over half of States are monitoring for MTBE at leaking UST sites. (Earlier this year, EPA strongly recommended States immediately begin monitoring and reporting of MTBE and other oxygenates in groundwater at all UST release sites nationwide. In those cases where States detect MTBE or other oxygenates, EPA strongly advised that States take immediate and aggressive remedial action to address the contamination.) In almost all of the cleanups at leaking UST sites, the available information on remediation costs reflects those costs to address contamination from benzene as well as other contaminants, such as MTBE. Cost data are available for a relatively few sites at which only MTBE contamination has been cleaned up.

Given the uncertainties, it would be premature to offer an estimate on possible remediation costs. Numerous factors influence the cost of cleaning up MTBE releases, including:

- the number of sites contaminated with MTBE,
- the concentration of those releases,
- the effectiveness of cleanup technologies,
- the level to which States will cleanup MTBE, and
- whether States will re-open previously closed leaking UST sites.

None of this information is currently available on a national level, but EPA is working with our State and regional partners to gather this type of information. Earlier this year, EPA recommended that all States monitor for and report MTBE and other ethers in groundwater at all leaking UST sites. At those sites where MTBE is detected, as stated above, EPA strongly advised States to take immediate and aggressive remedial action to address the contamination. The New England Interstate Water Pollution Control Commission is obtaining information from the States about their experiences with MTBE releases. The American Society for Testing and Materials, EPA, and the States recently formed a workgroup to develop a protocol to help States decide if and when it is appropriate to re-open previously closed leaking UST sites.

Anecdotal information indicates that the cost to remediate MTBE contamination is significant. The reasons for the increased cost of MTBE remediation include:

- MTBE does not naturally attenuate as rapidly as BTEX,
- site characterization is more difficult and expensive, and the
- MTBE plume separates from the rest of the petroleum plume and travels more quickly through the subsurface, making it more likely to reach a receptor (e.g., groundwater).

Question 12b. Can you comment on some of the outside reports on the potential scope and costs of the problem?

Response. EPA is familiar with the Environmental Science and Technology Journal article on MTBE referenced in question 12a above. As EPA understands the article, it does not speculate on costs of the MTBE problem, but does conclude that: "Although the large number of MTBE LUSTs in the immediate vicinities of community supply wells may represent a significant threat to drinking water over at least the next decade, the data to determine the magnitude of that threat are simply not available at the present time". EPA agrees with the article's conclusion about the potential threat to drinking water from LUSTs; however, the Agency is working to identify and collect the necessary information so that EPA and the U.S. Geological Service (USGS) will be better able to characterize the threat of MTBE contamination to drinking water. EPA will work with USGS to supplement the analysis described in the journal article and develop projections for the future. As for other outside reports, EPA is not familiar with the other outside reports to which you are referring.

Question 12c. How does the EPA plan to address MTBE in groundwater, specifically what statutory authorities does it plan to use?

Response. The Toxic Substances Control Act (TSCA), section 6, 15 U.S.C. 2605, provides EPA with broad authority to issue rules to regulate the manufacture, processing, distribution in commerce, use and/or disposal of chemical substances in the United States where such regulation is necessary to prevent unreasonable risks to health or the environment. EPA has recently published in the Federal Register an Advance Notice of Proposed Rulemaking, under TSCA, to initiate a process to address the threat to the nation's drinking water resources from contamination by MTBE. One of the options available to EPA pursuant to the unreasonable risk provision under TSCA section 6 is to eliminate or greatly reduce the use of MTBE as a gasoline additive. EPA is interested in comments on a comprehensive approach to reducing MTBE risk. The Agency will also consider whether action under another statute administered by EPA, such as the Clean Air Act, the Resource Conservation and Recovery Act, the Clean Water Act, or the Safe Drinking Water Act, could effectively address the risks posed by MTBE and, if so, whether it is in the public interest to regulate the risk under TSCA instead of such other statute.

Question 12d. Does EPA see this as primarily a Superfund issue, or an Underground Storage Tank remediation issue?

Response. Releases from underground storage tanks are a significant source of MTBE contamination, and State and EPA UST programs are working diligently and using the full range of authorities appropriate and available to address the issue of MTBE contamination. As you know, Congress created the Leaking Underground Storage Tank (LUST) Trust Fund in 1986 to oversee cleanups by responsible parties and pay for cleanups at sites where the owner or operator is unknown, unwilling or unable to respond, or which require emergency action. EPA has been using and will continue to use LUST Trust Fund resources—as well as other appropriate mechanisms—to address MTBE contamination.

Question 12e. Does the Budget that you have presented to us take into account any additional cleanup activity that will be needed due to MTBE contamination?

Response. The Administration is very concerned about MTBE contamination. The full nature and extent of MTBE contamination nationwide is currently unknown. EPA is supporting efforts to obtain additional information and to prevent and remediate MTBE contamination expeditiously. The President's budget request for fiscal year 2001 reflects the need to balance environmental priorities and to stay within budget targets. It should be noted that the bulk of the funding for cleanup of leaking USTs is borne by responsible parties and State underground storage tank cleanup funds, which raise over $1 billion annually. EPA's Leaking Underground Storage Tank (LUST) funding is primarily used by States to oversee and expedite these cleanups.

Question 12f. Will there be additional resources required in the future?

Response. The President may need to request additional LUST funding as more information becomes available about the nature and extent of MTBE contamination

in the future. Additionally, Federal and State regulations may need to be strengthened, and enforcement activities will require necessary encouragement and support.

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