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RCRA & Superfund Update
Impacts on the Northeast
May 5-7, 1983
Conference Proceedings

Council of State Governments

Eastern Regional Conference

Task Force on the Environment

The Council of State Governments

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The Council of State Governments

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Kate L. Parker
Editor

Council of State Governments
Eastern Regional Conference
Task Force on the Environment
Representative Teresalee Bertinuson (CT)
Chairman

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PREFACE

The challenge of proper hazardous waste management will surely follow us into the next century. Will we, as state and federal legislators and executive branch officials, find the political will and determination to rise to this challenge? I believe that it is imperative that we do so and do so quickly.

The Congress is strengthening RCRA this year and that is good. But the law alone will not solve this problem. This country needs dedicated, impartial and effective executive branch agencies at both the state and federal levels to carry out the law and those agencies must be adequately funded.

This challenge calls for vision, for the ability to look way ahead of us and take action now to insure against future contamination of our natural resources. Short-term, "bandaid" solutions are an unworthy response to what is a critical national environmental problem of sweeping magnitude.

States, the federal government, citizens, municipalities, industry and environmental organizations will have to work together. The problem is too big to solve otherwise.

Our conference, RCRA & SUPERFUND UPDATE: IMPACTS ON THE NORTHEAST, was designed to allow exchange between state and federal officials and sharing of information among states. We hope that you find the proceedings valuable.

Representative Teresalee Bertinuson, Connecticut
Chairman
Eastern Regional Conference
Task Force on the Environment
July 31, 1984

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We owe a special debt of gratitude to Dr. Leonard Cutler, New York State Senate, for his enthusiastic assistance in making the conference a reality.

Finally, we are very grateful to Dr. John Skinner, Director, United States Environmental Protection Agency Office of Solid Waste, for providing us with funds to publish these proceedings.

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CHAPTER I

RCRA Present and Future: Impact on the States

Presider:
ROBERT BENDICK, Director, Rhode Island Department of Environmental Management

Keynote Speaker:
U.S. REPRESENTATIVE CLAUDINE SCHNEIDER, Rhode Island

Responders:
JOHN H. SKINNER, Director, Office of Solid Waste, U.S. E.P.A.

ANN RAPPAPORT, Deputy Director, Massachusetts Department of Environmental Quality Engineering

M.L. MULLINS, Manager of Environmental Systems, Monsanto Company

- Should the federal government support state hazardous waste management programs? For how long?
- Do the states have the capability to administer and enforce "equivalent" hazardous waste management programs? Can states afford to?
- Will a majority of states seek and achieve final delegation by 1985? What are the roadblocks?
- Will the current RCRA program prevent the creation of more Love Canals? Why or why not?
- Do Subtitle D sites pose a hazard? Will they in the future?
- Why has Subtitle D never been adequately funded? What has happened to state solid waste programs?

RCRA PRESENT AND FUTURE: IMPACT ON THE STATES

Representative Teresalee Bertinuson:

Good evening. I'm State Representative Terry Bertinuson from Connecticut. I chair the Task Force on the Environment of the Eastern Regional Conference of the Council of State Governments and I'm very pleased to welcome you all here this evening. We're at the beginning of what looks like a very informative and timely conference. Before we begin, I would like to express our appreciation to Norman Nosenchuck, Director, New York State Division of Solid and Hazardous Waste, Dick Valentinetti, Director, Vermont Air and Solid Waste Programs, Dr. Leonard Cutler, New York State Senate and Norman Miller, New Jersey Division of Legislative Information and Research. They have been most generous with their advice and help in putting this conference together. We'd also like to thank John Skinner, Director, USEPA Office of Solid Waste who has been able to provide us with financial support that will enable us to publish the proceedings of this conference.

At this point, I think we're ready to move right into the program. We don't want to go too late in the evening. This session has a global title, if you notice, from your program: RCRA Present and Future. That tells it all and of course we're particularly interested in the impact on the states. Our moderator for tonight will be Robert Bendick, who is Director of the Rhode Island Department of Environmental Management. At this point, it is my pleasure to turn the program over to Bob.

Robert Bendick:

Thank you, thank you, and I'm going to move quickly into the program. It is a real pleasure to introduce the Congresswoman from the Second District of Rhode Island, Claudine Schneider. She has throughout her career been associated with environmental matters: she did not take on that role after being elected to Congress in 1980. She serves on the Science and Technology and Merchant Marine and Fisheries Committees and in both those capacities, she does involve herself deeply in environmental affairs. She is an officer of the Northeast Midwest Coalition where she has also stressed environmental matters and I'm happy to introduce her tonight to talk about RCRA.

Congresswoman Claudine Schneider (RI):

Well, I am happy to be with all of you this evening. I must admit that it's not my favorite thing to do after dinner, talk about hazardous waste, but, quite frankly, there isn't much choice in the matter, and I am delighted to have the opportunity to join with all of you representing the whole Northeast region. I think that there is very little question that the topic that you are discussing over these next couple of days, hazardous waste, is the most critical environmental, health, economic and political problem that we have to deal with within the next decade and I say that with all sincerity. The proportions of the problem are staggering because we're talking about everything from the air that we breathe and the hazardous waste we are finding

in our drinking water, our swimming holes, our landfills and right around our neighborhoods. The expansion of hazardous waste knows no bounds.

Each year the United States disposes of more than one ton of hazardous waste per person. More than 15,000 uncontrolled hazardous landfills have already been identified in the United States. In the Northeast where we have a population that represents only 24% of the population of the U.S., we represent 41% of the abandoned Superfund sites. So, needless to say, we certainly have outdone ourselves when it comes to the generation and disposal of hazardous waste and polluting our own backyard. Part of the problem is ignorance and of course we have to acknowledge that part of the problem is negligence. The solution, or so we thought, really remains in the laws. Unfortunately now, however, many of those regulations that we have put forward to control hazardous waste are like a leaky sieve.

To give you a few examples, let's just look at the situation with hazardous waste in air pollution. EPA has been required to identify hazardous air emissions that are not yet regulated and to set standards on those. But at this point, only four have been identified and standards set. There are three others that have been identified, in addition to those four, but they have no standards for them. So many airborne chemicals still are unregulated and they are therefore legally being emitted into the air.

Of course, we also have the problem of existing landfills. The RCRA legislation allows, through a particular loophole, the opportunity for any landfills that were already in use when RCRA was enacted to continue to operate without installing protective systems to prevent leaks in current landfills.

And then we in New England are especially familiar with the small generator issue. As it stands right now, the federal law exempts companies generating less than a thousand kilograms of hazardous waste per month and yet some of the estimates that I've seen from OTA say that this loophole allows approximately 10% of the hazardous waste in the United States to go unregulated. It's estimated that 25% of the hazardous waste generated in New England comes from these small generators. Needless to say, we've got to take some action on it. Some states have already taken the initiative on a statewide level, such as Rhode Island, Vermont, Massachusetts and New Hampshire, plus New York and New Jersey, and they have enacted laws to regulate companies generating less than thousand kilograms per month. But I think it's very important to the Northeast that EPA agree to regulate hazardous waste at less than a thousand kilograms. Probably a hundred would be a good break-off point.

The Chamber of Commerce recently did a study which indicated that of the businessmen they had surveyed, 92% of those small business respondents knew absolutely nothing about the federal hazardous waste laws and 62% of them did not know anything about what the state requirements were. Needless to say, we have laws, there are a few loopholes, but for heavens sake, we have an enormous educational job ahead of us, too.

The first question that I was asked to address was, "Is the federal RCRA statute adequate to prevent the creation of more Love Canals?" Well, I think the statute itself is very straightforward and if these straightforward concepts could be put into effect then the statute would be adequate to prevent more Love Canals, but as we are finding out, implementation of the concepts is much more difficult. For example, the administrator of the hazardous waste program in EPA very astutely divided the waste into two categories, hazardous and non-hazardous. This very logical division has presented problems, however, since the hazardous materials differ in type and they also differ in degree of hazard. The material can present a hazard if it is mismanaged. These are the kinds of complexities that really make much more difficult implementation of the legislation whose intent, I believe, is quite clear. But, we learn to implement the Act as we go along.

Another question is, "What specifically is needed to improve the Act?" The current bill pending before the Committee on Energy and Commerce to reauthorize RCRA really covers the three major problems that Congress is aware of. First of all, it eliminates the blanket exemption for hazardous waste generation in relatively small quantities. Secondly, it sets standards for burning hazardous waste as fuel. Thirdly, it requires the Administrator to set more stringent standards for waste disposed in landfills and identify wastes that should not be disposed of in that manner and it sets stricter standards on the use of wells and the disposal of hazardous waste.

I was also asked "Do you think that RCRA regulations reflect Congressional intent?" I think it is fair to say that the professionals at the Environmental Protection Agency certainly have had their hands full trying to write regulations to implement Congressional intent and as all of you, I am sure, are aware it has taken much more time and much more effort than was ever envisioned originally, but they are certainly moving along as well as I guess might be expected.

Another question is, "Why do you think Subtitle D of RCRA has never been adequately funded and what are the consequences for the states?" Well, I assume that most of you are familiar with Subtitle D. After all, when I looked at that question I thought, oh yes, Subtitle D. At any rate, it does provide the funding to states in order to conduct inventories of existing dumps, which are your municipal landfills, and secondly, to prepare a solid waste management plan and thirdly, to explore resource recovery options in order to phase out land disposal.

Well, the original funding for Subtitle D under the Carter Administration was 10 million dollars per year and Mr. Florio's bill substitutes 2 million dollars per year, primarily because he feels that that is a realistic figure. The states right now are trying to restore some of the funding in the Commerce Committee markup. I think that it's important to point out that when funding was cut back the states really did stop the work in that area and they didn't complete their plans nor move ahead on resource recovery proposals and as a result there's currently very little action in the various states in monitoring municipal dumps and landfills because the states have pulled many of their people off of the solid waste problem and put them onto the hazardous

waste programs where they are guaranteed federal funding. With the new stringent regs for hazardous waste, some companies, unfortunately, might be tempted to divert their hazardous waste to the municipal landfills that the states are no longer in a position to monitor. So that yes, this certainly could pose a problem and is something that I think that each of the states should be particularly sensitive to.

Question number 5 is "Do you believe that a majority of the states will have final delegation by January 1985 and if not, why not?" Well, I think that the thing that I ought to point out is that EPA really has been slow in moving along in issuing the regulations that the states need in order to make a final application to take over the RCRA Permitting Program. The final regulations were not ready until July of 1982 so no state really was in a position to apply for final permitting until after that date.

Secondly, with the federal regulations in place, most state legislatures will need to enact enabling legislation to take the programs over and to have new state regulations to conform with the federal standards. So, obviously, the legislative steps must precede the state application to EPA for final authorization and I don't know about some of your states, but I know that it can take between two and three years to get a particular bill through. For example, if you look at a state like Kentucky, their legislature only meets every two years, so I think that they will really be hard pressed to move ahead and get the job done in time. I think that all of you know the answer and the situation far better than I do insofar as the time and the money that is required to actually accept the responsibilities that are put forward by RCRA. So I will look forward to some of your questions and comments afterwards as they particularly relate to the states assuming this new responsibility.

I was also asked, "Do you think that the states have the ability to fund hazardous waste programs which are equivalent to the federal program when many states now face fiscal crisis? If not, what action should the states and federal government take?" Well, needless to say, that is probably one of the most loaded questions I had been presented with and I think that the answer is pretty clearly, "No." The states don't have the necessary funds to carry out an effective hazardous waste program and the solution to the problem will probably be some kind of tax on hazardous waste which we see now being implemented by a number of states. Specifically, New York and California have taken the lead and Minnesota is also moving along in that direction.

The last question is, "If by January, 1985, most states have not achieved final delegation, do you think that the RCRA program will revert to the federal government?" Well, the situation really is that the states do not just take over the federal RCRA program, they apply for interim authorization first under phase one and phase two. Then as they take over pieces of the program they put their own administrative structures into place and when they have everything in place then all interim authorizations of state programs will automatically expire 24 months after the effective date of the last component of phase two regulations and that should come approximately in January 1985. So, that means that if the states have not obtained the

authorization by that date, the authority of the state agencies to issue RCRA permits will terminate and then EPA will be in a situation where they will have to reinstitute the federal programs in that particular state.

So, given the practical programs that I have already mentioned in terms of time and money, I think that the states could not even apply for final status until after July 26th, 1982, and realizing the time necessary for the state legislatures to adopt the necessary laws, I think that we're in a position now where we would hope that EPA would probably delay the 1985 deadline or if all else fails, then Congress certainly could encourage EPA to delay that deadline.

With regard to the shell game of shifting our hazardous waste to landfills or through incineration into the air or into the water certainly there is an attempt to address this problem with RCRA but I think that with the current legislation any company can still play the shell game for a very modest fee. It could send heavy metal waste to a municipal sewage treatment plant where it can then become the city's problem. Or, if the wastes have a fuel value, they can be burned in an industrial boiler, thus bypassing any kind of air emission requirements and in addition to that, if the plant has an onsite landfill then it might be able to get away with burying the heavy metals right there with no questions being asked.

So the moral of the story is we need a multi-media approach to pollution control, one that looks at all various environmental media rather than simply shifting pollution from the air to the land, to the water. One of the ways to really get at the problem is to reduce the hazardous waste at the source. I believe that one of the best options for managing hazardous wastes is to produce less. Fortunately this is an opinion that is increasingly shared by the Office of Technology Assessment, by the Environmental Protection Agency, by the Chemical Manufacturers Association and also by a broad spectrum of state and municipal organizations who are charged with the responsibility of overseeing hazardous waste and the protection of the environment.

The concept of waste reduction is encapsulated in a bill that I have been working on with the very able assistance of one of your attendees here at the conference, Joel Hirschorn, my technical helper from the Office Technology Assessment. The legislation itself has a number of specific things that would be done to improve upon the Superfund legislation. As we have loopholes in RCRA, we also have loopholes in the Superfund legislation. The highlights of the legislation are that the highest fees would be imposed on the very highly toxic wastes that are disposed of in landfills so that generators would be paying a progressively lower fee on less toxic waste. Also, no fee would be imposed on recycled or recovered waste, thus encouraging recycling or reuse right there at the site or right at the point of generation. Also, the fee structure would raise enough revenue to continue financing the clean-up of abandoned sites and to fund EPA's program of grants to states for enforcement of hazardous waste.

Day after day before my Science and Technology Committee we have different expert witnesses come in and say, well, we have this technology and that technology and we can revove this pollutant and that pollutant and they find

that because of the current regulations there is a disincentive to take advantage of the technology. When we look at it from a broader perspective, not only through providing incentives to use recycling and reuse technologies, are we solving the pollution problem, but we're also addressing an employment problem. The potential for increased employment in this area is certainly enormous.

I think that one of the things that is of particular interest to the states is that there are provisions to earmark 150 million dollars a year from the revenue that would be raised by the bill for the program of grants to the states and the money would be used to help states meet their responsibilities under RCRA. This would be the first time that the states' grant program would be guaranteed an annual appropriation through a revolving account and the states could thus plan rationally for a 10-year period and the bill does extend for a 10-year period.

Another feature of the bill is that it is a very equitable approach and I think this is something that appeals to some of the Chemical Manufacturers Association because in testimony before my committee a number of them had pointed out that the burden would be distributed much more fairly because industries that produce the most hazardous waste would pay an economic penalty appropriate to the cost to society and the CMA has endorsed the whole concept of a hazardous waste fee. Finally, I think one of the positive aspects of this proposal is that it is national legislation, as opposed to doing it on a state-by-state basis. By adopting a national uniform fee structure our bill establishes a very consistent policy to guide industry and it would not allow different industries to take advantage of states that have less stringent requirements and create hazardous waste havens. So I think that there are a broad spectrum of positive aspects to this legislation. I happened to bring with me tonight a list of those people who have co-sponsored our bill. We just introduced it last week and we already have close to 50 co-sponsors. Most of the people that we have are folks that I went after personally and who serve on the pertinent committees, but I will say that those of you from all of the Northeast states should certainly mention H.R. 2503 to your Representatives and suggest to them that they co-sponsor it. The people that immediately jumped to this bill were, incidentally, some folks from New Jersey. I can't explain why. Already we have Congressmen Forsythe, Molinari and Rinaldo and from New York we have Congressmen Fish and Ben Gilman and from Pennsylvania, Congressmen Goodling and Clinger and a number of others. So if any of you afterwards wants to know specifically if your Congressman has signed on as yet or not, don't hesitate to ask.

The real goal behind this legislation is to work cooperatively with the industry and with the state governments to design a proposal that will permanently protect the quality of the environment for future generations. This is one of my personal goals. This is an opportunity for me that I am most grateful for, that I am in a position where I can help to shape legislation that will make tomorrow a better world and reduce the amount of hazardous waste that we need to deal with and I am hopeful that I will have the cooperation of everybody. Thank you very much.

Robert Bendick:

I think it's refreshing to find someone who can answer specific questions. Our next speaker is John Skinner, Director of the Office of Solid Waste, U.S.E.P.A. He is a veteran at EPA, having been there in the office of Solid Waste for 11 years and I think that kind of veteran deserves a medal.

John Skinner:

Thank you. It's a pleasure to be here with you tonight. I think with all the controversy about EPA these days, sometimes it's very easy to lose sight as to what has been accomplished in the hazardous waste management field over the last two or three years and I don't say this to bring any credit to myself or to the agency or to any particular administration because I think that the people who have really brought about change in the field are the hard working civil servants who day after day, through administration after administration, just keep their heads down and turn out the regulations, do the basic science and technology development that is necessary to make accomplishments. Let me go through some of the changes that I think are very significant and I think the remarks I'll make will address all of the questions that were asked.

This is May 1983 and it was only in May 1980 that the first set of national hazardous waste regulations were published. They've only been in effect less than two and a half years, so it's a relatively young program. Today we have a complete inventory of everybody in the United States who generates hazardous waste, who transport those wastes and who disposes, treats or stores those wastes. All of those people are registered, they all have identification numbers and we know what they do and where they are. None of that information existed three years ago. The cradle to grave system to track waste from the point of generation to the point that they are finally disposed of has been put in place nationwide. The manifest system is operating nationwide and all indications are that this part of the program is working very well. The states are following-up on manifests, the regional offices are following-up on manifests, and wastes for the most part are going where they are supposed to. None of that existed two and a half years ago.

Some very important interim standards have been imposed upon facilities that treat and dispose of hazardous wastes. Last year all parties that disposed of hazardous wastes on the land for the first time, across the nation, had to monitor their groundwater. They had to install wells to monitor their groundwater. This year the first set of data is going to come in from those groundwater monitoring systems and that's very, very valuable information that will be used to set the future directions of the program. There are now standards for closing facilities when they have to close, for monitoring them during the post closure period. There are standards for financial responsibility and for liability insurance which didn't exist three years ago. There are standards for issuing permits to all classes of facilities: storage facilities, incinerators and land disposal facilities.

Thirty five states have received authorization to administer the first phase of the program and in those states they enforce the manifest system and they

enforce the interim standards. Ten states have received authorization to issue permits to various facilities. All this brings a tremendous amount of state resources and capabilities to bear on the program. There have been a large number of inspections. Every year there are about 10,000 inspections of hazardous waste facilities. I'll talk a little bit about what those inspections are finding and what people are doing about those findings, but there is a high level of activity that I don't believe existed three years ago in the program.

So I think there's been a fair amount that has been accomplished. That's not to say that there's not a lot more to be done. There is. The program is far from complete. There are major loopholes that need to be filled. The Congresswoman addressed many of them. I'm going to expand on a few of those points, but there has been a significant change in the way wastes have been managed in the United States over the last three years.

Let me talk about what I expect to see in the future of the federal program. The first thing is, I expect to see expanded regulatory control over practices and wastes. More wastes will be regulated. More practices will be regulated. The regulations will be more stringent. We talked about the small quantity generator exemption which currently exists in the federal regulations and also exists in many state regulations as well. I predict that over the next two years that that small quantity generator exemption will be plugged. The loophole will be removed, at least down to the 100 kilogram per month level. I'm concerned and I think you should all be concerned about how that is done. Taking a regulatory program that was designed for the chemical industry or the steel industry and imposing that on small businesses, gas stations, dry cleaning establishments, is probably not a very cost effective approach. If a degree of hazard approach or a phase-in based upon the capabilities of small businesses is necessary anywhere, this is one area where that's necessary.

Another significant loophole in the federal program is with respect to wastes that are burned as fuels. They are currently exempt from federal regulation. We have a three phase approach that will eventually bring all of those wastes into control. We've established an enforcement policy which defines certain burning practices as illegitimate. For example, mixing wastes that are very difficult to burn with fuels for purposes of disposing of those wastes is not legitimate recycling and instead is subject to regulation as incineration. Later this year we will be proposing some administrative requirements so we can build a data base on who is blending these wastes into fuels and where they're going. Eventually, next year, we will be proposing some technical standards for boilers, we will be listing waste oil as a hazardous waste, and we will also be developing a fuel standard for waste fuels.

We will also be listing additional wastes in our list of hazardous wastes. Recently we put out a proposal proposing to list dioxin-containing wastes. Over the next two years we will be listing many more organic chemical wastes and eventually, in the long run, we hope to develop a toxic organic characteristic so that wastes would be considered hazardous based upon the concentrations of various organic materials in the waste. The technology and

the science to do that is in the early stages of development, but in the long run I think that's the only way to really reach out and bring in all of the wastes that need to be controlled.

I think there will also be further restrictions on the land disposal of hazardous waste. Last year we published a land disposal standard which, in my opinion, is the most stringent standard that exists in the United States today. It is far more stringent than any existing state standard. It requires state of the art technology to be applied to land disposal facilities. It is a very costly standard. It involves ground water monitoring, management of liquids, application of leachate collection systems and liners as well as long-term care of the facility. As evidence that this is an extremely difficult standard to comply with, we estimate that approximately 50 land disposal facilities closed before January of this year in order to avoid having to comply with that standard.

Now, there have been a number of people who have pointed out limitations in that standard and requested that we seek further restrictions on disposal of wastes on the land. We will be doing that. Let me just go through a number of them that we are considering. Currently we restrict the placement of containerized liquids in landfills. I think in the future we will be proposing a restriction on bulk liquids in landfills as well. Under both the Underground Injection Control Act and RCRA we are coming up with a prohibition on class IV injection wells. Those are injection wells that directly inject hazardous waste over drinking water supplies. We will be coming up with location standards that will attempt to identify those areas in the United States where land disposal is inappropriate and where it should be restricted. We will come up with a more extensive liner requirement where existing portions of facilities will have to be lined as well as future expansions of facilities. We'll probably come up with a requirement for financial responsibility for corrective action where people will be required to put aside money to enable them to clean up the ground water in the future if that's necessary to be done.

These are all important modifications to the existing standard. However our longterm plans in this area are much more profound and much more extensive than that. I think eventually we want to come up with a list of wastes which should not be disposed of on the land at all. Wastes which because of their mobility, toxicity or their persistence should not be placed in a land environment because of the concern for longterm care. In establishing such a standard we have to be concerned about the availability of alternative technologies, the cost of those technologies, the capacity of those technologies and how fast they can come online. Hopefully in mid 1984 we'll have a proposal along those lines.

We will also be moving aggressively to issue operating permits to the approximately 8,000 facilities that require them. We are going to be focusing on the worst of those facilities first. We are going to be focusing on land disposal facilities and incinerators. We've already called in over 200 land disposal facility permit applications representing the largest and most controversial facilities in the United States. We have a copy of that list if

people are interested in looking at those. We will be emphasizing both land disposal and incinerator facilities over the next several years before we move to some of the smaller facilities that store wastes.

Let me mention a bit about enforcement. I talked about the fact that there is considerable inspection activity, but I think one area where the program really needs to be improved is in response to those inspections. We did a survey of ground water monitoring at 189 facilities. This is about 10 percent of the facilities that require ground water monitoring and we found a 60 percent noncompliance level. Some facilities weren't even putting in the wells let alone taking the samples and analyzing them correctly. An interesting fact is that most of those facilities were in authorized states. Very few of them were in states where EPA administered the program. However, the EPA enforcement record wasn't much better. But, the point is, that neither EPA nor the states were responding aggressively in the enforcement area. I understand that in this region of the country, in the Northeast, many states do not even have the administrative capability to levy penalties and fines. They have to go to the State Attorney General or into court in order to levy a penalty or fine. This often takes considerable time. That's a major shortcoming in an enforcement program. Unless there is an incentive to comply, unless the penalty is going to outweigh the advantage of noncompliance, you are not going to find nationwide compliance.

Let me talk a bit about state authorization. The policies for final authorization have been established. We've put out a final authorization manual. We did this with extensive consultation with the states. We were not able to respond to all of the state concerns, but we think we've provided the most flexibility that is allowed under the law and also the most flexibility that makes sense from a policy point of view. It has been issued both by my office and by the Office of General Counsel. It is currently over at OMB and will be cleared in several days.

In addition to that, we've carried out pre-application statutory reviews in 28 states. That means we have looked at state statutes to see whether they are acceptable for final authorization. Where they are not, we told the States how they had to change them. With that information from the statutory reviews and with the final authorization manual, states have all the information they need to achieve final authorization by January 1985. The ball is in your court now. If a state misses the January 1985 deadline it's not because they didn't have information on what they needed to do in order to achieve that deadline. Processing those applications will be very high priority in EPA, both in the regional offices and in headquarters.

Let me conclude with a few comments about accountability. If one thing that the past four or five months has shown me and shown everyone in EPA is that the Congress and the American people are holding this agency responsible for successful implementation of this program. Now, it's clear that the states are our partners in this and to the extent they're capable we will authorize their programs. To the extent that they're willing to pick up responsibility, we will delegate responsibility to them. We will encourage and work with the states with technical assistance and financial assistance. But the bottom

line is that Congress and the people will look to EPA to know what's happening. That means along with delegation of responsibility there must be oversight. We have a responsibility to know what's going on and to know whether the states are carrying out their authorities in an appropriate manner. There has to be agreement between EPA and the states on accomplishments. There has to be reporting on accomplish- ments. There has to be response on the part of the agency if the states aren't carrying out their program properly. Now this need not be done in a confrontational manner. It need not be excessive oversight, but there is a responsibility for knowing what's going on and for responding to what's not going on. There need not be extensive bean counting, but some statistics are important. We have to consider the quality of state programs as well as how fast they're moving and the number of inspections and permits that they are issuing.

One of the things that we will be doing over the next several months and one of the things that Mr. Ruckelshaus has indicated that he wants us to develop on a priority basis is a delegation policy that stresses accountability and responsibility and attempts to put forward reporting requirements in a way that everybody can live with, but that sufficient information is developed so that everybody knows what's going on.

So in summary, what do I see in the future? I see more extensive regulation. I see more wastes being controlled. I see more stringent standards. I see a trend toward more sophisticated technology. Regulations will eventually push more and more wastes off of the land into alternative technologies. I hope I see a higher level of enforcement and more responsive enforcement and continued delegations to the states, but delegation with oversight. Thank you.

Robert Bendick:

Thank you, John. We've heard the federal perspective, now something from the states. Ann Rappaport is Deputy Director of the Massachusetts Department of Environmental Quality Engineering, charged with program development and management issues, in particular, dealing with federal grants and hazardous waste issues. Ann is a graduate of Wellesley College and she has a Masters of Civil Engineering from MIT. Ann.

Ann Rappaport:

Thank you. I realize I made a bit of an error in agreeing to speak tonight: I failed to get diplomatic immunity before coming. With all the EPA people present, it makes me a little nervous about the remarks I prepared, but I'll go ahead anyhow and see what happens later. With the relatively short time available to me to prepare my remarks, I stuck really close to the questions and so I think I will repeat them because they were slightly different than those given to Representative Schneider. Some of the distinctions are very important to both of us.

"Should the federal government support state hazardous waste management programs and for how long?" We feel that substantial federal support is

needed for the foreseeable future. States rely on the federal government to conduct basic scientific research that allows standards to be set. This activity has been grossly underfunded recently in areas related to hazardous waste and state management efforts have suffered as a result.

Compared to the traditional air and water programs, the federal contribution operating the state regulatory programs in hazardous waste is disproportionately small and the environmental problems are tangible and awesome. Federally supported training programs have played an important role in expanding the capability of states' professional staff in air and water pollution. In the hazardous waste program, federally sponsored training has been sporadic, elementary and otherwise inadequate. Despite the current popularity of shifting responsibility from federal government to states, there remains a crucial role for the federal government in conducting research and standard setting, providing training and technical assistance, and in providing basic program support until state funded programs are able to operate on their own.

My second question was, "Do the states have the capability to administer and enforce equivalent hazardous waste management programs? Can the states afford to?" The answer to both questions is yes and no. Most states have very capable staff and in states such as Massachusetts which has been permitting hazardous waste facilities since 1973, there is a wealth of experience in the field. States have tended, however, not to focus on an "equivalent" program, but on a program that addresses the environmental problems they've observed in their practical world. In the Northeast this has meant that states have attempted to launch programs that are substantially more ambitious than the federal. For example many states require licensing and financial assurance for transporters where the federal system does not. Many states regulate waste below the federal 1,000 kilogram per month cutoff and some states already have expanded the federal list of hazardous waste by including waste oil and other compounds. There's no question that the resources required to run an adequate waste program are substantial, but the real issue is can we afford <u>not</u> to? We don't think so.

"Will the majority of states seek and achieve final delegation by 1985? What are the roadblocks?" I can speak only for Massachusetts and I can assure you that we are strongly committed to the concept of delegation, but from where we stand now, the roadblocks are many and they are discouraging.

The states have received and commented on the draft Final Authorization Guidance Manual that was referred to by Mr. Skinner. This document carefully outlines the procedures and requirements for state delegation. EPA's interpretations of its regulations make this authorization manual into a sort of guide to roadblocks, in our opinion. Two examples might help to illustrate my concerns. EPA will scrutinize the state's hazardous waste facility siting process as part of the authorization decision. In many states in the Northeast siting is done by an agency that's independent of the state regulatory agency or is done by an independent board. Although there was originally some confusion about the criteria to be used in this decision, EPA now says that it will authorize states with siting procedures that consider

factors in addition to public health and the environment, but it will review siting decisions on a case by case basis. Does this mean that a siting counsel decision based on some factor other than public health and the environment could jeopardize our authorization? We don't know. That issue has yet to be clarified.

The second and more fundamental problem is in the Memorandum of Agreement Section, in the Guidance Manual. This section delineates a type of federal oversight which we view as unprecedented for a delegated program. There are tighter deadlines and more burdensome reporting requirements under final authorization than we currently experience under Phase 2 or Phase 1 interim authorization. Without going into detail, we feel that EPA regulations and their interpretation of them have created a final authorization package in which the only incentive to states is the deadline for reversion of the program to EPA.

"Will the current RCRA program prevent the creation of more Love Canals? Why or why not?" Needless to say, this was a tough question, but I took a perspective on it that I hope you'll understand. In Massachusetts we are not convinced that the current federal program provides adequate protection to public health and the environment. Both our state enabling legislation and our regulations prescribe measures that are more stringent than the federal RCRA program. As as example, anyone in Massachusetts generating more than 20 kilograms per month of hazardous waste must prepare a manifest and send the waste via licensed transporter to a licensed hazardous waste facility.

Will the RCRA Program prevent the creation of future problems? Probably not all of them. The program has made significant strides in public awareness through a variety of circumstances both positive and negative. The legal and regulatory framework has been tightened to clarify liability and responsibility. I do not think that we will see an end to the loss of property value and potential health problems through the current RCRA program, in part because I believe the current program is too narrow.

The next two questions provide a perfect opportunity to illustrate this important point. "Do Subtitle D sites pose a hazard? Will they in the future?" The answer to both of these questions can be an emphatic, "Yes." Depending on the management practices, design and operations, siting and hydrogeological features, ordinary sanitary landfills can pose substantial threats to ground water. Even leachate coming from a landfill that contained exclusively household refuse can contaminate downgradient wells. In addition to groundwater contamination, concentrations of methane gas in Massachussets landfills have caused explosions in adjacent buildings and have rendered some structures unuseable. In fact, for those of you who are familiar with the University of Massachussets facility in Dorchester which is built on an old landfill site, they've gone to an alternative mechanism which is very expensive and installed a sophisticated methane venting system in their buildings. Although the number of sanitary landfills in Massachussets that are known to have contaminated water supplies is relatively small today, we believe that our 283 operating and 247 inactive landfills pose a very significant threat to the common well water resources.

My final question was, "Why has Subtitle D never been adequately funded and what has happened to state solid waste programs?" We've concluded that there has not, historically, been a real constituency for proper solid waste management. That isn't really a very startling conclusion if you realize the same could have been said about hazardous waste 10 years ago. In our state the problem is complicated by the predominance of municipally owned landfills. Towns are poor. They want to dispose of the waste at the lowest possible cost. They want landfills out of sight and out of mind. In New England, out of sight often means placing landfills in wetlands and wetlands are often hydraulically connected to water supplies. Garbage isn't sexy. It isn't hazardous and in all likelihood potential ground water problems were never adequately understood by those who made the funding decisions.

What has happened to state solid waste programs? Well, as we look around the Northeast, which we have started to do recently, my staff assures me that nowhere has the decline in solid waste management been more dramatic than here in Massachussets and let me describe our solid waste program to you briefly. Because of the arbitrary distinctions between Subtitle D and Subtitle C and the shifts in funding that have occurred along with the substantial pressure to assess and address uncontrolled site problems, our solid waste program is in total disarray. Most of the staff has been diverted to uncontrolled sites. Routine inspections of Subtitle D facilities are rarely conducted. In general, landfills receive attention only if they cause or seriously threaten downgradient wells or if it's known that they historically accepted hazardous waste. While hazardous waste problems get the press coverage, many of our staff believe that landfills are another set of ticking time bombs only a few of which have gone off so far.

Robert Bendick:

Thank you, Ann. Our next speaker, at least in my mind, represents the source of the problem and hopefully the ultimate solution. Mort Mullins represents the Chemical Manufacturers Association. More specifically, he's the Manager of Environmental Engineering for Monsato Company, based in St. Louis. In this capacity, he is responsible for the design of manufacturing environmental control facilities, technical support for plants and management and regulatory analysis and response. He serves as Chairman of the Chemical Manufacturers Association RCRA Task Group. He is a registered professional engineer in Missouri and Tennessee and I hope tonight he's going to tell us how to solve our problem.

Mort Mullins:

Thanks Bob. I'm the source of the problem. That's a scary introduction. I couldn't help but pick up on Congresswoman Schneider's comment about ignorance and negligence which had to remind me of the story about the preacher whose Sunday sermon dealt with the problems of the world, which is almost as broad as our subject matter tonight. He allowed as how there were really only two problems and they were ignorance and apathy. In talking to his parishioners as they left the service, he asked one old gentleman what he thought of that position. He repeated his position, the two problems, ignorance and apathy

and the old fellow scratched his head and said, "Well, frankly, I don't know and what's more, I don't care." Well, I don't think that we can say that many of the folks that we deal with on a day-to-day basis are either ignorant or apathetic about the problems of hazardous waste management. Although, as was pointed out earlier, there are still a lot of folks out there whose attention we don't yet have and I guess we need a bigger two-by-four.

The chemical industry has its attention pretty well focused on this issue, because we've got a lot of problems. We've got an image problem and we've got some very real problems out there, both in terms of current activities and past activities that we need to deal with. I got the same list of questions and I chose not to try to deal with all of them. I picked the one regarding the adequacy of current regulations and I'd like to focus a bit on it.

Congresswoman Schneider mentioned that the reauthorization bill which is presently in Congress and looks like it's heading for mark-up in the full committee next week. It deals with quite a number of issues, some 18 sections and 6 amendments, but the three that she mentioned, I agree, are uppermost in terms of importance. The small generator issue, the regulation of burning hazardous waste in things other than incinerators and finally some degree of prohibition of land disposal of hazardous waste. Let me talk about those in that order just very briefly.

The CMA has not taken a position on small generators because a whole bunch of our members are small generators and they're a little uptight about the administrative workload that might come along with full bore regulation. I think, however, I can speak for my company and we are quite supportive of small generator regulation, particularly in the context in which it's presented in the Florio bill which would address that category from 100 to 1,000 kilograms per month as a separate category with, hopefully, reduced administrative burdens. Likewise, we are supportive of the efforts to establish a regulatory framework for burning in boilers. The EPA is hard at work through several contractors doing the background work in that area and I think with or without a section in the reauthorization bill on that subject, we expect to see some regulations in the next couple of years and think that's most appropriate.

On land disposal, let me deal with that in just a little more detail. When the regulatory package covering the permitting of land disposal facilities became effective last January 26th, EPA and the states were, for the first time, in a position to start issuing permits for those facilities. Unfortunately, that was about the same time when the chaff hit the fan in Washington and the resulting furor and the erosion of confidence that followed has raised a number of questions regarding the adequacy of the entire RCRA Program. Several bills have been introduced in Congress which would, to varying degrees, essentially ban land disposal of many hazardous wastes in the United States. CMA supports the need for further restrictions in land disposal, but has serious concerns about both the environmental and economic consequences of some of the programs that are being proposed. Let me talk about those in the context of one set of state regulations, those that have been put in place in California.

The California program, which I'm sure many of you know resulted from Governor Brown's executive order, has some facets to it that we're supportive of and we have gone on record in terms of that support, at least on a conceptual basis. The California program first identifies, through regulatory rule making process, those specific wastes for which land disposal of certain types of wastes should be restricted based on the factors that Dr. Skinner mentioned earlier: mobility, persistence, and toxicity. Secondly, it provides a phased schedule for prohibition based on predicted commercial availability of the alternative disposal facilities. Third, it would provide an opportunity for limited extension of prohibition dates based on lack of regional alternative capacity and finally, it provides individual generators an opportunity to petition for an exemption based on the fact that either their wastes are different or their disposal method is different than those considered in the prohibition and they can make a showing that land disposal is adequately protective.

This approach avoids some of the pitfalls which we see in several of the existing or the current federal legislative initiatives. Specifically, it would identify prohibition candidates in a regulatory framework rather than by statutory listing. We feel that statutory listing circumvents public participation in the background documentation that's appropriate in establishing candidates for prohibition of landfill. Secondly, it does allow technology forcing. That is, prohibition after a period of time adequate for permitting and construction of alternative technology while still allowing the flexibility to extend deadlines when good faith efforts have been made.

Third, it allows variances when the specific wastes or waste disposal combinations are such as to render land disposal as responsible or more responsible than the alternatives. Finally, it avoids the kind of situation which followed the TSCA prohibition on PCB disposal before alternatives were identified. That is, the accumulation of large quantities of stored PCB's without a place to go. One additional concern: several of the schemes under consideration speak to prohibition of land disposal rather than specific forms of land disposal. We believe this is inappropriate in that there is a vast difference between landfill, land farming, waste piles, surface lagoons and deep well injection and we would urge that any statutory instructions to the agency allow distinguishing between the various forms of land disposal. With the addition of the kind of land disposal prohibition framework embodied in the California program, CMA believes that the current regulatory program will be adequate to allow use of such facilities for hazardous waste disposal.

As you know, EPA's program is based on a combination of liquids management and groundwater monitoring, which Dr. Skinner described earlier. The first element, liquids management, is provided by requiring a liner of appropriate thickness and material of construction for the wastes involved as well as leachate collection and removal. The liner provides a barrier between the groundwater and the wastes and keeps liquids which enter the landfill via rainfall away from the groundwater. The leachate collection system removes liquid which does enter the landfill and provides for its treatment. When the landfill cell is full, the regulations require closure involving an impermeable cap and continued operation of leachate collection until all

residual moisture is removed. During operation and the postclosure period, both up gradient and down gradient groundwater is monitored routinely to protect leakage. If leakage is identified, remedial action is required. If this program is combined with a selected restriction of waste for which the degree of containment offered by properly designed and operated landfill is not adequately protective, it's our belief that the likelihood of future Superfund Sites will be vastly reduced.

As to the specific reference to Love Canal, I'm not sure we've got that problem solved yet, because I haven't seen anything in RCRA that would prohibit building a subdivision or a school on top of a known existing hazardous waste landfill.

One final update remark in terms of the bill that was reported out of subcommittee last week. This bill would require the Administrator to review all of the thousands of RCRA hazardous wastes, both listed and characteristic, and make a determination for each as to which forms of land disposal are adequate or conversely are inadequate. Failure to do so within a relatively tight timeframe prescribed in the statute would result in automatic prohibition. This is the sort of convoluted carrot and stick incentive where you tell Fred, if you don't move fast enough, we're going to punish Joe, and we're Joe and EPA is Fred. That's an approach we're not too crazy about.

I'd like to, I guess, repeat my earlier comment that with the approaches that are being suggested in the reauthorization legislation and upon which EPA is already moving forward with or without that legislation, we believe we're heading in the right direction. One is prone to ask the question, "Will landfill under the existing RCRA regulations be totally protective?" I think the answer is, "no." I think the operative word there is "totally." I think there is, for any degree of technology, going to be a risk/benefit trade-off and the tough job that we've all got to do is to arrive at the right balance between risk and benefit. Thank you.

Robert Bendick:

Thank you, Mort. We have a few minutes left and the idea now is to have some questions of the panelists. First, the opportunity for the panelists to ask questions of each other and then we'll just have an informal discussion. There are few enough people here that I think we can just -- it doesn't have to be moderated, just speak up when you have something to say. First, do the panelists have any questions of each other?

Congresswoman Claudine Schneider:

Dr. Skinner, you had mentioned at some point that there was a 60 percent noncompliance and I'm afraid that I didn't understand exactly where that noncompliance was and the details of it and the cause of it. I wonder if you could reiterate that point.

John Skinner:

Let me try and speak from here. This was a survey that our regional office and the states did of 189 selected land disposal facilities. It was supposed to be a statistically valid sample but for various reasons it was not perfectly valid. We went out and inspected the facilities to see whether they had groundwater monitoring wells, whether they were taking samples properly and whether they were keeping records properly. In 60 percent of the situations we found that they were not, and in many of them it was fairly major violations, not just recordkeeping, but the wells weren't installed or weren't installed in a manner that was capable of detecting violations. Now since then, there's been follow-up on every one of those facilities and by mid-April they were all supposed to be in compliance. I'll have to check and see whether they are.

Congresswoman Claudine Schneider:

Well, I'm more curious to ask the question of anybody, why is there this noncompliance? Why aren't the states enforcing the laws that some folks have gone to the trouble of making and why isn't EPA enforcing it? Maybe we could hear from the states and EPA.

Representative Teresalee Bertinuson:

Money is one good answer, I guess. Enforcement is expensive. Most of the states are having serious fiscal problems.

Ann Rappaport:

Another issue is confusion. I would be interested in seeing that survey repeated after the states have gone through departmental process. One of the experiences that we've had here in Massachusetts is that as we've called for permits there's been more and more clarification on the part of EPA as to what facilities are in fact required to conduct air and water monitoring. At the time that the survey was conducted, I don't believe that that had been resolved on a facility-by-facility basis. So that in itself might change the results as well.

Merrill Hohman:

I'd like to make a couple of comments on that. I'm in the Boston regional office of EPA and we are quite concerned about the whole issue of compliance with those regulations. There are a number of factors that haven't been mentioned. One of them is that if none of our states have authority to issue administrative penalties, all they can do when they find the source of noncompliance is write a warning letter. If that is ignored, they issue a notice of violation and if that is ignored, it can be referred to the Attorney General. With the existing caseload an Attorney General has nowadays with Superfund sites, litigation on that type of thing plus in many cases, struggling to get laws changed to qualify your authorization, there just aren't the resources available to go out and push hard on some of these

sources. Frankly I think if sources believe there's not going to be a push on this, they are not going to go into compliance. That's one problem.

The second problem which has been mentioned also is the whole issue of the extent to which EPA can or should overview the states. We have a lot of compliance inspection effort in New England. All of our states are doing a great job - they're exceeding all their commitments in their grant program to doing inspections. However, there is no mechanism whereby states track and report to EPA source by source what has happened to every one of those. By agreement with states we go out and do file reviews and look at random at these things but there's no overall total program to track compliance. Those are some of the factors. One other factor also is that most of our state environmental agencies are staffed with environmental engineers, civil engineers, chemists, biologists, all very competent people. There is a severe shortage of groundwater geologists and one does not simply go out willy nilly and announce to a source where to put the wells or if the source hires a consultant, to have the ability on the state staff to review that plan to ensure that it's properly prepared and the wells are in the right spot. I think there are a whole range of problems out there affecting it.

John Skinner:

One other point. I think that we have to take a certain amount of blame in that area as well, in that there was a lot of confusion at the beginning as to when those regulations were going into effect, whether they were going to go into effect, whether they were going to be suspended for reevaluation under the Executive Order for Regulatory Reform. So that probably caused some hesitancy on a lot of people's part in proceeding and I agree with everything you said, Mel, about the other factors involved.

Mort Mullins:

Sixty percent is kind of mind boggling and I'm just as buffaloed by that as anybody, but in a write-up in BNA they did speak to the fact that a number of violations had to do with inability to determine what was upgradient, and there were some who had been unable to get analysis for the radionuclides and I guess I can relate to some of those. Those have been real problems. We've got several hydrogeologists on my staff for a company our size and we've still been hard pressed and we've still got a number of plants where quite frankly, we don't know which is the upgradient well at any given point in time. It keeps changing. It's seasonal. This has been a freakish year for groundwater. A lot of places we have been unable to get analysis for radionuclides. There just aren't enough labs out there able to run them and we found we were waiting months and months and months to get those results back. So we went ahead and submitted from a lot of plants without the radionuclide data and I understand that was one of the categories of noncompliance. So I think there are some technical categories of noncompliance that have accounted for some of those, certainly not 60 percent, but it's part of the problem.

Robert Bendick:

I have one question for Mort. That is are we -- we keep talking about ground disposal and in much of what you say, you're talking about ground disposal. Is there any major project among the chemical manufacturers to work on technology for destruction, chemical destruction, or some sort of incineration or anything in that area rather than ground disposal?

Mort Mullins:

Frankly, we're not doing any basic work ourselves, but we are following a number of what I guess you might call emerging technologies. You probably all read about the Rockwell molten salt work, MIT super critical water treatment and plasma technology. These are mostly alternatives to incineration. CMA is funding some basic work on incineration itself parallel to some similar efforts within EPA to try to get a handle on this mysterious thing we call hierarchy of incinerability. As you know, the permitting system will all depend on being able to say what a given incinerator or boiler eventually will be permitted to burn. The concept is you'll run a trial burn on some sort of material and say everything that is easier to incinerate than that material is okay, everything that is harder to incinerate should have another trial burn. Well, as smart as we think we are, nobody can agree on what constitutes this hierarchy of ease of incinerability. The Bureau of Standards has one approach and I guess EPA is now using heat of combustion as a basis while admitting that it's imperfect. We're doing some contract work to try to get a better handle on substitute parameters for this hierarchy of incinerability, also some substitute parameters for efficiency, in order to hopefully come up with something we could use as a basis for on-line measurement of incinerator efficiency which now is a very difficult material balance sort of a thing. There is a lot of work going on, but not enough. We are going to have to find some better technologies as these materials are identified which really ought not to be land disposed.

I guess I came out of the comments here tonight with a continuing concern about the shell game. I was in manufacturing for the majority of my career before I went into environmental control and I put in a lot of air pollution facilities back in the early seventies and we thought we were doing great things. Of course we created a lot of sludge which we put in an on-site landfill and now we're saying let's take that sludge out of the landfill and incinerate it. I'm not sure we're thinking straight yet about this shell game. We may still be in a vicious circle of the media of the month. This month is hazardous waste; next month we may be back on water or air. I think the program integration approach that's underway at EPA now to try to make sure folks are talking to each other would be a big step forward in trying to avoid continuation of the shell game.

Robert Bendick:

Just a follow-up question on that -- you say there's research being done, but not enough. Is that because the economic incentive isn't there for someone to do the research or is it because the technological problems are insurmountable and it's not worth doing the research?

Mort Mullins:

Incentive is part of it. I was very glad to hear Congresswoman Schneider talk about the waste end tax. I think that's a very appropriate step forward for all of us. That will give an incentive for people to do things that they don't now have an economic incentive to do. Part of the problem has been that the hazardous waste revolution has taken place during a period of severe economic difficulty and industry has been pinched in a lot of quarters. R&D has been an area that has suffered a great deal and as the economy strengthens, knock on wood, that will put us in a position to be able to do lot of basic work that we'd like to be doing.

Congresswoman Schneider:

I'd like to add a couple of points to that. One, addressing the technological solutions to deal with hazardous waste. Just this past week we had an investigation and oversight hearing on some of the different technologies that are available and in addition to the molten salt technological alterations there is also research being done at the University of Tennessee which uses the biological research - DNA and number of other things - to address the breaking down of complex chemical compounds. So I just thought that I would mention that, that there is research being done. I too feel that there needs to be more of an incentive to pursue that and perhaps we could see the private sector pursuing some of that. We know that the university, the academic research sector is. Of course their budgets are limited too.

The other thing I wanted to point out is the whole perception of cost as related to recycling or reuse. I think that there is a bias that most of us have which says it's enormously expensive for us to reuse or recycle our waste products or to dispose of them at the point where they are generated. Just this past week, we had a witness come to Washington from Rhode Island. The jewelry industry is one of the leading industries in the state and this business woman manufactures all the Christian Dior jewelry and most of you in the audience will know that is a very fine quality jewelry. She is a person who is extremely concerned about polluting her neighbors and her environment, living in such a small, highly populated state as Rhode Island. If you throw something over your left shoulder you hit somebody immediately in the face. But the fact of the matter is they found that with a limited capital investment into the reuse and recycling of some of their waste products, they were actually saving money on their overall water bill. In the jewelry process you've got to do a great deal of rinsing. They were using only half as much water. They were also saving almost a third as much energy. Their natural gas bills were reduced by using the reuse process. So we've heard that many times from large companies such as Monsanto or others. Union Carbide, I know, has done a great deal in the area of reuse and recycling. But even small industries, their attitude as I go around factory to factory and talk to the businessmen, they usually say, "Well, I don't know how we're going to comply with these regulations. It's going to be expensive and it's going to do this, it's going to do that." They already have a built-in wall of resistance to even investigating it. There are those who have checked into it and found it has worked to their advantage to make a more reliable product and save their overhead at the same time.

Robert Bendick:

Any other questions?

Joel Hirschhorn:

If I could make a comment on that point about alternatives to land disposal. The citizens of this country indirectly have paid for two exhaustive, comprehensive and absolutely impartial studies, one by the National Academy of Sciences and one by the Congressional Office of Technology Assessment concerning hazardous wastes. There is one point that both studies agreed on: for absolutely every hazardous waste - every hazardous waste - there is a technological way to either not produce the waste, or to recycle, recover, destroy or detoxify it. Every hazardous waste.

I think it's important for all officials and the general public to know that it is not necessary to put hazardous waste into the environment. Now, one can ask the question, why aren't the technological, proven, feasible alternatives used and that's the question Congresswoman Schneider has addressed through her bill putting a tax on waste, because the answer is very simple: it's economics. The decisions out there are economic decisions. Technology is not the issue. Not that you couldn't develop more technological solutions: you can, you should and they will be developed. But even today, under the worst circumstances, the alternatives exist.

John Skinner:

Can I respond to that? I agree with you, Joel, that is true. I think that as hard as it is to believe, though, that there are some instances where the environment is better protected by placing the waste on land.

Now let me give you an example of this which is very, very striking to me. We're dealing with the cleanup of the dioxin wastes in the state of Missouri where huge areas of soil have been contaminated with dioxin. Those wastes can be burned. You can take the 50,000 cubic yards of wet dirt and you can burn them in an incinerator. But it would take 9 months until you've burned them all. You can burn them to 99.99 percent destruction efficiency and they'll still be .001% dioxin left, but you can burn them and it will cost you $60 million dollars. The other thing we found though with those same wastes is that they bind very, very tightly to the soil. In fact, to remove them from the soil, you have to go through a multi-stage extraction process: twelve stages of solvent extraction before you can remove it from the soil. It seems to me that it might be a better solution with those wastes to put them into a monofill with a cap over the top. Tens of thousands of years of rainfall is never going to leach those wastes out if we can't extract them with a ten or twelve-fold extraction proceeding. So I'll agree with you that there's always a technology solution as an alternative. And in many, many instances it is also the preferable alternate. But there are also situations where not only from the point of cost, but also from the point of environmental protection that land disposal is a better idea.

Jacqueline Rams:

Are you going to cap the whole town of Times Beach?

John Skinner:

No, no. The solution would be to remove those wastes and place them in a monofill. I'm not talking about Times Beach. I'm talking about the horse arena sites.

Jacqueline Rams:

It seems to me like there would be huge volumes of soil that would have to be put somewhere. I mean if you're talking about Times Beach, you're talking about a whole town. Are we going to create hazardous waste fortresses across the country?

John Skinner:

Any solution to that problem involves taking huge volumes of waste and putting them somewhere and that's the start. The question is, what do you do with them away from there?

Joel Hirschhorn:

You can do on-site treatment - there are chemical approaches, thermal approaches and biological approaches.

(Recording equipment turned off at this point because of inadequate sound pick up from audience. Additional equipment was brought in for the next two days of the conference.)

CHAPTER II

Superfund: How Is It Working?

Presider:
REPRESENTATIVE TERESALEE BERTINUSON, Connecticut, Chairman, ERC Task Force on the Environment

Speakers:
JOEL S. HIRSCHHORN, Project Director, Congressional Office of Technology Assessment, Hazardous Waste Control Assessment Project

WILLIAM H. HEDEMAN, Director, Office of Emergency and Remedial Response, U.S. E.P.A.

NORMAN NOSENCHUCK, Director, New York State Division of Solid and Hazardous Waste

LINDA GREER, Science Associate, Environmental Defense Fund

- Has Superfund implementation been unnecessarily complex and burdensome? Could the process be streamlined?
- What actions could a state take to shorten the time involved to obtain funds and achieve site clean-up?
- Should Superfund be enlarged and extended?
- Is the state share requirement hampering Superfund implementation? Should it be eliminated or revised?
- What is a state's role and responsibility in the Superfund program? What actions can EPA or the states take to enable maximum state participation in the Superfund program?

SUPERFUND: HOW IS IT WORKING?

Representative Teresalee Bertinuson:

Good morning everyone. I'm Representative Teresalee Bertinuson from Connecticut. I chair the Task Force on the Environment of the Eastern Regional Conference of the Council of State Governments and for those of you who are just joining us this morning, welcome.

The first session this morning deals with the overall question of the Superfund and how it is working. We have some lively panelists and I think we'll have a good exchange of information. Because Mr. Hedeman does have to leave early, we are going to have him make his presentation first and take questions at that time. We'll allow some exchange from the panelists and then questions from the floor and after that we will move on to the other three presentations and take questions at the end.

To focus our discussion this morning, I will read the questions that we have asked the speakers to address.

1. "Has Superfund implementation been unnecessarily complex and burdensome? Could the process be streamlined?"

2. "What actions could a state take to shorten the time involved to obtain funds and achieve site clean-up?"

3. "Should Superfund be enlarged and extended?"

4. "Is the state share requirement hampering Superfund implementation? Should it be eliminated or revised?"

5. Finally, "What is the state's role and responsibility in the Superfund program? What actions can EPA or the states take to enable maximum state participation in the Superfund program?"

With that as background, I'm very pleased to introduce our first speaker, Mr. William Hedeman. He is the Director of the Office of Emergency and Remedial Response for the U.S. E.P.A. and is in charge of the Superfund Program. Mr. Hedeman.

William Hedeman:

Good morning. I appreciate the opportunity to meet with you this morning to discuss a program that has had its fair share of national media attention in the last number of months and I want to discuss it in an atmosphere of candor, but also recognizing that it's an atmosphere of change---change because of the new leadership that is coming to the Environmental Protection Agency and the inevitable change that I'm sure that leadership will bring. And so, while I would like to be candid, I have to do so in the sense of recognizing that some

of the remarks I make can be only speculative or somewhat vague because I'm not sure exactly where the program will be going when this new leadership assumes responsibility.

Suffice it to say, that from my perspective the last four to five months have been incredibly difficult. During that period of time I have had four bosses sitting in the Assistant Administrator's position and it's rather questionable who the boss is now because there's no one sitting in there, given the fact that the individual who was assigned there is now the Deputy Administrator. One thing that has become very apparent at EPA in the last five months is that you learn how to spell the word "acting" without even thinking.

I would like to go over with you some of the points that were raised in the five questions that were just asked and begin by not only focusing on the accomplishments of the program, because despite the turmoil, I do think we are making progress, but I also want to concentrate on how we, in my office, believe that we can not only improve our relationships with the states but also facilitate participation by the state governments. Decisions about the precise manner in which we are going to strengthen this program area have to await Mr. Ruckelshaus' confirmation and then the confirmation of the Assistant Administrator for Solid Waste and Emergency Response. There are, however, a number of options that we are assessing in that regard and I thought I would share some of them with you.

First of all, let me talk about the results of the program to date, and these are the cumulative results as of essentially today. One facet of the program which has not been terribly interesting to the media and therefore, I've seen relatively nothing about it in the newspapers, is the removal part of Superfund which is that component of the law that allows the federal government, at 100 percent federal expense, to respond to immediate and significant threats to public health, primarily in terms of fire and explosion or direct contact to hazardous substances. As of today we have taken 132 such actions and completed 106 of them. We also have, in that same category, undertaken what is called a planned removal in which states contribute 10 percent. Nine such sites have been targeted for this type of response or have work underway; six of those have been completed. So there are well over 100 sites already in which a fair amount of surficial or surface clean-up has occurred as a result of this removal program. $28,000,000 has already been put into that effort and I anticipate that many of the constraints that we have placed heretofore on that program in terms of obligating money will be lifted and that the agency's approach in terms of what constitutes an emergency and therefore, qualifies for a removal action will become more flexible in the months to come than it has in the past.

We are finding that a number of sites on the National Priority List upon further review, constitute or have as part of them, a fairly immediate situation that requires attention. In that context, we are also finding that delays in administering that program and money expended for that program are being increased, in large part, because we have to go immediately and negotiate a clean-up contract at the site as the flames are in the background or as the people are being evacuated. This often requires us to pay "top

dollars." As a result, on Monday the agency will go out with a request for proposals for four national clean-up contractors to support this removal program. I'm hoping that we can award those contracts by October and in the event that that occurs, we will have pre-negotiated contract prices and the capability to essentially activate these contractors and have them available for these emergency actions when required.

On the sites that are on the National Priority List, we have obligated $78,000,000 to date. Seventy-eight of those sites are in some form of investigation or feasibility study; twenty have advanced to a design stage; fourteen are in construction; and eighteen are undergoing what we call initial remedial measures, which is essentially removing drums from the site, drawing down lagoons or other very obvious actions that have to be taken before you could begin to take a look at the overall problem. We have completed, as the media has pointed out, five sites on the National Priority List. I would note that the national average with respect to the sites on the list is about 44 months. You simply don't take away or correct a problem overnight that took 50 to 100 years to create, particularly when we have at roughly 80 percent of the sites on the National Priority List groundwater problems where we have no idea exactly where the contamination is in the ground, where it has been, where it is going, the extent of the plume, etc.

The enforcement program also is beginning to move faster than it has in the last year. There are 61 enforcement cases involving the RCRA program relating to Superfund sites at the Department of Justice and another 26 involving referrals to the Justice Department for Superfund alone.

Now, I would like to concentrate on the relationship with the states and begin by observing that the states are assigned a very key role in the Superfund Program by the statute. The policy of EPA throughout the program, and I anticipate that it will continue to be the policy, will be to encourage states to assume an increasing share of the program, recognizing that the statute essentially gives us a two-way veto. The federal government can decline to proceed at a particular site by declining to make the 90 percent funding available to the states and likewise the states can decline to proceed by not making their 10 percent available. The statute essentially forces a mutual working relationship with the federal and state governments and I think that relationship is essential to make this program go.

To date, we have signed 42 cooperative agreements with states, which is the mechanism we use for states to take the lead at these sites. As a result of our efforts in the last fiscal year, 44 percent of the site work under the National Priority List was being undertaken by states as opposed to EPA, representing 67 percent of all the money that's been obligated to date. Under the Superfund Law, states must provide certain assurances in order to participate in the Superfund Program and I want to discuss three of those in particular with you because I think they are pertinent to the subject matter of this conference. First, we have the financing assurance which I alluded to already. The states have to pay 10 percent of the cost of the remedial action on the National Priority List unless the site was publicly owned at the time of disposal. In that case, the states must pay 50 percent or more of the

cost. Only one site thus far has fallen into the 50 percent category nationally but it has reflected a major problem we're having.

There are a number of sites in this country that are or were owned and operated by states or local governments at the time of disposal and they are massive sites requiring multi-million dollar correction. Those sites have not proceeded towards clean-up because of this cost sharing requirement and by and large, up until now, the enforcement program has dealt with those sites as opposed to the Superfund. We have performed a national analysis of the requirements for cost sharing and that has shown that as many as 42 of the 50 states do not have adequate resources to meet this cost sharing requirement. Twenty-nine states with sites that are listed as national priorities lack any type of trust fund or continuing type of funding mechanism for meeting these actions and so what has evolved is an ad hoc approach within these states, often relying upon general revenues, which does not insure that matching funds will be available when needed.

As an example, the much celebrated Times Beach decision in February has yet to be implemented. Three months have passed. People are sitting, still in temporary housing. The town is again under 10 to 15 feet of water because of flooding of the Merrimac River, but the people sit in that state wondering what is going to happen. The reason they are in that situation is that the state of Missouri has not been able to come up with the 10 percent match to cover the $33,000,000 we've made available out of the trust fund to permanently relocate a town. Why? The governor went to the state legislature. He requested an appropriation. He had little difficulty getting it through the House. He had great difficulty getting it through the Senate and in the final days of the Missouri state legislature before its Easter recess, he got 4.5 million dollars from the legislature, with one exception. The money could not be spent until all of the houses had been bought. You can't buy the houses until the money is spent. The legislation was inartfully crafted. Perhaps there was a purpose in mind. In any event, we are in a grid lock --- a legislative grid lock - because of the requirement that this occur.

Now I make that point because I think serious consideration has got to be made from a state perspective to getting involved in this program for more than simply running to a legislature each time an emergency or an action has to be taken. Legislatures simply are not in session most of the year. They are in session 90 to 120 days in the West. Some of them don't come into session but once every two years and that is not a practical way to get involved in this program. I would suggest that states such as New York and New Jersey that have moved in the direction of establishing a continuing funding mechanism, have probably demonstrated a much better approach to take.

Only four of the 22 states with funds, however, have raised more than 25 percent of the money needed to fund their share of the remedial action and so that's my second point. In those states that have moved toward achieving some sort of funding mechanism, the revenues do not appear to be there in many cases, to deal with the problem. States have, to date, relied upon a credit for work that was done between 1978 and 1980 to meet their cost share requirements, but these credits are running out.

There is under review in my office consideration of eliminating or deferring the 10 percent match requirement for remedial investigations and feasibility studies, which is a policy requirement that was imposed by the previous administrator. That would allow us to move more quickly on remedial investigations and feasibility studies and be responsive to the state's problem of coming up with the match. Obviously, for those states that have entered into agreements providing this 10 percent match there will also have to be some sort of mechanism to reimburse or credit them for future work, but that's just putting off the inevitable because the state contributions for remedial investigations and feasibility studies generally amount to not more than 20 to 40 thousand dollars. The inevitable requirement of paying 10 percent of the actual construction for the sites, which can run as high as $600,000 or more, depending on the remedies that we are looking at, still exists. Indeed in many of the sites I am involved with nationally, states can expect to be drawing down 1, 2, 3, 4 millions dollars or more for a particular remedy. So the shortfalls in state funds are going to be a major constraint on the actions that we can take at what we are estimating to be upwards of 235 of the sites on the National Priority List.

The second delay that I would focus on is the whole problem of off-site disposal. It is, again, an assurance that the states must make before we can make monies available under the fund. That is to say, if the remedy selected requires the removal of the waste from the site and placement elsewhere, the states must assure the availability of an acceptable facility that is in compliance with RCRA and that is also in compliance with any state laws that may exist.

Our current policy is that out-of-state facilities can be made available to satisfy this requirement, but we are finding that responses are being delayed because acceptable facilities cannot be found. This is a particular problem in Missouri. I'm sure this group is not interested in Missouri, but I relate it because Missouri may be just around your corner. There is presently no facility in that state that can accommodate large amounts of soil with high levels of dioxin contamination. In addition, the agency has recently proposed listing dioxin as a RCRA regulated waste and so any facilities in the future that require dioxin disposal will have to be in compliance with that.

Consider the problem of a waste site that is not your classic "drums piled on high or stuffed in the ground" or the classic waste pit, pond or lagoon, but instead, vast quantities of contaminated soil that have to be excavated and carried away to a particular site. At one site alone in Missouri that is on the National Priority List involving roughly 12 homes, we are estimating that we have to remove 8,000 cubic yards of soil. The estimated cost of that remedy ranges from $5 million to $77 million, depending on how you get rid of it. Since there doesn't appear to be any place to take it, given the large volume, the alternative of building a giant cement crypt and essentially putting it in there appears to be the only one available at the present time. Some states have wanted to require the use of in-state disposal facilities to meet this assurance, for three reasons.

First of all, the states are reluctant to accept wastes from other states and I think you ought to be coming to grips with that very quickly. Second, there is a fear that the wastes would end up being concentrated in a few states eventually if out-of-state disposal continues to be permitted. Finally, there are concerns about carrying the waste from one state to another through towns and along interstate highways. If the agency moves to require the use of in-state facilities as opposed to allowing monies to be spent to transport waste out of the state, significant delays in clean-up may occur. But what we are finding is that may be an inevitable course of action because of the hysteria nationally that is building with respect to the disposal of hazardous waste.

The third assurance is that the states assume responsibility for operating and maintaining response actions. Currently, the EPA policy is to pay 90 percent of the O & M costs for six months following a response. There is a feeling that has come out in the OTA Report, which I think Joel will get into, that EPA favors projects with low capital costs and high O & M costs in order to push the major part of the montary burden onto the states. States, obviously, are inclined to favor a remedy with a high capital cost and low O & M costs. The argument goes in that direction. I have to personally take exception to the OTA Report because we simply haven't reached that point. To the extent that we have actions underway at sites, they really have not, with only a few exceptions, involved remedies in which the O & M issue has evolved. While I can understnd the O & M concern, it is not one that has emerged as a real concern in terms of actual problems as yet.

The O & M policy is being evaluated in the agency. One option under consideration is to go well beyond the six month point in time in terms of paying costs to operate and maintain the remedy. The difficulty, however, is that some states by law are prohibited through their constitution or their statutes to commit state funds beyond a limited period of time and so even if we have a specific cut-off period for O & M that is extended beyond the six month point in time, it is all together possible that we will still run into that constitutional impediment.

Now, how can we strengthen the state role? First of all, in terms of the state financing requirement, in my office we have explored a number of ways to deal with this problem and to help states consider various options through, in large part, the assistance of various groups, including Norm Nosenchuck and the ASTSWMO association that he is involved with. The agency will sponsor four workshops in October of 1983 to develop techniques for increasing the purchasing power of state funds. The most promising technique being explored is to capture economies of scale by establishing multi-state and multi-company syndications that aggregate the responsibilities and the requirements for a regional cluster of states so that they can get the best resources out of their dollars. Syndicates could pool, for example, the purchase of clean-up equipment or contract jointly for equipment services or create a fund to distribute grants for clean-up activities. There are also some rather novel ways in which states without hazardous waste funds could develop new revenue sources and this is something that we would explore.

In terms of management, we see three possibilities for improving the program that could lead to smoother relationships with the states and in turn quicker response actions. The cooperative agreement negotiation process between EPA and the states could benefit from arrangements that insure uniformity and a minimal need for special conditions and cooperative agreements, thereby reducing the time for negotiations.

Secondly, and very much related to that is the option under consideration to delegate a fair amount of responsibility to our regional offices to negotiate these cooperative agreements and essentially to sign for the agency. By providing guidance to the regions in a fairly definitive nature as to what would be in the cooperative agreements, we feel that it is possible that a large amount of this can be accelerated and that the need for headquarter's review of this previously centralized program can be taken care of. Finally, we're looking into ways in which we could possibly delegate parts of the program to the states, at least in the emergency removal area.

Now, in the few brief moments I have left, I would make two more observations. It's a two-way street. The Superfund Program has gotten its share of criticism from the national level. Some of that I think, is warranted. Some of it is not. But I also have some concerns about the states.

It is inevitable, and this group here is one of the key groups that has to realize this, that the large amounts of money required to respond to these sites will be needed beginning in 1984, 1985 and 1986. That is when the roughly 100 or more feasibility studies and investigations will have been completed, a remedy will have been identified and the time will arrive for the rubber to hit the road, so to speak. State legislatures have to realize that now, not in 1984 or 85, but right now. The program has had difficulty getting off the ground in the last two years in large part because Congress in enacting the law in 1980 presupposed that the states were ready with checkbooks in hand to come up with a 10 percent match. That has not occurred. It has not even occurred in the ability to come up with the small amounts of money for the feasibility studies. What I'm saying to you is that the bigger problems are very shortly ahead and that you have got to come to grips with that issue in your legislatures very quickly.

I think also that the states have to come to grips with the need for tight management, just as much as I and the regional offices have to do so from a national level. I would suggest that you seriously consider within your states opportunities to avoid delays caused by consecutive actions. For example, we are seeing in Illinois efforts by that state to go out on the street and get through the competitive bidding process while the cooperative agreement or contract is being negotiated or to do some of the other preliminary work that has to occur so that it can fold in right after the money is made available rather than a period of time thereafter.

In this part of the country, you have to recognize in your management structure that weather is a very major factor. I am experiencing nationally delays beyond anyone's imagination because no one has bothered to sit down and

establish a critical path factoring in the weather constraints and the fact that you cannot move on these sites during certain periods of the year. You also have to recognize that water, which is a major problem in the contamination, moves in a cycle, a hydrologic cycle, and that tests taken in May may not be analogous to tests taken in October or December.

I am also finding nationally that turf wars within the states are very apparent. Two, three or sometimes four state agencies fight over who will run the Superfund Program, who will represent the state. Often times, once that turf war is sorted out, the winning state agency has no experience in construction contracting and so totally unacceptable delays are being experienced as we await for the states who have taken the lead to move out, get proposals on the street, get bids and get the work underway. We have had delays of as much as 9 to 10 months from the time a cooperative agreement has been awarded to the time a state has its action underway.

The biggest delay, however, is one that we mutually face and it's going to be the public's unwillingness to accept what we mutually propose to be the remedy unless certain things occur. Let's talk about the public for a moment. When I met with the Director of Natural Resources in Missouri some time ago, he and I talked over lunch and found we shared some common experiences, including involvement in the environmental movement in the 1970's. He indicated that that movement in 1970, and actually through the decade of the 70's, has been largely one, characterized by the cynics, as being associated with the "longhaired weirdos and the little old ladies in white tennis shoes" who to some, lacked credibility. That's not the case today. The movement has become very sophisticated and has now educated housewives and husbands and children who have very little difficulty standing up before a public meeting and raising very hard questions, expressing a high level of awareness of their health and their children's health and the situation that they are living in.

In the context of all this, in particular with hazardous waste, we are fighting the "not in my backyard" syndrome, the NIMBY syndrome, as it's called. So it is essential that as we collectively work together, we do so recognizing that we not only keep the public informed, but involved in every step. We're not going to succeed if that doesn't happen. If I have one criticism of the previous administration's operations of the Superfund Program, it has been an unwillingness to accept that fact. I don't think that exists any longer. I am anticipating that the new leadership will very clearly recognize the need for public involvement and public awareness, and work in that direction. If we don't do that we are facing one of two approaches. One is similar to a recent case in Michigan in which the public went into court and had a judge order the remedy, a remedy which both the state and EPA feel is unsafe. The other situation is where the remedy is selected, and the public, unaccepting of it, moves to stop it in court.

I would end by the question of should Superfund be enlarged or extended. I don't make that decision. I've had it asked of me by six Congressional committees in the last two months. That's a decision that the Congress has to make and this Administration will have to decide what to recommend.

We are estimating that at the present time there is money in the fund to respond to 170 sites on the National Priority List, but that 170 number was derived before we came to experience how much it is actually costing at some of these sites to accomplish a remedy. Norm may get into Love Canal, but I don't think we're going to get out of Love Canal for any less than $20 million and perhaps significantly more.

At Times Beach, Missouri, we spent $33 million simply to buy the town out. We haven't even started dealing with a remedy. We are finding nationally that the problem envisioned by the Superfund Program in terms of pits, ponds, lagoons, buried drums, stacked drums, etc., is only a small subset of the national problem. No one considered the presence of dioxin contaminated soil. Right now we're looking at 205 sites in Missouri. No one considered the problem of contaminated soil with respect to lead throughout the country. No one looked at the problems of asbestos contamination, and no one examined the problems of PCB-contaminated soil sprayed along roadways to get rid of it through midnight dumping. I think as we get more and more into this problem we are going to find that no one considered the magnitude of this program when the law was enacted in 1980.

When I came to this job about a year and half ago, we had a national inventory of 11,000 sites. Today it has just topped 16,000. That does not include sites that will be discovered by the states as they use the money made available under Section 3012 of RCRA to investigate new sites. That does not include the dioxin contamination that we're experiencing nationally. We are just scratching the surface of this program and this problem. 1.6 billion dollars is just scratching the surface. I don't know what direction the Congress and the Administration will go. In my opinion, the debate that emerges on this will be more what should be the federal role versus the state role in this effort. Should we continue with a trust fund effort or should we proceed in some other direction? The tax ends in 1985. The program is progressing at a rate in which the expenditures may, if it accelerates, keep pace with the tax as it is actually being collected. It may ultimately be that the demand will far exceed the supply of money available before that 1985 period ends. It is up, I think, to all of us to be very consciously aware of this problem and to weigh in as you see it necessary to do so.

I thank you for the opportunity to share some of these remarks. I can speak for EPA that we continue to look forward to working with you closely, with your legislatures, with your executive branches in dealing with this problem and while we may scratch and claw at each other from time to time, I think in the end, we share the common denominator purpose of correcting a national problem that has long been unattended.

I'd be happy to take any questions, if you want, at this point.

Norman Nosenchuck:

Yes. It's interesting that we just talked about the state cooperative agreements. Another area that hasn't been mentioned at all in connection with state Superfund programs, concerns state Superfund contracts with EPA taking

the lead and the Corps of Engineers doing the work. One of the major concerns a lot of the states have, for instance, is the fact that under the federal Superfund program EPA staffers are providing training to the Corps of Engineers and these costs are borne by the federal Superfund. My information is that the fund is being used to staff up and train the Corps, whereas under state cooperative agreements, where the state takes the lead for remedial activities, all those expenses come out of the pockets of the states. For instance, under existing policy, correct me if I'm wrong, Bill, when the federal government will participate in cost sharing is after the cooperative agreement is executed, which means that the state has to do all of the site investigation work to rank sites using its own resources. States also use state resources to correct the mostly defective RAMPS, the remedial action master plans that are being developed by EPA contractors. The slowness of those RAMPS being produced in acceptable final form is slowing down the program. In New York state, on April 29, 1982, we forwarded six cooperative agreements for 100 percent federal funding to EPA Region II. We were told that if you submit those agreements by May 1, 1982 they will all be acted on -- at 100% federal funding. On January 20, 1983, one of those cooperative agreements was finally executed for the Olean Well Field Project. We're still waiting on the RAMPS for the other ones. EPA chose deliberately to hold off action on those cooperative agreements that we had submitted for 100% federal funding. That's one of the concerns that we have.

Let me ask another question. We talked about how much money has been spent. How much money has been collected?

William H. Hedeman:

What is the first question?

Norman Nosenchuck:

The first question is this. Why doesn't EPA provide the same funds to the states that they provide to the Corps of Engineers? Why can't you get your consultants to develop quality RAMPS instead of the defective RAMPS? I will give you specifics and I will bring them with me. In connection with these remedial action master plans (RAMPS), isn't it a fact that the cooperative agreement cannot be executed until the RAMP has been finalized because that leaves out the --

William H. Hedeman:

That's right and I would be interested hearing from other states if they are having the same problem with the quality of RAMPS. I had not ever been hit with that frankly, until this morning about 10 minutes ago, and there is a policy that we have that the RAMPS should be established, which is a master plan approach that we will take before we move in terms of obligating any money through a cooperative agreement. It is essentially to get an idea of what your act is going to be before you open the curtain. I don't see that policy changing, but I've also not been of the view that there was a problem

with the quality of them. If there is, I commit to you to try to get into that.

Norman Nosenchuck:

We have written letters and it's very well documented and I think Bob Ogg, if he so chooses to, will attest to this. The other question I have is, how money has been collected under the fund? How much money has been deposited in short term securities? How much interest has been collected and is the interest that's collected on the fund going to be additive to the fund or is that amount of money going to be used to reduce the tax on the chemicals? I always raise this question, so I expect you to have your card on that. But, I think everybody should know this in order to understand how slow the program has been going and the amount of interest that has been collected, which is significant. Previously, and up to this point in time, I submit that there has been a deliberate campaign to slow down the expenditure of that money by slowing up the entire process. The EPA track record speaks for itself.

William H. Hedeman:

The total amount of money that has come into the fund or estimated to come into the fund by the end of this fiscal year, which is about three months is $582 million. I don't have the card of the precise amount as of this date. I had it yesterday for the hearing, but I don't have it with me. Based on appropriations out of that fund, we are projecting that the end of fiscal year '83 that there will be a balance in the trust fund of $350 million. The Administration's budget requests for fiscal year '83 is $310 million. Yesterday, I guess, no, I'm sorry, Wednesday, the House increased that $310 million to $335 million. The Senate appropriation hearings on the EPA's budget were held yesterday afternoon so I am not in a position to say what the Senate may do, but the bottom line to the first part of the question is that the appropriations appear to be keeping relatively with the pace of the money coming into the fund. There is this perception that $1.6 billion is sitting out there. It is not. It is a cumulative amount that is over a five year period based on the tax on the industry and to repeat what I said, we expect that that will have generated revenues of $582 million by that time. Of that $582 million, interest on the monies that are in the account at the present time, if I can quickly add this, would be about 40 -- about 50 million dollars. So that money is available in the fund and is appropriated by the Congress. So the interest money that is collected on the money that is sitting in the fund until it is made available is being used. Likewise, as fines and cost recoveries from sites where we have taken action are collected they are going back into the fund so that the fund can essentially be a revolving one. There has not been that much cost recovery to date, because you cannot bring a cost recovery action until you've completed the job and spent the money. We are just beginning to complete a lot of these projects so there will be a fair amount of cost recovery effort in the next fiscal year which will further enhance the fund.

Norman Nosenchuck:

Is the interest additive to the fund or is that used to reduce the tax on the chemicals?

William H. Hedeman:

It is additive to the fund.

Representative Teresalee Bertinuson:

As much as I hate to do this, I think if we're going to come close to meeting our schedule, we should go on to our next speaker. Thank you very much.

Our next speaker will be Joel Hirschhorn. He was Project Director of the Congressional Office of Technology Assessment's recently completed three year study of the Federal Hazardous Waste Program. Mr. Hirschhorn has brought some copies of the summary for you. Those little purple books, I believe, that are available at the registration table. Mr. Hirschhorn.

Joel Hirschhorn:

Thank you. We actually put out three products. One is a full 400 page report and I believe that if any of you want to stay close to the hazardous waste issue, that you couldn't find a much better source document for tremendous amounts of information as well as analysis. The summary booklet is available free from OTA. The full document is available through the GPO for $8.50, but if you're government, you can probably get it for nothing directly from OTA and there's also a two pager out, a very brief overview. I might note that this three year study, that we did at the request of Congress, was initiated in early '80 -- requested in early '80. We began to get critical of the federal hazardous waste program under the Carter regime. We are a nonpartisan analytical support agency for Congress. Nothing that we do is partisan. We come into this, I want to emphasize, without prejudice and although we sound terribly negative, that negativity is based on analytical findings rather than any predisposition to be critical. I do believe that our three year study is the most comprehensive study of the hazardous waste problem done outside of EPA. I might note, our work is continuing. It is not over. We'll have a report coming out relatively shortly on a study on Love Canal. We'll have another study focused more on Superfund.

4ust in general then, to give you the bottom line of this 400 page document, in a sense: the hazardous waste problem facing the nation, and I would agree wholeheartedly with Bill, is far worse than most people ever imagined and even yet imagine today. The scope, the intensity of the hazardous waste problem in the United States will be realized over time, I believe, to be much more severe than currently understood.

The second part of the general tone of the study is that the programs and the actions taken to date to deal with the hazardous waste problem in the country have been unfortunately inadequate and ineffective to a large degree, but let

me also quickly say that we are further ahead of the game than we were five years ago and ten years ago. There's no doubt that through the enactment of RCRA and CERCLA and through the actions at EPA we are doing better than we would be without those programs. The last thing I would say about the study and the OTA approach, is that while we say the problem is terrible, we say the actions taken to date are not enough, not effective enough, we do hold up solutions. We try to present options and alternatives for Congress. That's our job, particularly taking a long range point of view. Now my remarks today will be on the Superfund, but again there's a lot in this study and we have a lot of views and comments about many aspects of the federal program.

With regard to Superfund, I'd like to lead off with what, I think is the most important finding of our study, and certainly the most important policy option or proposal that we have made to Congress. Unfortunately I never hear EPA talking too directly about this, but it has to do, to pick up again on Bill's theme, with financing, economics, funding. One of our proposals was to change the financing base of Superfund, to move it away from a tax on feedstocks and create a national federal tax on hazardous waste itself, putting the tax on generators. Generators are the people who must make the critical decisions as to whether to reduce the generation of hazardous waste in the first place at the source, whether to use land disposal or treatment and destruction approaches. We think that, again agreeing with Bill, the scope of the hazardous waste uncontrolled site problem is so great that we have to raise more money for Superfund. We believe that Superfund has to be greatly expanded.

So the question is, how do you expand the Superfund? We have an estimate in our study based on 15,000 then known sites that it would take 10 to 40 billion dollars to deal with the problem and that's, believe me, a very conservative estimate. It will probably wind up to be much greater than that. So you have to raise more money. We think you have to expand the Superfund. We think that putting a tax on hazardous waste can do that, but there's another important point to make and this is not stressed enough. You want to do more than raise more funds for Superfund. You want to do something in a way to affect current management decisions in industry. You want to move people in industry in two directions. You want to move them toward waste reduction at the source, recycling, recovery, whatever it takes; process modification; product substitutions; source separation. You want to move industry toward waste reduction. There is no social benefit in producing hazardous waste and the other thing you want to do is to move industry away from land disposal, all forms of land disposal, towards permanent treatment, destruction, and detoxification techniques. The point is, unless we start to change the whole national structure, we will continue to produce more uncontrolled sites. As we watch the number of uncontrolled sites grow, I can give you all kinds of reasons why current policies, current regulations, virtually assure the creation of more uncontrolled sites. You have to get ahead of this. You have to start changing current management practices, decisions. You have to do something about regulations.

We think that a tax on waste generators may be useful; a structured tax by the way, and I want to emphasize this, a tax which is biased against land

disposal. A tax which is biased against the most hazardous waste. Not all hazardous wastes are equally hazardous. Unfortunately, EPA has not implemented a degree of hazard system, but there are various levels and types of hazards. So we have proposed a structured tax on waste placed on the generators to move them toward waste reduction, move them away from land disposal. A few states have done this. Most states cannot do it to an extent to raise enough money or have high enough tax rates to influence management decisions. The political pressures at the state level are immense. Large corporations who want to fight this will threaten state governments and therefore keep the tax rates too low. I only know of one state that has a high enough tax on generators to influence current management decisions and interestingly enough, the word that we're getting in that state in about one year of implementation of that tax, has been about a 1/3 reduction in hazardous waste generation already in that state. It's a pretty incredible result. There have been no administrative problems either. I think that it's possible to shift to this pace of financing Superfund.

I want to tell you that bills based on our proposal have already been introduced. In the Senate it is S. 860. In the house it's H.R. 2503 and if you care about getting ahead of the problem, not only raising more money for Superfund, but influencing the structure, and current decisions so that we don't keep producing more Superfund sites, you should seriously consider and examine these bills based on our proposal. By the way, we have also proposed that the states get a cut of the money directly, right off the top and if you examine these bills, they would generate more funds directly to the states than any other proposal I have seen, including the ideas that Bill's group have come up with for helping the financing schemes in the states. I have examined that and I do not believe that would generate any substantial or significant amounts of money. What we're talking about here would pump considerably more money into the states and the states need the money.

We get a lot of questions and some criticism about this concept of a tax on hazardous waste generators. I don't have enough time here today to go into it all. If you are interested, we can -- OTA can provide you with testimony that we have given several times in the last month or so, which goes into answering those criticisms and concerns. We think the technical, the data base, exists to implement the system. We think the action should be taken soon to give industry advanced warning so that they can take appropriate actions. We think it's possible to create federal assistance in R & D and for capital investment so that we can build the kinds of facilities we need and also view this tax on generators as a way to integrate CERCLA (Superfund) and RCRA. That has not taken place yet today. They are too often considered as separate programs when they really should be considered as just two facets of one attempt to deal with the hazardous waste problem.

I won't say anything more about this tax. I hope some of you will pursue examining that proposal and provide encouragement. When people ask me what would be the one action, the most important action that we could conceive of after studying this problem for three years, although we have other policy options and actions, understanding that you have to deal with the economics of this is extremely important. It's probably the highest priority item I can

think of and the most potent way of effecting better remedies. I will move on to a few other findings of the study concerning Superfund.

We have been critical of the way EPA selects sites and evaluates sites for the National Priority List. We are still critical of that. I think the analytical procedures for evaluating and analyzing uncontrolled sites need improvement themselves so that you can get a better framework for ranking sites and deciding where to put your money. We constantly hear reports about terrible uncontrolled sites that do not make it onto the NPL and if you're not on the NPL you can't even qualify to get funding and of course, and I agree with Bill, there's inadequate funding, but still you have to deal with selection and that is a problem.

I'd like to move on though to what is probably, from a technical point of view, the most unresolved and important issue for Superfund. Many of you have heard this. It's a very simple question. How clean is clean? Maybe you want to ask it the other way. How dirty is dirty? But, any way you want to frame the question it's fundamental to dealing with the uncontrolled site problem that you must have a way, you must have standards to determine how far you have to go for a clean up. I believe that Congress directed EPA through the requirement to create a National Contingency Plan to deal with this issue of how clean is clean. We do not find the EPA's answer to this mandate acceptable at all.

In fact, I would say that right now there is no meaningful way of determining how clean is clean. It is often impossible to evaluate and select a clean-up technology if you don't know how far you have to go. You have to think about national standards. You can't do it on a site specific basis, a case-by-case basis, an ad hoc basis. We know technically that of course there are site-specific aspects to uncontrolled sites. Anyone knows that. Still I say there is a need for national uniform standards to determine the extent of clean-up and again I would say, and I think Bill has said this publicly recently, because of the lack of resolution of the how clean is clean question, we also find an absence in EPA of an adequate framework to evaluate and analyze alternative clean-up technologies. I'm not talking about the immediate removal situation or the emergency situation. I'm talking about the final remedy for an uncontrolled site because the concern here should be that we're possibly taking actions which are not effective in the long term, that really do not remove the problem, that are stopgap bandaid approaches to dealing with uncontrolled sites. I submit to you that although EPA through the National Contingency Plan must consider various alternatives in a cost effectiveness framework, that the type of remedies that are being evaluated and the type of remedies that are being selected, by and large, are not permanent remedies. There is not enough emphasis on treatment, destruction, detoxification of the waste at these uncontrolled sites. Most solutions are what we call containment solutions. You leave the waste there. You build walls around it. You're doing things like that. That is, I think, going to be increasingly realized by the public to be an unacceptable approach. The numbers become staggering. I have this view in my head, sort of a science fiction view, of the United States covered with toxic zones, walls around many areas. This just can't go on like this. You have to find permanent

solutions. You need a framework to evaluate various alternatives. You need an economic framework. You need a technical framework. You have to deal with how clean is clean. Really there is no more important issue to pursue than this and the corollary issue of how to evaluate and select clean-up technologies.

Going onto another point, I think we have also been very critical of EPA and are very sympathetic to the plight of the states because the technical complexity of dealing with hazardous waste is enormous. I have an engineering background. Those of us who have technical backgrounds and have worked in this area are the first ones to reveal to policy makers and the citizens that the technical complexity of finding solutions for hazardous waste problems is immense and therefore, I say to you that one of the greatest needs is to provide more technical resources to the states. The states do not have, forgetting about inadequate funding and financing, the states do not have the technical resources to deal with hazardous waste problems. They cannot afford even to hire the very few hydrogeologists in the country. There is a severe problem of manpower, a severe problem of inadequate data, a severe problem of inadequate R & D on clean-up technologies.

We at OTA hear from many inventors and entrepreneurs around the country who want to invest money, who have already invented approaches, new clean-up approaches. The problem of dealing with large amounts of contaminated soil is an immense problem. I can only offer to Bill that more money should be put in right now to dealing with that problem. I think there are thermal, chemical and biological ways to decontaminate, for example, dioxin-contaminated soil in large amounts, not merely to put walls around it or to create huge burial sites. But, we need to deal with the technical resource problem. We need to deal with R & D and innovation. We have to apply high-tech solutions to hazardous waste problems. It's a huge market.

There are people in industry in the private sector who realize that cleaning up uncontrolled sites in the United States for many decades to come will be big business. There are interests out there who are willing to go after that business. But one thing stands in their way often and that is government policy. There is no greater disincentive for innovation and creativity in the application of high-tech solutions than poor government policies that stand in the way. I think one of the aspects of the federal Superfund program right now is that it is not encouraging the expansion of the technical base for dealing with these problems and something has to be done there, both by EPA and by Congress. I want you to know, by the way, we're just as critical of legislation. Our job is to tell our clients, the House and Senate, that legislation is defective if it is, that it has to be changed or that we need new legislation.

I would just like to make a general comment about EPA. A federal executive agency that has a Congressional mandate to deal with a problem is supposed to come back to Congress if they don't have enough money and ask for more money. But what we've seen of course, for years, is EPA wanting less money. It's Congress that's been trying to force the money on EPA. EPA does not come to

Congress asking for more money. EPA does not come to Congress asking for strengthening of the laws and closing of the loopholes.

These initiatives are being taken in the Congress, but Congress can't do the job entirely by itself. It needs the cooperation, of course, of the appropriate federal executive agency. So, there's no doubt, if you again look at the OTA report, that we recommend legislative actions and I'm sure there will be many legislative actions in this area. In addition, I would suggest to you that the states have to take a very active role in Washington at the federal level in presenting their case to the Congress, to the government, and I don't think we hear enough from the states. Although we've heard a lot from Norm and we've cherished our relationship working with Norm and other people at the states, I again tell you as somebody sort of standing in the middle of all of this, that I think the states have to be more of an activist in this area of hazardous waste, at all levels of state government, executive, legislative, regulatory agencies. They have to get more involved. They have to tell Congress exactly what their problems are. We don't hear enough from the states.

So I'll end my brief comments at this point. As I say, the study deals with a lot of issues related to all aspects of hazardous waste. I'll be happy to help you get a copy of the report if you need it. You can get copies of our testimony. As I say, our work is continuing and thank you.

Representative Teresalee Bertinuson:

As I said before, we will take questions when the full panel is over. To tell us what's going on in the states our next speaker will be Norm Nosenchuck who is Director of New York State Division of Solid Waste. Mr. Nosenchuck is Chairman of the Association of State and Territorial Waste Management Officials Superfund Task Force. He is responsible for both the nonhazardous and hazardous waste program and for all remedial actions under State Superfund Programs for the clean-up of inactive hazardous waste sites. Norm.

Norman Nosenchuck:

Thank you and good morning. I am going to take one part of my remarks out of context because I know Bill Hedeman has to catch a plane and I didn't have a chance to ask him this other question. Bill touched on this problem and Joel touched on this problem: the whole question of operation and maintenance costs.

Section 103C3 of CERCLA requires that the states provide for postremedial operation and maintenance and many states are experiencing a great deal of difficulty providing for these expenditures. One of the things we recommend and we've made Bill aware of this on January 21, 1983 when we met with him and his people, CERCLA should be amended to allow states to use a portion of the Superfund monies on a site specific basis for investment purposes by the states to cover future operation and maintenance costs. Also, the postremedial period of operation and maintenance should be defined more precisely. At present, state obligations could be construed to last

indefinitely and yet Section 107K1 of CERCLA, according to my interpretation, permits an industry to buy out of that responsibility and give it to the trust fund. This section states, in part, "the liability established by this Section or any other law for the owner or operator of a hazardous waste disposal facility which has received a permit under Subtitle C, The Solid Waste Disposal Act, shall be transferred to and assumed by the postclosure liability fund established by this particular portion of the Act when such facility and the owner and operator thereof has complied with the requirements of Subtitle C of the Solid Waste Disposal Act and regulations issued thereunder, which may affect the performance of such facility after closure and such facility has been closed in accordance with such regulations under the conditions of such permit and such facility in the surrounding area have been monitored as required by such regulations and permit conditions for a period not to exceed five years after closure to demonstrate that there is no substantial likelihood that any migration off site or release from confinement of any hazardous substance where other risk to public health or welfare will occur. Such transfer of liability shall be effective 90 days after the owner or operator of such facility notifies the Administrator, the Environmental Protection Agency and the state where it has an authorized program, ... that the conditions imposed by Subsection have been satisfied." It is my interpretation that where you have private clean-up the industry will start to invoke this section 107K1 and turn over operation and maintenance to the federal government under this post closure liablity fund established under CERCLA. Why can't the states do the same thing?

That's an observation that's shared not only by me, but some other people in different states and that's a major concern to us.

"Has Superfund implementation been unnecessarily complex and burdensome?" Clearly, the answer is "Yes." I submit, as I said earlier, that Superfund is being administered under what I call a band aid approach and this was indicative of that philosophy. Hopefully, this approach will change in the future, but up to this point in time, it's been my impression that the EPA objective was to do the least amount of work possible, what I call the band aid approach, in as many Congressional districts as possible. That was the approach as I understood it.

As a matter of fact, last October we had the previous assistant administrator for the RCRA and CERCLA Programs at our annual ASTSWMO meeting in Utah and we talked about section 3012 of RCRA. It was the states that fought for the hazardous waste site inventory funding, for the $10,000,000 section 3012 money and the Congress made $20,000,000 available in 1980 and EPA deliberately chose not to ask for 20 cents or 2 cents or anything for section 3012 work. Why? Because as that EPA individual told the 30 states represented at our annual meeting: "As far as we -EPA- are concerned, we know about all of the hazardous waste sites that there are. There are no more sites out there. I'm going to do everything possible not to give the states a dime for 3012 activities". This was in front of about 30 state representatives. I'm telling you, that was the EPA attitude. I hope it changes, Bill.

"Could the process be streamlined?" I talked earlier to Bill and at this meeting about the RAMPS, the Remedial Action Master Plans. The federal procedure clearly requires the development of these RAMPS by the federal contractors and the feds have, I think, three contractors around the country doing this work. A fair amount of the work has been subcontracted out to firms that have had no experience in my judgment, whatsoever, in this area, if my review and my staff's review of some of these documents indicates what we're getting is representative of what's happening around the country. Some of the poorest documents I've ever seen.

The states, in effect, are providing consulting engineering services to revise these draft RAMPS to the point where they are acceptable so we can go ahead and develop the state cooperative agreement which is entered into when the state takes the lead for the remedial activity. The other item, of course, is the State Superfund Contract, when the EPA takes the lead. The federal government doesn't give the states a dime for this type of work. Fortunately, in New York State our state legislature provided funds to us for this purpose last July when they passed our State Superfund Act. In New York we are gearing up to handle the program. On April 29, 1982, as I said earlier, we submitted to EPA Region 2, six cooperative agreements for feasibility studies that were supposed to be 100 percent federally funded and, as I said earlier, to date only one was executed on January 20, 1983. Deliberate hold back. The Region tells us the agreements went to EPA Washington Headquarters. Washington tells us they never got them. This ping-pong game has got to stop. I am very pleased to hear that these responsibilities are now going to be given to the regional administrators. I know Bill had to leave. I'm sorry that he had to because I wanted him to hear this.

These are some of the problems that are symptomatic of the program. There has not been much guidance given to the states, or to the EPA regions for that matter, in connection with the program. The guidance has been changing and if some of the people from the EPA regional offices, want to tell you privately if what I'm saying is correct or incorrect, ask them directly. But the fact of the matter is, it has been changing. We have asked EPA for a compendium of federal Superfund information to be given to each one of the states so that the states would have all of the information that is available. When we made this request on January 21, 1983, at our meeting with EPA staff in Washington, D.C. one of these individuals, and it wasn't Bill -- he wasn't there, one of the EPA staff members who was there said: "It's going to cost us too much money to distribute this information to the states." That's what we were told. We said give us one copy and our people in ASTSWMO will photocopy and distribute that to all the states. I couldn't believe the response I got from EPA.

There are too many people in Washington, in this program, who don't have experience, any knowledge in connection with what I call the real world: what the states are facing along the firing lines and what the local government officials are faced with. We are concerned about that. There are too many people involved at EPA who don't understand the real world problems, and that's most unfortunate.

One of the things that should be clearly done, as we mentioned earlier, is to change the EPA policy that requires 10 percent state match funds for the remedial investigations/feasibility studies -- the initial work that's done by the states under the program. As you heard Bill say, EPA is considering changing that policy. We've been talking about that to him for some time now because that is a real concern that is holding up Superfund activities in many states around the country. That's a tremendous concern. We've also requested that CERCLA be amended to eliminate that portion of Section 114, which limits the ability of individual states to establish their own Superfund based upon taxes levied upon appropriate industries, the federal pre-emption provision.

Section 104C3 of CERCLA requires a minimum 50 percent state match for sites formerly owned and/or operated by states or their political subdivisions. That must be amended. The rationale in the law for this distinction is flawed and serves to financially restrict the state's ability to participate in the cleanup of such sites. The 10 percent state match requirement should apply, we believe, equally to all sites and in the interim, by policy, EPA should not require more than a 50 percent match for any such site. EPA can do this by policy right now. EPA has had under consideration anywhere from 100 percent that the state will pay for the cost of the cleanup at a publicly owned site to as little as 50 percent because CERCLA says "at least 50 percent." They've been messing around with a matrix that provides for maybe a 70 percent state share and a 30 percent federal share. We asked for a copy of that matrix on January 21, 1983. My golly, I'm still waiting for this document.

These are some of the concerns that we have. The section of CERCLA which permits the states to credit only direct out-of-pocket expenditures between January 1, 1978 and December 11, 1980 toward the 10 percent state match should be amended. This crediting provision is currently site-specific. A crediting system should be developed whereby the states can claim all expenditures resulting from in-kind services, state emergency response actions and nonsite specific program activities, such as participation in the implementation of the National Contingency Plan. All of the work the state does right now in developing the information for the sites to be ranked in the NCP comes out of the state resources. The state has to put out that money up front. In some cases, it can cost 30, 40, 50 and 60 plus thousands of dollars to do all of the investigatory work in connection with the site. All of these expenditures should be credited as part of the state match requirements.

We also have concerns in connection with listing those 419 sites on the NPL. Some of these sites were listed unilaterally by EPA, without state concurrence. In our state, for instance, we have a site in western New York called the Hooker Hyde Park landfill, which already was in federal court. The federal judge had resolved the situation, an agreement had been reached. The work is being done under a Federal Court Order and yet EPA went ahead and listed the site on the NPL. Why they did it, I don't know. The work is going on. I'm sort of concerned about sites like that being listed where clearly there's not going to be any enforcement action under CERCLA. Was the site listed so that EPA could draw down money from CERCLA for its expenses while denying CERCLA money to the state?

"What actions could a state take to shorten the time involved to obtain the CERCLA funds and achieve site cleanup?" One of the things that we do in New York, that I recommend you all should consider, is to prequalify all of your engineering consultants. Put out your request for qualifications, update it at least annually, develop your short list and work from that. That would help greatly as far as that's concerned. Also, I would suggest that you get your state legislators to provide the money to hire the people necessary to do the work, because you're not going to get it from the feds. It's catch 22. You should get people involved in the Superfund program who are knowledgeable. We are talking about people who should understand procurement, remedial design, contract administration and remedial construction. You need experienced people in the program. Don't do what the feds did and put in inexperienced people. Get your best people in the program and you'll move ahead. Provide the program with some resources.

"Should Superfund be enlarged and extended?" Clearly, yes. Again, it's up to the American people and the Congress who we depend upon, not EPA. EPA's track record speaks for itself. It's been dismal. It's most unfortunate. The problem is great. We have no idea right now of the magnitude of the problem. The way the program is dragging right now, with the September 30, 1985 sunset provision, I'm concerned. We need a lot more money for this program beyond the $1.6 billion dollar Superfund. I choke up when I say 1.6 billion dollars Superfund. That's not a Superfund. It really is unfortunate that a name like Superfund is used for a five-year 1.6 billion dollar program. Anyway, 1.6 billion dollars is certainly not enough money to do the job. Cleaning up the problems of the past, and that's what Superfund is addressing, is going to be expensive. The cost will be great. How great the cost will be, we still don't know. Love Canal in 1978 brought the hazardous waste problem to the forefront of the American consciousness. As a nation we react to a crisis. We have an environmental crisis facing us now. We don't know the magnitude of the crisis. CERCLA should be expanded. It should be extended. The federal government should provide for their pro-rata share of operation and maintenance costs under CERCLA.

"Is the state share requirement hampering Superfund implementation?" Clearly, "Yes," and I believe that there should be a state share. I do not believe the federal government should come up with all the money to pay for these activities because otherwise the state wouldn't address its own particular concerns on a particular project. The state should put up some money. They should provide resources and they should get involved in the program to make sure whatever is done meets the objectives of that particular state. The question of how clean is clean, as Joel brought up, is a serious question not yet addressed. It appears to me, based on past performance, EPA might be using several standards. One standard where industry does the cleanup, one where the cleanup is done under a cooperative agreement and perhaps a third standard when EPA takes the lead with a Corps of Engineers cleanup. I don't see the equity there. The state's role and responsibility in the Superfund Program is considerable. I do believe and I do encourage all the states to get involved in the federal Superfund Program. Not too long ago, I got a letter from an EPA individual that said they objected to our policy in New York of wanting to take the lead on all projects. They wanted part of the

action. This was most interesting -- especially since EPA has a policy which says they want the states to take the lead role in the program when possible.

"What actions can EPA or the States take to enable maximum state participation in the Superfund Program?" Let's bring decision making down to the EPA regional offices. Let's stop the ping-ponging between the regional offices and the EPA Washington, D.C. headquarters office. I submit that's been deliberate in the past and I hope this procedure changes. Another important consideration to improve the federal Superfund program is to eliminate the 10 percent state match requirement for the feasibility studies. Give money to the states up front to do the work in connection with bringing the RAMPS up to speed. Give states money for doing whatever work is necessary to bring a site onto the National Priority List. That's absolutely necessary.

Let me read just a couple of items from the Superfund brochure the feds put out in December 1982, when they sent out the National Priority List. "The law requires that, wherever possible, the remedy selected should avoid the costly step of excavating hazardous wastes and transporting them off the site for disposal elsewhere. The benefits to be derived from continued work at a remedial action site, must be weighed against the benefits of working at other sites in the nation" -- what I call the bandaid approach. "A project could be delayed or terminated to allow funds to be shifted where they are most needed." This substantiates what I said before: do the least amount of work necessary in as many Congressional districts as possible. The intent of these conditions, and the other ones here, is "to derive the maximum benefit from Superfund for the nation as a whole." That's a joke.

Representative Teresalee Bertinuson:

Thank you, Norm. The last speaker on this panel is Linda Greer. Linda is a staff scientist with the Environmental Defense Fund and she's worked on hazardous waste issues there for a year and a half. She holds a Masters Degree in Environmental Science and Engineering from the University of North Carolina at Chapel Hill and a Bachelors Degree in Biology from Tufts. Previous to working at EDF, Linda worked as an Air Pollution Engineer and an Aquatic Pollution Biologist. Linda.

Linda Greer:

Good morning. I'm a scientist with the Toxic Chemicals Program of the Environmental Defense Fund. The Environmental Defense Fund's Program is committed to minimizing or eliminating people's involuntary exposure to toxic chemicals and our focus for the past several years has been mostly on hazardous waste. Although many of you probably haven't heard of us, you've heard of a lot of the things we've done. Under Superfund we've sued the Environmental Protection Agency over the National Contingency Plan because we felt it was inadequate and did not meet the requirements of the law. We've also sued them to set up the health registry which they're supposed to set up with the Department of Health and Human Services. In addition, we take either the credit or the blame, whichever you choose, for releasing the first set of documents on the dioxin situation in Missouri.

Under RCRA we sued about the hazardous waste landfill regulations because we feel that they are inadequate. We were the people who brought up liquids in landfills last year. We've opposed the deregulation of existing hazardous waste incinerators, which was successful, and we're working on the RCRA reauthorization bill in the House and later in the Senate to try to improve on the legislative level some of the problems we've been seeing with EPA regulations on the regulatory level.

For a long time we've considered it one of this decade's greatest ironies that the Gorsuch-Burford administration took such great pleasure in their Superfund Program and pointed to it as their program of highest priority. Our opinion, which was probably shared by a lot of you, was that the program was proceeding terribly slowly throughout her administration and that the slownes was due to a lack of commitment to spend Superfund money to clean up sites. Her administration was committed to not continuing the Superfund Program when it expired and this commitment along with the demanding technical and legal aspects of running the program kept things at a snail's pace.

What progress can we point to in the Superfund? Well, very little. Mr. Hedeman discussed the emergency actions which have been taken by the agency. One must keep in mind that if EPA were working systematically and more quickly, we wouldn't be taking these expensive emergency actions and we would be doing systematic long-term cleanups which are permanent. Emergency actions are costly. They're not preventive. They are often taken after people have been exposed and they are, of course, not the ultimate solution. We look at the number of remedial investigations and feasibility studies that the agency has undertaken, not emergency actions, as the best indicator of progress in the program because these studies are required before any meaningful cleanup can be done at the site.

Our records show that 22 remedial investigations have been initiated. This rate of accomplishment is not something the agency can be proud of. These numbers don't comport with the agency's assertions that the Superfund Program is a success story and the irony is, as we've discussed before, that the problem doesn't appear to be money. My figures were a little bit older than Bill's. Our numbers show the Superfund program has collected $576,000,000. They've spent only $126,000,000 and they collect money at the rate of $26,000,000 a month and this money is just not being spent.

Furthermore, and this is something which has been discussed this morning, the prospect for improved performance in the program looks quite dim unless radical changes in agenda and finances are made by the new Administrator. EPA's fiscal year '84 budget proposal will address only 126 sites of the 412 sites by the end of September 1984. That's counting 31 in '82, 40 in '83 and 55 in '84. This is based on EPA's budget submission to Congress. This number is less than half of 292 sites which EPA estimates will have to be cleaned up with Superfund funds because there will not be any responsible parties.

The goals for the enforcement program at EPA are also embarassingly low. For example, the proposed FY84 budget provides for the filing of 10 new cases to force the cleanup of dump sites. That's 10 cases. Existing enforcement

resources cannot support these minimum goals which have been established. For example, according to EPA's previous Associate Administrator and General Counsel, Robert Perry, at least 141 additional work years are needed right now to meet existing FY83 goals. A January 1983 memo from the then Associate Enforcement Counsel for Waste, Ed Curran to Michael Brown, the Enforcement Counsel, states the preparation of new cases, administrative orders and the enforcement of existing decrees and orders had been given low priority this year as a result of the enforcement resource shortfall.

What can we do to improve Superfund? I have very few new ideas from the ones you've heard this morning. It's interesting to me that EDF is so much in the mainstream right now in what we think ought to be done. We worry about that sometimes, and wonder if we should be a little bit more far out, but I think people are just so frustrated with the program that a very high level of concern is starting to be considered mainstream.

Action has to be taken in three areas. First, accelerate the cleanup of priority sites. Second, improve the quality of Superfund actions and third, expand the existing program. In addition, we must take further preventive action to keep new Superfund sites from occurring. Let me make some specific suggestions under each of the areas which we believe would straighten out the program and since several of these have been mentioned this morning, I will be brief.

Accelerate the program. In order to accelerate cleanup, EPA can do three things. First of all, establish a clear policy that federally funded work can proceed at least through remedial investigations and feasibility studies and perhaps remedy selection without slowing for enforcement activities. The previous Administrator, as you know, favored pursuing enforcement action to minimize the expenditure of funds. This introduced delays because the investigative work could not be done while the possibility of an enforced or a negotiated settlement was pursued. This policy makes little sense. The information the agency acquires during these stages would assist them in the enforcement process. The cost of this work could be recovered in an enforcement action anyway and the entire project will have been delayed if the enforcement did not succeed.

The second thing they can do, and this is something that's been discussed at great length, is reverse the policy decision to extend state cost sharing requirements for the investigative and feasibility studies. Current EPA policy requires that the states share in the costs of all four phases of site work, at a rate of 10 to 50 percent. This decision was also made to extend Superfund as far as possible. It has resulted in unacceptable delays in even commencing work at sites while the states debate how to find the money to participate. Obtaining state commitments before any investigation has been done has been complicated by the absence of information EPA has on the site, the cleanup method that will be needed to be employed, and the costs. We thus believe that a reversal of this policy will move the program more quickly.

Lastly, is increase the money and staffing of the program at headquarters and simply put -- EPA should just put their money where their mouth is.

To improve the quality of Superfund actions, two main changes must be undertaken in the National Contingency Plan. First, EPA must set a standard for cleanups. That's the how clean is clean issue. We believe they should use existing EPA standards, guidance and criteria for determining the level of cleanup. Secondly, they should improve the public participation requirements. Despite the acknowledged importance of citizen involvement, EPA has, in actuality, done very little to make such involvement an accepted part of the Superfund Program. The issue went from being called public participation to community relations, a phenomenon which was documented this fall in an EDF presentation at the HMCRI Conference. The issue of public participation is handled completely inadequately in the National Contingency Plan, where EPA personnel are given the following advice: "Keep the local community informed to the extent possible." That's the guidance provided in the National Contingency Plan.

The third area in which to improve the Superfund program is to expand the program. EDF believes that the best way to do this would be for EPA to perform remedial investigations and feasibility studies at all 416 national priority list sites. This will make a major contribution to the objectives of Superfund. Better information will be available to EPA to pursue enforcement actions and to project program costs. The existence of the information on problems and the cost of remedies will help states to plan to make their shares available, and importantly, even in the absence of federal construction funds, the detailed information on the problem and the alternative solutions may create sufficient pressure on private parties and others to do the necessary work.

Second, they should step up initial investigatory work on the ERRIS list, the inventory of 15,000 sites. I'd like to note that the money that was recently made available, the $10,000,000 under Section 3012 of RCRA, is really nothing more than a drop in the bucket. It amounts to no more than $600 per site. As most of you know, you can't even run a full sample analysis for $600 on a single sample.

And lastly, we feel strongly that EPA should set up the required health registry with the Department of Health and Human Services. We know so very little about the health effects caused by dump sites and there's a very large amount of health concern in this country about it. The health registry is a necessary first step to attain the information so badly needed on this important subject.

Lastly, and perhaps most importantly to EDF, states can help the nation's Superfund program by stepping up their efforts on prevention. By this I'm referring to tightening the RCRA regulations which govern our current management of hazardous waste. These laws, although long and complex, have numerous significant loopholes which are causing Superfund sites to continue to be created even today. I looked at the list of Massachusetts Superfund sites for this talk to decide which of the hazardous waste management practices, which led to these sites, could happen today legally under RCRA, and I have a couple of examples.

The Charles George land reclamation trust landfill was a municipal landfill which accepted hazardous waste between 1973 and 1975. Groundwater contamination occurred from this practice. Could this happen today? Yes, in most states, because the hazardous waste could have been produced by small generators. Generators of less than a ton a month are not required at the federal level to dispose of this waste in a hazardous waste facility and very commonly it goes to municipal waste landfills.

The New Bedford Harbor sites were contaminated with PCBs discharged, in part, from the municipal waste water treatment system. Can municipal waste water treatment systems still accept hazardous waste? Yes, because RCRA contains a domestic sewage system exemption, which states that any waste sent to a domestic sewage treatment works is exempt from the hazardous waste system, even if it is hazardous.

The Nyanza chemical waste dump was contaminated by textile dying wastes. These wastes are not listed today as hazardous. They are handled under the RCRA system only as characteristic wastes. In fact, not a single hazardous waste stream has been listed by EPA since the original acknowledged incomplete first list. Several months ago EPA finally proposed listing the chemical dioxin and that was only after the incredible amount of attention focused on that chemical by the events in the state of Missouri.

Many wastes which pose a threat to human health and the environment are not covered in the RCRA system today and are likely to cause Superfund problems in the future. It is constructive to think more closely about the interrelationship of the RCRA and the Superfund Programs than most people currently do. I urge all of you to take a hard look at your state RCRA laws, and close the loopholes which exist at the federal level, making your laws as tight as necessary to protect human health and the environment and to keep new Superfund sites from happening. Prevention through RCRA is a cost effective approach, vastly superior to any cleanups that can be provided under the best of Superfund programs.

Representative Teresalee Bertinuson:

Thank you, Linda. We will take just a few questions now. We're running behind, but maybe we'll go to 11 o'clock and we will take questions just from the floor. Why don't you direct your questions to the panelists and I think we'll pick it up if the panelists stay in their seats.

Question from Audience:

Norm, you talk about the states getting more responsibility in the Superfund and everybody knows that New York State is highly capable. How do you feel about the other states in terms of their capabilities and how can you, as a state with one of the leading programs, find time to help them out?

Norman Nosenchuck:

Well, I'll tell you. It's very difficult to find the time because we are so busy. Other things are happening and as Bill Hedeman pointed out, because of weather constraints most of the remedial activity is taking place in good weather. The only time we have to share our expertise with other states, I think would probably be sometime in the dead of winter or something like that. I'm serious. The legislature in New York State has given us the ability to put into place a program to clean up inactive hazardous waste sites. The legislature has also provided us with funds just this past March through new environmental regulatory fee legislation, to hire additonal people for our hazardous waste management program. We will be putting on additional staff. There is a need to share expertise between the states. No question about it. The best mechanism for doing this sharing of expertise in my mind, is through the Association of State and Territorial Solid Waste Management Officials. That's where the reservoir of ability, information and talent is. EPA, from 1976 to date, have asked the states, aren't you going to be taking over programs in hazardous waste management under RCRA and in CERCLA, but have not called in the states to be equal partners in developing the regulations. That's why the EPA regs aren't as effective as they should be. They talk about ex parte this and ex parte that, but I submit that we are government officials also. If the states are being asked to assume a program, assume a responsibility, the states should be sitting down cheek by jowl with the feds developing those regulations. I think that the states would be of great assistance to EPA. I know that state capabilities vary. We're fortunate in New York State that we have people involved that know what they're doing.

Question from Audience:

One question and a few comments. I would like to reiterate New York's concerns about the quality of the RAMPS. I find it very frightening that Mr. Hedeman has never heard that there is a problem concerning the quality of the RAMPS. Either he's not asking or not staying at conferences or something and I think that's an important point.

I would like also to reiterate our concern in Massachusetts that the EPA Regional offices be delegated much more responsibility than they have been. We cannot wait for 8 or 9 signatures and signoffs down in Washington for every single piece of action.

Thirdly, I'd like to comment on the question of going out simultaneously to bid for projects while you're waiting for the cooperative agreement to be processed in the region and in Washington. For some of us, we have been -- some of the states have been contracting under different procedures and so we are going to have to change our procurement procedures and our contracting procedures to be in conformance with the federal requirements. In order for us to do that, we either have to take it out of our hide, that is hire somebody to help us, we assign personnel from existing programs, or and this is what we have done in Region 1, or at least are trying to do, enter into first the state EPA cooperative agreement to be able to use EPA's contract or to help us get the bids out and the procurement procedures, etc., at the same

time proceeding with the cooperative agreement. But, I don't think it's as simple as Mr. Hedeman was saying and the cost for that initial bid document for the consultant is approximately $30-40,000. We would have to be taking that out of our own pocket with no match possibilities in the future. I think that's a real concern, at least as the initial cooperative agreements are proceeding.

My last question or comment is, we've talked a lot about how much money EPA is spending out of Superfund for the Army Corps of Engineers, etc. I would like to know if anybody actually has specific figures as to how much the Superfund has been used for Center of Disease Control, Army Corps of Engineers, Coast Guard, it goes on and on, in the last two years, with projections for the next two years. I don't know if anybody here has that information or if you can get it.

Joel Hirschhorn:

Well, my own comment there would be whenever you listen to EPA officials tell you about how much money is being spent, you better learn the word game.

Audience:

I want to know where it's being spent, and I'm surprised to hear you really haven't picked up on that.

Joel Hirschhorn:

Well, there's a difference between money spent -- between money spent, monies obligated, and monies authorized. What you will discover, contrary to Bill's figures, is that the actual amounts of money spent on cleanup is very, very low compared to monies that may be spent for other purposes and monies which may have been obligated or authorized in some way, but have a long way to go before it is spent. So there are games being played with words. I can tell, I forget the exact figure, but the actual amount of money that has filtered down to actual physical cleanups at sites, is a very low figure.

Audience:

I think the states should find out exactly how low that figure is.

Norman Nosenchuck:

Can I just make a further comment? I'm really sorry Bill Hedeman isn't here because I hate to make a critical point showing EPA non-performance when Bill isn't here, but we have other EPA people here. Case in point, the number one site on the New York State National Priority List is the Sinclair Refinery site in Wellesville, New York. We asked the federal government over a year ago -- I forget how long ago. How long ago is it Bob? A year and a half?

Robert Ogg:

About a year.

Norman Nosenchuck:

About a year for emergency action at the site. This project is now in the EPA ping-pong. It wasn't the EPA Region II fault, because they sent our request on up to EPA Washington headquarters and never got a response, but under the existing system I can't contact Washington directly. I must go through the EPA Region and then I must wait for the answer back. The Region is hamstrung on this project, even though the Region supported the emergency action request. We had a situation where we have a bunch of barrels containing wastes next to the Genesee River. The company involved had left the site. The Genesee River was expected to rise. We were very concerned this year that the high waters would come and wash out the bank, the barrels which were corroded would go into the river and contaminate the water supply of the village of Wellsville. EPA played around back and forth, back and forth, ping-ponging. EPA finally came to the determination that there was no immediate threat. I was speaking on the telephone to a reporter from one of our western New York State papers and this reporter told me that he happened to be there personally the day we got the word from EPA there was no threat, and he said he watched part of the bank collapse that day. The State of New York then decided to spend $12,000, which we did, from our State Superfund Program to do the emergency work. That's all it cost--we got the bids and we did the work--just like that. EPA is geared to nonrapid performance, period.

Representative Teresalee Bertinuson:

I think we'll close on that sanguine note. I thank the panelists very much.

CHAPTER III

TOXIC VICTIM COMPENSATION LEGISLATION: WHAT IS EQUITABLE?

Presider:
SENATOR DANIEL DALTON, New Jersey, Chairman, Energy & Environment Committee

Keynote Speaker:
U.S. REPRESENTATIVE JOHN J. LAFALCE

Responders:
ASSEMBLYMAN MAURICE HINCHEY, New York, Chairman, Environmental Conservation Committee

JEFFREY TRAUBERMAN Director, Toxic Substances Program, Environmental Law Institute

JACKSON BROWNING, Corporate Director, Health, Safety and Environment, Union Carbide Corporation

- What should the key concepts in federal toxic victim compensation legislation be?
- What should the role of the states be?
- What impact will federal toxic victim compensation legislation have on states?

TOXIC VICTIM COMPENSATION LEGISLATION: WHAT IS EQUITABLE?

Senator Daniel Dalton:

This session will focus on toxic victim compensation legislation. My name is Dan Dalton. I'm a State Senator from New Jersey and chair the Senate Committee on Energy and Environment and am the sponsor of a bill that was signed into law approximately a year and a half ago by then Governor Byrne, that established the New Jersey Landfill Closure and Contingency Fund, which establishes a fund out of a surcharge on solid waste for victim compensation. The regulations are now being drawn, so I will be very interested to see what DEP does with those regulations and find out what I really meant when I introduced the bill. Additionally, I am presently the sponsor of a fairly controversial bill in New Jersey called the Worker and Community Right to Know Bill, which attempts to establish or preclude compensation, and hopefully preclude some victims to a certain extent by providing workers in the community with information about toxic or hazardous substances in the work place and also those substances that are being emitted into the environment in a given community. We're following the lead there of folks like New York, and Massachusetts and Maine, City of Philadelphia, etc., who already have Worker and Community Right to Know Bills.

The keynote speaker this morning is Congressman John LaFalce and he is from the New York District which includes Love Canal and has been one of the most forceful Congressional proponents of toxic victim compensation legislation. Congressman LaFalce has sponsored toxic victim compensation legislation this year and we are anxious to hear his description of H.R. 2482. So without further ado, Congressman John LaFalce.

Congressman John LaFalce:

Thank you very much. It's a pleasure being here. It's difficult for me to refuse an invitation from any state organization, having been a State Assemblyman and State Senator in the State of New York. I look back on those days very, very fondly for a great many reasons. We were close to the people, and we had much greater comradery in those legislative bodies than we do at the federal level.

It is also important to realize that, in considerable part, the compensation of individuals in our society has been brought about through the states rather than through the federal government. I realize that although I am an advocate of federal toxic victims legislation it might take some time to prod Congress into action. State legislative bodies might be the ones to act first.

The issue of toxic victim compensation is surely an important one for our region. One hundred and seventy of the 419 sites on EPA's Superfund Priority List are located in the 10 states represented in the Council of State Governments Eastern Regional Conference. Eighteen of the top 25 priority sites are in our region and there are literally thousands of other sites, many as yet undiscovered and unexplored, that dot the entire Northeast landscape. We must be vitally interested in the Superfund and RCRA Programs and proposals

to aid toxic victims, for the known and unknown problems that we face are truly staggering.

The states in the Eastern Regional Conference have been and probably will continue to be leaders on hazardous substance matters. As a representative from New York, as is Assemblyman Hinchey, I am pleased that the New York State Department of Environmental Conservation recently announced it will order an end to the burial of toxic waste that can be destroyed by incineration. This represents a major step away from the landfill disposal of hazardous wastes. That's a step that I strongly endorse and support.

Several states in our region have also established mini-Superfund Programs. These funds will be used for emergency response actions, remedial actions, and financing the non-federal share of cleanup under the Superfund Program. My review of state legislation, however, and correct me if I'm wrong, has turned up only two states nationwide that have established a fund for toxic victim compensation, California and New Jersey.

The state of California has established a Hazardous Substance Compensation Account within its Hazardous Substance Account. The compensation account can be used to cover toxic victims uninsured out-of-pocket medical expenses and actual lost wages or business income, not to exceed $15,000 for three years. Although the Senator would know far more about it than would I, I understand that the New Jersey's Spill Compensation and Control Act establishes a fund which can be used to offset loss of income or impairment of earning capacity due to damage to real or personal property.

The paucity of state programs to provide compensation for toxic victims is certainly mirrored at the federal level. Now we did come close to addressing this problem in 1980 when the Senate Environment and Public Works Committee reported a bill that contained a toxic victims compensation title. But the political compromises that were struck in the lame duck session of the 96th Congress during the Superfund battle, did not include toxic victims compensation. We still have no federal toxic victims compensation scheme today. I don't think there can be any excuse for that.

Out of the ruins of the Superfund battle though, did come the 301E Study Group, named after the section of the Superfund law that established a panel of experts to study the adequacy of existing common and statutory legal remedies for toxic victims.

The 301E Study Group's report was submitted to Congress last July. It highlights problems and outlines a solution. Most importantly, it sets the stage for the next logical step, either Congressional or state legislative action or both. It seems to me that Congress and state legislatures can no longer hide their collective head in the sand and hope that toxic victims will go away. If anything, we can expect greater pressure from our constituents as the magnitude of the problem is fully exposed.

Before examining the rule of no compensation, let's note the few exceptions. The federal government did act with amazing speed at Times Beach to address

the dioxin emergency in that town once it was exposed. There are other cases where toxic victims received some type of compensation. At my own Love Canal, we did receive some form of compensation. I worked on that problem before people ever heard of Love Canal, before Lois Gibbs ever knew the word Love Canal, I'd been working on that for about a year to try to bring it to light.

In December of '82 EPA settled a suit against the Olin Corporation for DDT contamination of river waters near the Redstone arsenal. In addition to paying for whatever the cleanup may cost, Olin also agreed to pay an additional $24 million to assist residents in the contaminated area. This amount includes a $19,000,000 trust fund to be established for health care and for meeting personal injury claims. Olin will pay the other $5 million to the federal government for medical monitoring of the citizens and other related medical projects.

Generally speaking, however, victims of exposure to toxic substances have a very difficult time obtaining compensation. The reason they have such a difficult time is that they suffer at the hands of a system that has very inadequate mechanisms for compensation. This too is the conclusion reached by the Superfund 301E group, that we have terribly inadequate mechanisms.

Our system of law has failed the toxic victim in at least two ways. First, the courtroom, if not absolutely closed, is virtually closed to toxic victims. Statutes of limitation and overwhelming burden of proof requirements in hazardous substance exposure cases have effectively frozen the toxic victim out of the courtroom. Secondly, we have not provided for the administrative compensation of toxic victims through a no-fault federal or state mechanism. Until we make changes in those mechanisms -- legal and administrative -- toxic victims will continue to be legal victims.

Now the Superfund 301E Study Group recommended that the states play a major role in both administrative and judicial remedies for toxic victims. The study group recommended a two-tier system of remedies. The first tier would provide an administrative compensation remedy without showing a fault. Its major purposes would include the provision of limited compensation to meet the economic and medical needs of injured persons, in a manner that is more prompt than tort litigation. The second tier would keep intact the existing system of tort law in the states with some recommendations for procedural and other improvements.

Let's look at tier one. The study group recommended the establishment by federal law of an administrative compensation system to provide full coverage of medical expenses and substantial, though limited, coverage for loss of wages. The administrative compensation remedy would be administered in each state by an appropriate state agency, but the federal government would contribute 80 percent of the administrative cost. Administrative awards would be paid from a new federal fund established with contributions from or taxes on the production of hazardous wastes or toxic chemicals in crude oil and by a tax on the disposal of hazardous waste.

The study group also recommended that the states develop common law and statutory remedies and that they remove unreasonable procedural barriers to recovery in court actions for personal injuries. These would include revisions of state statutes of limitation, repeal of statutes of repose, adoption of liberal joinder rules, revison of substitutive and procedure rules so as to hold contributors to injury or damage jointly and severally libel under the theory of concertive action, and the adoption of causes of action that would apply strict liability.

Now, as long ago as 1978, I introduced federal legislation to provide a scheme for compensating toxic victims. I then called it the Federal Toxic Tort Act. Trying to revise it and refine it from '78 to the present, this year I introduced H.R. 2482. My proposal differs somewhat from the study group's recommendations, although our goal is the same. My bill would establish a new federal cause of action for the toxic victim. It would not be an exclusive cause of action. The cause of action established in H.R. 2482 may be maintained in any court of competent jurisdiction in any state or in a District Court of the United States.

The study group also rejects the use of presumptions in plenary state court actions although several are included in the study group's tier one remedy. By contrast, my proposal would allow an injured party to establish a rebuttable presumption, not a conclusive presumption, but a rebuttable presumption that a defendant did in fact cause or significantly contribute to an injury, illness, or damage suffered by the plaintiff if the plaintiff could establish one, that the plaintiff was exposed to a hazardous substance; two, that exposure to such hazardous substance was reasonably likely to cause or significantly contribute to injury, illness, or damage which the plaintiff alleges to have suffered; and three, that the plaintiff's exposure was of sufficient level and duration to have contributed to the injury, illness or damage. My proposal would also ease the evidentiary burden that a plaintiff must meet to establish the rebuttable presumption. Any evidence which tends to establish that the hazardous substance in question causes or contributes to injury, illness, or damage of the type allegedly suffered would be considered relevant.

In addition, statistical studies, epidemiological studies, animal studies, tissue culture studies, micro-organism culture studies, laboratory and toxicological studies and hazardous substance release studies prepared by the Agency for Toxic Substances and Disease Registry of the Department of Health and Human Services would be admissible as evidence. H.R. 2482 would also remove the statute of limitations barrier in toxic victims compensation cases by imposing a more liberal discovery rule. Action for damages would be able to be brought for three years after the injury, illness or damage and the cause of injury, illness or damage were first known to exist or should reasonably have been known to exist. A similar rule has been adopted in approximately 13 states by statute or by judicial interpretation.

My proposal would also establish a federal administrative remedy. The Toxic Victim Compensation Board would be established to pay compensation for

personal injury and illness and for property damage up to $50,000. The injured party, other than a worker covered by a state worker's compensation program, could file an application with the board for certification as a victim along with any evidence which would tend to establish any fact necessary for the board to determine that the claimant is a victim. Benefits awarded by the board would be paid from the toxic victims compensation fund. The fund would be established with monies from the federal Superfund to the extent such funds are available and from loans from the Treasury or general revenues. However, the board would be subrogated to the rights of any victim for the full amount of payment and would retain a lien against any judicial recovery that a toxic victim would obtain in the courts. In addition, because of the rights of subrogation, the board could initiate an independent action against libel parties on their own.

My colleague Jim Florio from New Jersey, along with Congressman Ed Markey from Massachusetts have also introduced a toxic victims compensation bill, H.R. 2582. Their bill would establish an administrative compensation scheme administered by EPA and the Social Security Administration. Victims or their dependents would be compensated for full medical costs and loss of earnings up to $20,000, and like my proposal, EPA could sue companies to recover the awards. The bill would also establish a federal cause of actions allowing victims to sue in federal court alone.

- In the Senate, both Senators Stafford of Vermont and Mitchell of Maine, have introduced their own bills to establish administrative compensation systems linked to the federal Superfund Program and a new federal cause of action.

The three bills establish new statutes of limitation for toxic victims and eases the victim's burden of proof requirements in limited instances. Senator Stafford's bill, for example, would establish a presumption similar to that contained in my legislation in connection with any claim for medical expenses. However, the presumption affects only the burden of going forward with the presentation of the case, it does not affect a toxic victims's burden of proof. The bill would also establish a six year statute of limitations which would begin to run at the time of discovery of the illness, injury or damage, but not the cause of the illness, injury or damage. It seems to me that in toxic victims compensation that you must include knowledge not only of the injury, but of the cause of the injury. So often it's difficult when you know you're injured to have any idea of what the cause might be.

The Mitchell and Florio-Markey bills would create a new federal cause of action, but they would not ease the toxic victim's burden of proof requirements by creating a rebuttable presumption. They would, however, permit liability without regard to fault and that liability would be joint and several. Damages could include medical costs, loss of income and earning capacity and pain and suffering. Under their bills, suits would have to be filed within three years of the discovery of the injury or when some connection between exposure and the injury was discovered.

Proposals to provide compensation for toxic victims have been the subject of criticism by industry groups. Sometimes that has been constructive criticism and other times that has simply been a means of stonewalling the issue. The Chemical Manufacturers Association, which did, in fact, lead the successful charge against victims compensation in 1980, has formed an ad hoc working group to examine the issue and draft industry-backed legislation. I anxiously await to hear the representative from CMA on today's panel who also is with Union Carbide. If I might say so, it's been a pleasure for me to work within my Congressional district with Union Carbide on a great many different issues, whether it's been the local or the national leaders. Bill Sneath and Warren Anderson have been very responsive to whatever issues have arisen.

I'm pleased also that CMA has joined in a suit filed by the Environmental Defense Fund against EPA and the Department of Health and Human Services to insure and accelerate the government's program for collecting data on the impact of public health from waste sites as required under the Superfund law. These tasks were assigned to the Agency for Toxic Substances and Disease Registry within HHS. Those of you who are familiar with the Reagan administration's implementation of Superfund, would know that the Agency for Toxic Substances and Disease Registry exists in the law, but not in HHS. The agency has not yet been established despite the fact that it's been more than two years since Superfund was passed. Some advise me that disdain for the agency runs so deep within the Administration that legislation was sent to the hill unofficially in 1981 to actually eliminate the agency. It almost found its way, I'm told, into the 1981 Omnibus Reconciliation Act, but was ultimately left out of the final compilation of that infamous document for rather obvious reasons.

There are some sectors within industry that are going to oppose this no matter what. One large chemical company, in a letter to the Secretary of Commerce, stated that defeat of toxic victims compensation would be its top legislative priority in 1983-84. Its officials wrote that toxic victims compensation legislation "would make American industry vulnerable to claims by anyone alleging exposure to chemical compounds and would create another large bureaucracy at the federal level. Such legislation would adversely affect all segments of American industry which use or produce chemicals." Hopefully, we can work with the responsible elements within the industry and the Chemical Manufacturers Association to draft responsive legislation whether it be at the federal or state level.

Now despite opposition and less than optimistic prospects at the federal level for broad toxic victims compensation proposals, a clear consensus has emerged that it is time to establish an administrative compensation scheme in a limited area and that is for asbestos victims. There are currently tens of thousands of claims for asbestos related diseases in the courts and state administrative agencies. The Manville Corporation alone faced 15,000 claims and anticipated another 32,000 when it filed for Chapter 11 bankruptcy proceedings. The crisis precipitated by the Manville filing and the sheer number of asbestos victims should prod Congress to action. If not this year, I would think certainly next.

The House Subcommittee on Labor Standards has already held hearings and is preparing to markup legislation, and the asbestos coalition, an ad hoc coalition of defendants in asbestos related lawsuits, has circulated a draft proposal to establish a legislative framework for occupational disease compensation. Under the coalition's proposal, Congress would first have to adopt a generic scheme for compensation and then implement the scheme by separate resolution for each particular set of occupational diseases. Benefits would be provided in conjunction with workers' compensation awards from a trust fund without case-by-case determinations of liability. The proposal would establish no new federal presumption and benefits provided from the trust fund would be an exclusive remedy, thereby eliminating tort law remedies.

Occupational diseases covered by the proposal would include those which present a national problem and are well enough understood for the administrative system to provide benefits to a well defined class of victims. The coalition has prepared an implementing resolution for asbestos related diseases which imposes a special tax on the asbestos and insurance industries, establishes a benefits schedule, and requires the federal government to match dollar for dollar private contributions to the asbestos fund. I think it's likely that asbestos compensation programs will piggyback state workers' compensation programs and that the states would be responsible for implementing such programs.

Now I'm much less sanguine about the prospects for passage of a broader toxic victims compensation legislation. The 98th Congress faces the unfinished environmental agenda of its predecessor, FIFRA, Clean Air, Clean Water, RCRA and several other environmental protection laws have to be reauthorized. In addition, several bills have been introduced to amend the Superfund Program in a great many different ways. All these laws and proposals are of major interest in Congress and to the states. What I'm fearful of is that because of the time that we will be spending on them, toxic victim compensation might be bumped from the top of our list or from the top of your list by more pressing matters. However, I'm pleased that very shortly hearings on toxic victim compensation legislation will be held in Congress by the House Subcommittee on Commerce, Transportation and Tourism, chaired by Jim Florio, and that signals the start, I think, of the fight in this Congress to secure passage.

In summary, I don't think we will have completed our commitment to the American people to protect the environment and the public health from the scourge of hazardous substances until we address the suffering of people. We have in place a system of law that could and should protect the environment and indirectly, public health. With your help, we are moving toward a time when we might say that there will be no, or at least far fewer, toxic victims from the hazardous substances produced, handled and disposed of today. We certainly must move in that direction. But we've not reached that day and I'm afraid that it'll be a long time before we stop discovering future Love Canals, Times Beaches, and Midland Michigans. We can't ignore what's going on and we cannot ignore what is going to go on for a considerable period of time. We're going to have to respond to the suffering of those Americans who

have been and will be exposed to hazardous substances in the workplace, at home, and in the streets of our cities, towns and villages. I look forward to working with you in that endeavor. Thank you.

Senator Daniel Dalton:

Thank you, Congressman. As you can see, the whole area is the most virgin territory, so to speak, and the question of what is equitable also is an area, as the Congressman pointed out, with a lot of different perspectives and solutions. Here to continue the discussion is Assemblyman Maurice Hinchey. He's Chairman of the New York State Assembly Committee on Environmental Conservation. Assemblyman Hinchey has been an active leader in the development of New York State's environmental policy for many years and has a great interest in the issue of toxic victim compensation. Assemblyman Hinchey.

Asemblyman Maurice Hinchey:

Thank you. Thanks very much and I appreciate the opportunity to be here this morning and to talk about this subject. There have been many calls for some mechanism at a state, but from my perspective, preferably at a national level, to recompense those who have suffered as a result of exposure to toxic or hazardous substances. There are many questions, as we can see very clearly from the comprehensive discussion that we just had from Congressman LaFalce. But the answers are more difficult to arrive at. But let's start with a basic fact. Exposure to toxic and hazardous materials causes pain and suffering. It causes cancer. It causes birth defects. It causes anxiety, depression and a great many other things. People die before their time. Others live with disease and medical malfunctions that are invisibly caused and in many cases irreversible. Not all toxics, not all exposures cause this pain, but the cost of unregulated development and disposal of substances that are and will become known as poisons is high. These costs are not being paid largely by those who obtained the benefits from this production. They are being paid by exposed families, by exposed communities and ultimately by many, many families and communities of the future. The producers and the disposers, whether legal or illegal, know where the poison is and perhaps what it is. But this is not known by those people whose homes may be located downhill from the toxic disposal facility or peoples whose wells have been contaminated by percolated substances that have intruded themselves into water supplies and they're even found in kitchens and bathrooms and laundryrooms, on the lawn in some cases. Even in children's wading pools.

So if we grant that toxics are poisons and that poisons ought not to be part of our daily diet and if we grant that people are hurt by exposure to them then we face the first and hardest question raised by this problem: what do we do to help them? Well, we do something or we do nothing. I think we can clearly reject doing nothing even though some people regard that as an easy way out. It may be attractive, but lack of action will only postpone the payment of those social costs until sometime in the future when those costs are even greater than they are now. We've learned, I think, the hard way, that it costs far more to correct a serious environmental problem or a serious

health problem after it occurs than if we were to address it up front in the first instance.

The New York State Assembly has been one of the leaders in the effort to legislate corrective changes at a state level. Our program has three major components that relate to victims' compensation. First is the statute of limitations bill which removes obsolete language from our state law limiting action to recover damages for personal injury, illness, death, or injury to property caused by the latent effects of exposure. This also allows actions within two years from the date of discovery or two years from the discovery of the cause, whichever is later. In cases involving respiratory damage, the limitation is two years from discovery that such disability was caused or contributed to by that exposure.

The second bill in our program is known as the Inactive Waste Strict Liability Bill. This would impose by statute common law standards of strict liability upon generators, trasporters and owners of inactive waste sites which cause environmental health threats. Under this bill, all parties could be held responsible for clean up costs and for damages.

The third bill of interest here is called the State Community Right to Know Bill and it consists basically of two parts. First, the requirement that all industry complete an industrial chemical survey to inform people what materials they use and store on site and also to inform the state of where those wastes were disposed of over the last 30 years.

These bills in combination with the rest of the Assembly's hazardous waste program to regulate the land burial of hazardous waste, to regulate the incineration of hazardous waste, to control liquid bulk storage of petroleum and other toxic substances and environmental monitoring, would provide New York with a complete program to protect our environment and public health.

Toxic poisons often have a long gestation, a long latency period. Dioxins, PCB's, acetones, may take decades or even skip a generation before effects are shown and they may show themselves in the form of child mortality or deformations or various kinds or retardation. However long it may take, this race is not only against biological time, but it is also against legal time as well. Because, by the time these conditions show up, the Statute of Limitations on the present statutes in many cases, has generally run out. As an aside, the statute of limitations problem is one reason why existing law, which otherwise might be sufficient to provide recompense, is in fact inadequate. Limits of one year or two years, occasionally four years, might be perfectly sound for automobile accidents or even in some cases medical malpractice, but when the effects of exposure may not be known for 20 years or longer or perhaps until even the first grandchild is born, it clearly requires adjustments in our current treatment of injuries caused by these hazardous materials. National and state legislation is needed to extend the statute of limitations, or better yet, to utilize the discovery rule for cases of hazardous substance injuries which are not immediately apparent. Then the statute of limitations can do its job to get the case to court where it can be resolved with a minimum of uncertainty. As it stands now, the various statutes of

limitations are a bar to justice rather than what they were prevented to be, a measure to prevent injustice. The New York Assembly has recently passed legislation extending the statute of limitations in our state, but that bill still awaits action in the New York State Senate and its future there, frankly, is uncertain.

But I'd like to speak for a couple of minutes about the need for federal legislation which will provide funds to compensate the victims of hazardous substances. There is no better solution, in my view. The current approach, state-by-state, case-by-case, substance-by-substance is not adequate. New Jersey's experience with asbestos cases is clearly a case in point. After long litigation in lower courts, it took the State Supreme Court's decision merely to permit the case to proceed. Legal problems, the cost of maintaining suits against powerful opponents, lack of knowledge of causal relationships and the very backgrounds of the working people who are the direct victims of toxic exposure in the workplace, all make this approach a spotty solution at best.

New York State, in 1980, passed a Worker's Right to Know Law. It was landmark legislation and is now being copied in many states around the country. That law, at least, allowed concerned workers, or even if they weren't concerned, to become informed as to the risks associated with the various materials that they may come in contact with in the workplace. But more needs to be done. We need in our state a Community Right to Know Bill and we heard earlier today that at least in one state they're trying to combine these two measures, the worker's right to know and community right to know and I would say that's the right way to proceed. It's been very difficult for us to get the community legislation passed in New York even after our success with the Worker's Right to Know.

The New York Assembly in 1982 passed a provision enabling Love Canal victims to be compensated by privately sold liability insurance. That's okay as far as it goes, but it is clear that it is not a solution to the problems of toxic disposal and unwarned exposure. Missouri now is debating a State Superfund Bill to compensate victims, prompted largely by concern over dioxin poisoning. Even on the federal level the most common response is piecemeal with asbestos, dioxin, PCB's, and other hazardous materials competing for equal time and for equal attention.

As a nationwide phenomenon, the various states' response to hazardous waste is a hodgepodge of half starts and half measures. According to the National Conference of State Legislatures by January of this year, 28 states have in place siting mechanisms for hazardous waste disposal; 32 have some type of funding established for emergency responses and for site cleanup; 30 have adopted policy positions regarding alternatives to land burial; 48 have enacted transport regulations for hazardous substances. Their report concludes that many states lack sufficiently detailed legislation to enable them to, as they put it, take the reins of RCRA from the federal government. Only one state, California, has a Hazardous Substance Victims Compensation Program and that model is a useful one for determining what we want the federal government to do and how we think they should do it.

Effective September 1, 1981, the California Health and Safety Law contains detailed provisions running from the purpose of the law to "compensate persons under certain circumstances for out-of-pocket medical expenses and lost wages or business income resulting from injuries proximately caused by exposure to release of hazardous substance." There's another section, a Section B, on the taxing structure used to finance the fund. It draws on the federal Superfund for its definition of hazardous substances and it creates a state hazardous substance account with an appropriation in California of $2,000,000 with additional income to the fund from fines, from taxes on hazardous substances generation, from interest and from federal contributions and the like. The tax formula is set out very specifically.

The fund has a Superfund purpose. That is, it is to be used for site cleanup and rehabilitation, but its most important contribution, I believe, is victims compensation modeled on and administered in California, incidentally, by the same board that administers the Crime Victims Compensation Fund. Article 6 of the California Law sets out the parties and the procedures for making claims against it. The fund will, on proper showing, reimburse a claimant for his or her out-of-pocket medical expenses and cost wages for income as we've heard $15,000 a year for three years or a maximum of $45,000. Because medical expenses may run into the hundreds of thousands of dollars, that is clearly not enough, but at least it is something and more than we have in, I think, any other state. The state will then seek recovery against the party responsible for the hazardous condition. It supplants a sometimes unwieldy administrative procedure for an always unwieldy judicial one, so far as the injured person, at least, is concerned.

I'd like to take a moment to point out that while New York State also has a State Superfund, it does not contain a Victim's Compensation Clause, but even here where a progressive legislature has had the initiative to move against a significant problem, there are serious flaws. According to Jennifer Techera of the States Hazardous Waste Council, since the law was effective in the fall of 1981 in California, there have been virtually no direct applications for compensation. Already the California chemical lobby has rather gleefully posited that this shows that there is no real hazard to be compensated for. Well, we can believe that nonsense at our own peril. Although California acknowledges that publicity and public education has been weak, it certainly has not been nonexistent. The same things she told us that have always prevented people from seeking redress for toxic exposure have been operating in California. She cited a June 1980 Congressional Research Service report concerning six cases of toxic poisoning and why people have not made claims for their damage. The report cites the following reasons: overlap of worker's compensation which, of course, is rarely sufficient compensation; the latency of hazardous substance and the long period before they show their effects; multiple causation of a medical condition; medical lack of knowledge of hazardous substances' effects in diagnosis; and also a lack of public awareness of hazardous substances and the problems of legal proof.

In short, without a national commitment to redressing damages caused by hazardous substances, the public will have scant way even to know what its rights are and how to obtain satisfaction. The call for a mechanism to

recompense the victims of hazardous waste and substance exposure is coming from many sources. I hope that we add our voices here at this conference. The AFL-CIO has called for a comprehensive legislative drive on the issue and the Environmental Law Institute has proposed a second federal Superfund to directly provide victims compensation. Local groups, local communities faced with environmental hazards have pleaded for help and individuals whose lives have been shattered by diseases and conditions caused by their work or the work of neighboring industries or by the illegal dumps and unregulated storage facilities, have lost their homes and their health and they too plead for assistance. We should applaud the efforts of the Environmental Law Institute and those who have followed their recommendations with model legislation and we should applaud the efforts now being made in Congress by Representatives James Florio from New Jersey, Edward Markey from Massachusetts, John LaFalce from New York, Senator George Mitchell from Maine, and Senator Robert Stafford from Vermont. I throw in one Republican because I don't want my remarks to be construed as being partisan.

All four of the bills that have been proposed expand the current Superfund Law to embody measures similar to those which exist in California. Some of the bills expand the statute of limitations, others provide for a discovery factor. Others simply make clear the government's responsibility to provide relief for the victims exposed to hazardous substances. Whatever differences any of us may have with any provision of any given piece of proposed legislation, what emerges, I think, is clear. This problem is not one that the states can address completely alone. Federal intervention and federal legislation is necessary. Substantial resources must be directed at the human dimensions of the hazardous waste and substance problems. In the long run, the human dimension is the one that will matter the most to us and is the one by which our generation of legislators and concerned citizens will be most severely judged. State legislatures can do their parts and they must, but this is after all, in the final analysis, a national problem. Our states must work collectively to demand of the federal government the kind of action we require. This organization can take a positive and concrete step by issuing, as a result of this conference, an unequivocal resolution calling for implementing toxic victim's legislation as part of the existing Superfund Law, legislation that will address the need for compensating victims of hazardous substances. The problem is not of their own making, those victims, but it is certainly of their own suffering and when we return to our respective states, we should address our federal representatives and prompt our state legislatures to do the same. We should go to the public with our proposals and enlist public action on their own behalf.

There is no doubt in my mind that the federal government will not immediately yield to our request. I can be more blunt, I think. This Administration will surely not respond to anything that looks like a service to innocent victims, innocent human victims and that actually calls things by their right names. It will be part of a struggle all of us concerned with environmental matters are personally and presently engaged in. But it's the right struggle and I think it comes at the right time. It's the right time because it's already too late for Love Canal, too late for Patterson, for Wilton, for the dead asbestos workers. But it's not too late for the smallest thing that we can

do: try to see that once anyone has lost their health due to hazardous substances, that there will be at the very least tangible and adequate compensation for that loss. Thank you.

Senator Daniel Dalton:

Thank you, Assemblyman Hinchey. Our next speaker is Mr. Jeffrey Trauberman. Mr. Trauberman is the Program Director and Senior Staff Attorney for the Environmental Law Institute. He also is an Adjunct Professor of Law at Georgetown University Law Center and Vermont Law School. Mr. Trauberman.

Jeffrey Trauberman:

Before I talk about this issue, I thought I would explain a little bit of my background and perspective. I work at the Environmental Law Institute in Washington, D.C. Unlike the Environmental Defense Fund or the Natural Resources Defense Council, we are not a lobbying or litigating group. We do three things. We publish the Environmental Law Reporter and our magazine called the Environmental Forum. We sponsor conferences such as this and we also engage in research. What I work on is research and particularly on toxic substances research. We are a nonpartisan group.

ELI became involved in this issue about three or four years ago. We were asked by a foundation to develop model state legislation to compensate victims of toxic substances. We prepared an initial report, which Assemblyman Hinchey referred to, in 1980 for the Library of Congress on six case studies of toxic substance pollution. We followed it up with several law review articles and then we drafted legislation and we submitted it at a 1981 conference at the University of Virginia Law School. It was a pretty diverse and representative audience: the Chemical Manufacturers Association (CMA) had people there, as well as the Environmental Defense Fund, and the insurance industry. We took their comments, incorporated them in a document which I certainly can't say is a consensus document; in fact, it may be the antithesis of that, but it discusses some of the problems and issues involved in victim compensation and that's what I though I might detail for you today.

I get a scintillating journal each week called Federal Filings Alert. It's a description of selected cases each week that have been filed in the federal courts. I looked through it to highlight the types of cases that have been filed in 1982 and 1983 in the toxic substances area. I found lawsuits involving exposure to toxic fumes in mobile homes, silicosis of the lungs, exposure to agent orange, loss of livestock due to waterborne effluents, and exposure to diethylsilbesterol (DES). The point I'm trying to make is that although many people seem to perceive the issue of toxic chemicals as a hazardous waste problem, none of these cases filed really involves hazardous waste. I think it is important to look at the problem more broadly. Toxic chemical exposures are not limited to hazardous waste sites. They involve occupational exposures. They involve ambient environmental exposures from air pollution and water pollution. I think if you focus only on hazardous waste on this victim compensation issue, you may come to different conclusions than if you focus on the broader problem. I'm pleased to see that Assemblyman Hinchey mentioned occupational exposures as well.

I thought I would mention three things in my discussion. First is the extent of the problem. What is the extent of the problem out there? Two, what are some of the efforts of reform that have gotten underway? And three, what are some of the problems and issues that people face in constructing reform? I'll be very frank, there are a lot of uncertainties in this issue. The data is not all in. There are three primary uncertainties. We don't have a clear idea of the overall public health impact of toxic chemicals on society. We don't know, secondly, which particular substances are harmful, although we know some of them. Third, if you're speaking of legal mechanisms and legal issues, we don't know who injured whom. Without these uncertainties I think the whole issue of victim compensation would be a lot easier to resolve. Unfortunately, these uncertainties do remain with us.

Are there many toxic victims? How many are there? Well, it depends how you define a toxic victim. Do you mean health effects? Do you mean environmental effects? Do you mean property damage or lost business income? Property damage and some of the economic effects are relatively clear. I think the environmental and, particularly, the health effects issues are the most troubling. What kind of data is there in terms of toxic chemicals effect on health? In terms of occupational diseases, the Department of Labor did a study in 1980 involv- ing self-reported data. In part, they asked workers whether they were suffering from occupational diseases and came up with a figure of about 2,000,000 people reportedly suffering from occupational diseases. Of course, you realize that there are methodological problems with asking someone, "Are you suffering from an occupational disease?" If causation is a really big problem, nobody really knows whether it's an occupational disease or not. Non-occupational diseases, that is ambient environmental problems, are even more difficult to resolve.

In a couple of circumstances, a limited number, you have tangible human health effects. Other times what you have is suggestive data, data based on animal studies, data based on short term bacterial mutagenesis tests. The epidemiological evidence is still quite controversial. Some people such as Sam Epstein, author of The Politics of Cancer and the recent book, Hazardous Waste in America, suggest that toxic chemicals play a significant role in America's disease burden. Other people, Drs. Doll and Peto from England, have done a study and they suggest that our current cancer rates really don't reflect a very great contribution from hazardous chemicals. Other people disagree with them. Nevertheless I've looked at a lot of the data and a lot of the studies myself. Despite the scientific disagreement in this area over the aggregate figures, there are lots of health effects studies with respect to particular chemicals and particular substances and particular instances. These include lead, DBCP -- which is a pesticide that has caused problems in California -- sulphur dioxide, trihalomethanes in drinking water, certain industrial effluents, well water contamination an dioxins. So, although you may hear a common argument that victim compensation is a "solution in search of a problem" -- that is, the issue of reforming victim compensation is crafting a mechanism to address a nonexistent problem -- I don't think that that's altogether accurate. The overall magnitude of the problem, the aggregate public health impact hasn't been determined, but in specific situations and a number of specific situations, we do have health effects data.

Secondly, is it difficult for victims to recover? If people are injured maybe it's not a big problem if they can obtain redress for their damages. However, the study we did a couple of years ago for the Library of Congress suggested it was difficult to obtain redress. But it was a limited sample of only about a half a dozen cases. Again the Department of Labor Occupational Disease Study from 1980 has some telling figures in comparing occupational diseases and occupational accidents. That is, it compared accidents -- for example, when a safe falls on your head or if you fall off a ladder -- with occupational diseases. The average time to recover in an occupational injury case is two months in a worker's compensation setting. With occupational diseases it's a year, six times as long. The level of income replaced in an occupational injury is 60 percent, in an occupational disease, 40 percent. Here's an interesting figure on the primary source of compensation for occupational diseases. Of the people who do get compensation, 53 percent rely on Social Security, 21 percent get their compensation from pensions, 17 percent from veterans benefits, 16 percent from state welfare. Only 5 percent of people who obtain compensation get their compensation from the worker's compensation system. What you see is that the fractional costs, the cost of bringing these claims and the costs of trying to resolve these disputes are much higher in occupational disease cases than in occupational injury cases. Increasing frustration with the worker's comp system leads people to try to circumvent worker's comp and bring lawsuits against manufacturers. I don't know if you know what happens if you're exposed in the workplace, but basically you can't sue your employer. You can only recover through worker's comp. Well, the mechanism that people have used try to circumvent that, because of frustration over the worker's comp system, has been to try to sue the manufacturer of the product that exposed them in the workplace. And what you see with respect to most of these incidents is, I think, a go/no go situation. With respect to most of the substances there's very limited recovery, if there's recovery at all.

With respect to a couple of substances, where there have been demonstrable health effects studies, you see massive waves of litigation, and massive numbers of claims. Look at a couple of examples: formaldehyde, although it's one of the substances where there's unclear human health effects, has generated 2,000 lawsuits in the last three years. Asbestos, where there is evidence on human health effects, has led to 10 to 20,000 claims. Diethylstilbestrol has generated thousands of claims. Agent orange exposure, again a somewhat suspect substance, has been the source of 4,000 claims.

Just how are people faring in the legal system, and what kinds of recovery do they get? As I mentioned, there isn't much data other than the federal filings on lawsuits. But again, you look back at the worker's comp situation. In Colorado, which happened to be a state that we wrote a letter to, from 1977 to 1981, in the entire state, there were six cases of occupational cancer compensated in the entire state. The awards people received at the state level ranged from a low of $317 to a high of $613 for occupational cancer.

In New York in 1978, the latest date for which figures are available, three cases of occupational cancer were compensated. There are other statistics and

I won't really recite a litany of numbers to you. There are recurring issues and problems that you see for both plaintiffs and defendants, for victims as well as defendant companies or business enterprises. Causation, you've heard that said before, is both a scientific and a legal problem. Apportionment of damages among multiple parties is also a problem. Not only are we exposed in the workplace, we're exposed in the ambient environment. Maybe some of us smoke, maybe some of us live near a power plant or a similar source discharging hazardous substances.

Statute of limitations you heard about. Class action certification is also an issue. A lot of courts don't like to treat these kinds of cases with large numbers of plaintiffs as class actions and deny plaintiffs the ability to go in as a class. Evidentiary issues also arise. Some courts are reluctant to accept novel scientific evidence, such as animal studies and bacterial studies. People read, oh, they exposed a rat. You know, they gave him 300 cans of diet soda each day and why should we admit animal studies into evidence. There are valid reasons for high levels of experimental exposures, but I won't go into them. The courts are very skeptical of that, just like lay people.

Defendants also face problems in toxic tort litigation. What you find is that with respect to some of these substances, once causation is shown, there are potentially crippling levels of damage awards. In Illinois 50 railroad workers were exposed to dioxin. I don't believe there was clear evidence of large scale injury, and they recovered $57,000,000. Look at the Johns Manville situation. Here again, we see crippling levels of recovery, although there is some doubt as to just how crippling the levels are -- whether the company was trying to file for bankruptcy just to get out from under litigation. But basically you see this go/no go situation again. Representative LaFalce has been active in this area for five or six years. Representative Brodhead was involved earlier as well. In the legal area Jeff O'Connell, one of the authors of "no-fault insurance", has drafted a proposal called "offers that can't be refused" to try to encourage settlement of toxic substances litigation.

Japan already has a toxic substances compensation mechanism in effect. If you live in a designated area, if you suffer from certain designated diseases, and if you live in the area for a certain period of time, you automatically can get compensation.

Regarding the states, you've heard a little bit from our other speakers. New Jersey, Assemblyman Dalton's state, has a Spill Compensation and Control Act. California has a statute as well. Minnesota and Massachusetts have both debated victim compensation over the last year or two. Minnesota came very close to enacting a victim compensation proposal last year. It passed the House and the Senate and was vetoed by the governor and it's now kicking around again.

Then you have the 301e study, which is a federal study under Superfund proposing this two tier mechanism for compensating victims of toxic substances. I have a description, but you've already heard it. Last

Congress, Senator Mitchell and Representative Miller were active as were Representative Fenwick and Senator Hart. Representative LaFalce introduced HR7300. You also should consider product liability as relevant in this area, because DES and a number of similar items are the source of controversy. Product liability reform legislation is being debated up on the hill right now. This Congress there are at least a half a dozen bills, and you can order them for free. If you want to get a little bit more information on this, you just write to the Senate or House Documents Room in Washington, D.C. The bill numbers for those of you who wish to write them down are S945, S946, S917, HR5735, HR2330, HR2482, and HR2582.

Finally, ELI did a report which is this green document here with the catchy title "Statutory Reform of Toxic Torts: Relieving Legal, Scientific and Economic Burdens on the Chemical Victim". You can get that from our office down in Washington, D.C.

There are problems faced in constructing these reforms. It's really not a one-sided issue. I'd hate to leave you with the impression that the issue is one-sided. For example, regarding causation and the burden of proof: the traditional burden of proof is the preponderance of the evidence standard. Is that too tough to meet for plaintiffs and chemical victims? If it is, how are you going to change it? If you try to shift the burden of proof to the defendants, as I'm sure Jack Browning would be the first to tell you, you create other problems. These cases are not only hard to prove, they're extremely hard to disprove. You don't really want, as I've heard it said, all cancer victims to have the key to the treasuries of the chemical companies, because it's not clear what contribution hazardous substances contribute to the overall disease burden in the United States.

If you want to set up a fund, who are you going to have pay for it? There are two major choices. You heard Joel Hirschhorn discuss them before. An oil and feedstock tax, which is "up front," has an advantage in that it's relatively easy to collect. There aren't that many people who produce oil and chemical feedstocks. On the other hand, there are disadvantages. You may not be able to pass on the cost to the end product level. The costs of ginger ale or saccharin or something like that are not necessarily going to reflect the risks that are created. The good actors, by taxing chemical and oil feed stocks, fund the bad actors. If you have a waste end tax, however, or an end product tax, which Joel Hirschhorn mentioned, how are you going to set levels for a 1978 LTD emission? You can't set a proper tax. It would be an administrative nightmare to do that.

Exclusivity in the relationship to other laws is another key issue. Should these mechanisms be a substitute for all courtroom activity? Should you just not be permitted to go to court? Should it be elective? What if you go through a fund system and then later on you want to bring a lawsuit? Are you going to have to pay back the money? That's what we say at ELI, but others say no. They say you should be able to go in and if you recover measurably more in court you'd be okay.

I think I want to conclude with what I think are the implications and trends for businesses and for states. I think you see a movement in the courts toward expanded liability and continued circumvention of the worker's comp system. You're going to see a gradual demise of the negligence doctrine. That is, where someone says it wasn't my fault. We did everything we could have at the time with respect to the chemical. The courts are beginning to say that really doesn't matter. As between two parties, the courts say, you could have avoided the problem more easily than the plaintiff. With respect to shifting burdens of proof, you're going to be seeing a tendency to impose joint and several liability in multiple defendant cases. Under this approach, each contributor can be held completely responsible for the problem. You may also see potentially greater financial exposure of insurers and increasing insurance premiums, more litigation in the state courts and more legislation in the state courts.

Therefore, I think it's important to deal with this issue now. I think it's important to deal with this issue in a comprehensive manner, not simply as a hazardous waste question and not simply as an asbestos question, but more comprehensively. It is important to resolve these problems uniformly and consistently, so you're not faced with crippling recoveries to individual defendants because of individual substances. Rather, we should have a system in place -- a prospective system that can anticipate problems and deal with them without undue disruption.

Senator Daniel Dalton:

Did you notice when I told Jeff he was over his time limit, it didn't bother him a bit? Our next speaker is Jackson Browning. He's Corporate Director of Health, Safety and Environment for Union Carbide Corporation. Mr. Browning chaired a study committee of the Chemical Manufacturing Association which has explored the issue of toxic victim compensation legislation. Mr. Browning received a Bachelor of Science in Chemical Engineering and an LLB from West Virginia University. Mr. Browning.

Jackson Browning:

I'm told that if I send the registrar at West Virginia University ten dollars they'll make that LLB a JD and if I keep talking about the kind of subjects we've had this morning I just might get my doctorate, so I'll feel more comfortable with it.

The Chemical Manufacturers Association did decide to form a task force early this year to address this subject which is obviously going to be with us for a while and does require some resolution. I'm not going to go through the litany of issues that we are addressing because they are very similar to those that you have heard here this morning. There are questions of eligibility and exclusivity and causality and they are very complex and complicated problems.

We have done two things that I would like to bring to your attention which I hope will lead us constructively toward some kind of solution and resolution of these problems.

We have, as you have been told, joined the Environmental Defense Fund in suing the federal Department of Health and Human Services and the EPA to have them proceed with the study which Congress mandated under Section 104I of CERCLA. We think it is a tragedy that that study has not gone forward, it has not been funded, the people have not been put in place to do it. We think it's the sort of thing that we need to do in this country to begin to define the problems we are dealing with. If we talk about victims compensation are we talking about acute problems? Rashes and that sort of thing? How big is that problem? Are we talking about chronic problems? Cancer and other disease processes which take a long time to develop? Are we talking about genetic problems? Are we talking about all of these? We think it's important to have answers to some of those questions before we begin to design a fund that will be used to compensate people who have been injured.

We do feel that in many cases the burdens of proof put on people at both the administrative level, the workmen's compensation cases, claims process and also in the courts, make it very difficult for both sides to feel that when the process is through that justice has somehow been done. You hire your doctor, I hire my doctor and you know your doctor will say what you want and my doctor will say what I want and laymen, such as ourselves, are left to try to make some sort of a decision. There is no overall guidance on these subjects from people in the country who really have expertise and who could help us as a society arrive at more equitable judgments.

As a companion piece to our lawsuit under Section 104I, we at CMA commissioned a study by an organization called the Universities Associated for Research and Education in Pathology. It's a group of the foremost medical schools in the country - Yale, Harvard, California, Chicago - who have banded together to see if they can help the public process address these complicated and confusing technical issues. They have been doing studies for the last four or five years in a whole host of fields. We went to them to see if they could give us some recommendations, which might be helpful incidentally in this 104I suit, to see if there is some way to use the body of information that we have about toxic materials and their effect on people in a way that would give guidance to this process either at the administrative level or at the court level. We started that in March. We are told that they will give us a feasibility study sometime in early summer. I take that to mean the first part of June. They might not quite be on schedule, but I think they are going to be close.

We asked them to address questions such as the adequacy of the kind of information we now have on the effect of substances that might be found in dump sites. Obviously, the first thing they have to go about determining is what sorts of products one might find in a dump site. Then, what do we know about the effects of these materials on human beings. We have a lot of information from workplace exposures. There are epidemiology studies. There are toxicology studies. We want them to take a look at that kind of information. What do we measure? Blood samples? Urine samples? Do we look for genetic materials? What would be a reasonable way to decide that there has been a causal linkage between some exposure and some disease process. The problem is grossly complicated, of course. A lot of people who have never been exposed to chemicals get lung cancer. A lot of people who don't smoke get lung

cancer. So you find yourself talking about an increased incidence of a disease and when you're dealing with a particular individual it's very difficult to know what a proper compensation mechanism or award might be.

We have looked at the legislation that has been presented. There are various approaches that are being suggested. We find that most of them are constructive. We do have some problems in ascertaining whether we want to federalize this problem to the point where we get a whole new set of federal rules and procedures for handling court claims, whether we can live with a joint system where there is a fund, if that's the way we need to go if we decide the court system is not adequate to take care of the problem. If we need a fund, can you work out a system where the fund is raised at the federal level and administered through a workmen's compensation scheme, as someone proposed, at a state level. It will be something a little different for us, but perhaps those are workable, but these are the kinds of problems that one has to work one's way through.

We hope through the litigation and the ensuing negotiations with the HHS and EPA that this suit has precipitated, we will begin to get the federal government to address this problem of definitions of terms and some approach to causation that we can be comfortable with. We hope we will get some guidance from the foremost scientic brains in this country on this subject and we hope we will get it soon. We don't expect that this is a study that we at the Chemical Manufacturing Association would pursue exclusively. The work will be made open and public. That was part of the requirements that UAREP put on us when they agreed to make the feasibility study and we would welcome participation by other groups and even the government when the time comes.

The hour is late and I think I have hit the major points that I wanted to make that have not been covered by the very able presentations this morning. It's time for questions, and I would be happy to join the panel in pursuing that. Thank you very much.

Senator Daniel Dalton:

Thank you, Mr. Browning. You win the cigar. You were on time. We would like to open it up at least for five minutes of questions for our remaining panelists. Congressman LaFalce had to catch a plane.

Audience:

It seems to me that only half the justification for victim compensation legislation was presented here and I'm curious about the other half, which is that legislation of this type provide some kind of a stimulus for proper waste management through cost internalization. Product liability experience was alluded to a little bit, but I think that a lot of product safety improvements can be attributed to developments in product liability laws the last 20 years and I wonder whether anybody can comment about what they expect the response will be should a toxic victim compensation legislation be enacted.

Jackson Browning:

Since this was addressed to anyone, I understand your question: whether or not the victims compensation fund or mechanism can be structured in such a way as to give some discipline to those who might be responsible for the exposures. It's a good point. At the time of the enactment of the Superfund legislation in the fall of 1980, we did have in the chemical industry many points of difference with those who were pursuing the legislation. But, one of the points that we tried to make was that a proper way to collect the tax would be on the waste itself. I think the waste that's buried in the ground is the thing that we are most fearful of over a long period of time.

The argument at the time was that it was administratively not feasible to do that and in retrospect I suspect there was much merit to that argument. I would like it to be reexamined today because we do have RCRA and we do have the manifests and we do follow this material around and I think it might be a much better, much easier, thing to do today to find out who is generating the waste and where it's going. The degree of hazard is another complication which one might put on that. I think you can make some rough gradations and it seems to me that if we are going to have a funding mechanism for Superfund or toxic tort compensation for victims, however one wants to use the money, I think it's well from a societal standpoint to have a funding mechanism that drives towards less and less of the thing that is causing the problem. We have done an awful lot in industry just as a result of the OPEC activity in the last few years. They made it more economical for us to recover fuel and to recycle materials. It had a great deal to do with cutting down on the amount of waste we generate and I think that putting a tax on the material that goes into the ground would begin to give us the incentive and an opportunity to save some money by putting research and development effort into that activity.

In product safety, the driving mechanism for us, long before we got into this last four or five year crunch, was the product liability litigation. We were doing toxic studies of our materials back in the late 30's and have had a laboratory involved in this work for quite a long while. So all of these things that let you know that you are going to pay somewhere down the road for what you do that's wrong, I think are good and we would like to see everybody do that so that they'd be in the same boat we are competitively.

Jeffrey Trauberman:

I think I would like to underscore that as well. You don't really want to set up a system here that is a buy-out to compensate people. Heck, if you want to make it really easy to compensate people, just pay them out of the general tax revenue. Everybody that was injured, just give them some money. We do want to create a system that does have proper incentive for safe conduct. I mentioned before, the degree of hazard approach is difficult. We actually incorporate that in our proposal after about five years, giving them time to phase that in and start off with Superfund, but there are reasons to move away, as Joel Hirschhorn said from the Superfund up-front type of tax on activities.

Assemblyman Maurice Hinchey:

I think I would like to throw in one caveat, however. I think if you followed that line exclusively, you might find that you'd have to set up some kind of a massive state police force to regulate this whole process so you'd know how much was going and being disposed improperly and where it was going. That's the major part of the difficulty. We don't have that kind of information now and we need to get more of that, if we can. That's the purpose and part of our community right to know legislation, is to require the generators of industrial hazardous materials to tell us as best as their records will show where they put this stuff over the course of the last 30 years or so. But even so, I think if you restrict yourself to that, it's going to be hard to come up with a fund large enough to make these compensations.

Senator Daniel Dalton:

Any other questions? Everyone, thank you very much.

CHAPTER IV

CONCURRENT RCRA WORKSHOP

State Capability

Presider:
REPRESENTATIVE TERESALEE BERTINUSON, Connecticut, Chairman, ERC Task Force on the Environment

Speakers:
BRIAN STROHM, Assistant Director, New Hampshire Division of Public Health Services

MERRILL HOHMAN, Director, Waste Management Division, U.S. Environmental Protection Agency, Region I

RAYMOND MIYARES, Bracken & Barum

JACQUELINE RAMS, Camp, Dresser & McKee, Inc.

- Do the states have the capability to administer and enforce "equivalent" hazardous waste management programs? What must states do to develop the capability?

- Are adequate financial resources available to the states if the federal government curtails its assistance? What will happen if state resources aren't adequate?

- Solid vs. Hazardous Programs: Must they be traded? Canstates pay for both? What will it cost?

- Will state legislatures pay for an "equivalent" program for their states? Where will the funds come from?

CONCURRENT RCRA WORKSHOPS - State Capability

Representative Teresalee Bertinuson:

Good Afternoon. The first speaker on our panel this afternoon will be Dr. Brian Strohm. Dr. Strohm is the Assistant Director of the New Hampshire Division of Public Health Services and is responsible for state solid, hazardous waste and environmental health assessment programs. Brian.

Brian Strohm:

Thank you very much, Terry. I appreciate the opportunity to appear before you this afternoon. I was asked to address a number of questions and issues regarding whether or not states have the capability to administer and enforce hazardous waste programs which are equivalent to the federal program and whether states have the technical and financial resources to accomplish that goal. In an effort to address these questions I would like to identify what I see as the primary goals of RCRA and review how New Hampshire has interfaced with the Environmental Protection Agency, Region I and Headquarters and then give you my thoughts on what I think are the most important components of an effective hazardous waste program.

First, I am sure everyone here is aware of the complex nature of the hazardous waste management problems within this country today. In general these problems can be grouped into two categories. The first category deals with the existing uncontrolled hazardous waste sites. We are faced with the enormous problem of trying to mitigate the potential adverse public health and environmental impacts these sites pose. Between 500 and 1,000 new products are introduced into the marketplace and the environment every year, and that the volume of synthetic organic chemicals generated since 1940 has increased from approximately 500,000 to 70,000,000 tons per year. Past management and disposal practices have given little forethought to the ultimate fate of these chemicals in the environment.

The second category is the problem of properly managing and disposing of the hazardous waste currently being generated within this country. Proper management and disposal of these wastes will hopefully prevent the public health and environmental problems cited earlier from recurring. In response to this problem and in recognition of the need to properly manage and reduce the volume of hazardous waste currently generated, Congress passed legislation which resulted in the implementation of an elaborate regulatory scheme to ensure proper hazardous waste management. This has resulted in a tremendous administrative challenge for both federal and state agencies. Effective implementation of a nationwide program which maintains consistency from state to state requires timely access to existing and new data on emerging technologies, and health and environmental studies. Access to this information provides state authorities the technical resources required to manage regulatory programs in this rapidly changing field.

The primary goal of the Resource Conservation and Recovery Act is to protect the public health and environment. To achieve this goal society must identify means by which to reduce sources of hazardous wastes, such as substituting less hazardous materials in certain manufacturing processes, and provide appropriate technologies to adequately treat and dispose of those hazardous wastes for which there are no substitute materials. In order to accomplish this, it is imperative we have a consistent nation-wide regulatory program. If there is not, I believe we are going to witness in some states economic incentives, and an economic climate, which will encourage less stringent environmental programs and resulting state to state environmental regulatory inequities. This will only serve to perpetuate existing environmental problems and create new problems.

Successful implementation of an effective regulatory program for hazardous waste is a monumental task. Let me try to give you an example by comparing the nation's hazardous waste problem to its low-level radioactive waste problem. In the Northeast, eleven states have been meeting to discuss a regional solution to the region's low level radioactive waste problem. It has been estimated that these eleven states are responsible for forty percent of the nation's low level radioactive waste. There has been considerable public and private debate as to the most appropriate ways to deal with this particular problem. It has been estimated that since the inception of the nuclear industry the total volume of low level radioactive waste generated would equal the volume of hazardous waste generated in three days within this country. It is an enormous problem and in order to meet the challenge, states must have adequate funding and the necessary technical resources.

At this time, I would like to address what I perceive as:
1) key elements which will enable states to develop programs which are equivalent with federal programs; 2) the role of the federal government in overseeing the implementation of state programs; and 3) the requirements for successful siting of hazardous waste facilities which will provide the basis for a long term solution to existing problems.

There are currently hundreds and thousands of industries which are generating large volumes of hazardous waste. As industry developed and grew within this country, so did the hazardous waste generation problem. In recognition of the problem, the federal government is attempting to implement a regulatory program which is seeking to change past industrial hazardous waste management practices. In response, industry is reviewing its manufacturing processes and attempting to seek more environmentally acceptable treatment and disposal alternatives. As a result, more information is becoming available on new hazardous waste management practices on a daily basis. Access to this information by both public and private officials is essential in order to make prudent and environmentally sound decisions. Many states don't have the financial resources to develop the expertise necessary to adequately manage this new information. States do, however, need this information and should be provided the resources to selectively develop the expertise necessary to enhance their programs.

To accomplish this, it is imperative that states have adequate funding. I think it is totally unrealistic to expect states to fund the hazardous waste programs from state sources, and even more unrealistic to assume that states will be able to fund these programs through a user fee mechanism. This places an extreme burden on smaller states which don't have the large number of hazardous waste generators and associated large volumes of hazardous waste generated. Adequate funding at the federal level to assist states in developing and maintaining effective and consistent hazardous waste programs is essential.

The role of the Environmental Protection Agency in assisting states and implementing effective hazardous waste programs should be to provide the necessary funding and highly specialized technical resources to states. The agency should oversee state programs to ensure that consistency exists from state to state and provide highly specialized technical assistance and research to assist states in evaluating health and environmental problems and newly emerging technologies. This information should be disseminated in an organized manner to appropriate state officials. The information should be timely and provide sound data to assist state officials in making regulatory decisions.

Technical assistance should also be provided by the agency for assisting states in developing risk assessment and risk management capabilities. Proper risk management and risk assessment methodologies are essential for effective implementation of federal and state hazardous waste programs. Numerous existing and potential health and environmental problems related to uncontrolled hazardous waste sites, hazardous waste facility siting and emergency response must be addressed at the state level. The common recurring question asked of state officials is, "What risk does this facility or uncontrolled site pose to the public health?" There is a definite and growing need for the development of a uniform approach to assessing the public health risks posed by environmental contamination problems. A standardized environmental health risk assessment approach would assist regulatory agencies in making consistent and prudent policy decisions. Again, I see the federal government taking the lead in identifying a standardized approach to risk assessment and risk management and identifying a consistent decision making framework for regulatory agencies. Decisions would be made on sound and accurate health and environmental data. A data base would be developed from available studies or new studies commissioned by the agency. Studies would be subject to peer review and be updated on a continuous basis. States should have ready access to this data base to assist the states in necessary risk assessment and risk management functions. This would provide the basis for consistent decisions on health and environmental problems nationwide.

The information generated from this data base would be extremely valuable in conducting much needed environmental health risk assessments at uncontrolled hazardous waste sites. This has been an area which has been overlooked in the past. I feel there has been a step in the right direction with the recent assignment of a person from The Center for Disease Control to regional EPA offices. The need for health risk assessments is growing. This should be a responsibility for each individual state's appropriate health and/or

environmental agency on a site by site basis. Again, the Environmental Protection Agency and US Public Health Service should assist the states in developing the necessary expertise in these areas.

Consistent state and federal enforcement is also very important. Enforcement methods vary from state to state. In New Hampshire, for example, our enforcement process involves facility inspections and when appropriate subsequent administrative orders. Enforcement action where a company is uncooperative or recalcitrant is referred to the state Attorney General's Office. The number of these referrals is increasing and placing a considerable demand on the Attorney General Office's Environmental Division. Cases which eventually get into the court system may take months before settlement. I feel that administrative fines may be one method to minimize delays and obtain more timely compliance. The EPA and some states have the ability to impose administrative penalties. The EPA may be able to assist state enforcement actions by coordinating or integrating their administrative penalty authority with a state's enforcement action. Swift and consistent enforcement actions would serve to enhance the credibility and effectiveness of a state's program and at the same time mitigate potential health and environmental risks. Any state/EPA enforcement arrangement should be coordinated by the state, especially after state authorization.

I would now like to discuss the long term solution to our hazardous waste problem. We are currently in a crisis management mode. State and federal government agencies are attempting to address and remedy numerous problems due to poor past management practices. The long term solution is the successful siting of hazardous waste facilities designed to minimize risks to the public health and environment. And yet if you review ongoing siting efforts throughout this country, you immediately realize that it is very difficult to site a hazardous waste facility. In some instances public opposition has been insurmountable. Ineffective and unsuccessful attempts to properly site hazardous waste facilities can only serve to perpetuate existing hazardous waste management problems. Therefore, successful siting of hazardous waste facilities is a necessity.

There are four areas that must be addressed to successfully site a hazardous waste facility. The first is an adequate needs assessment. The industry which will be served and the type and size of a facility must be evaluated. Secondly, there have to be reasonable and justifiable hazardous waste facility siting criteria established. The current federal regulations, in my opinion, are inadequate in this area. Facilities should be sited so that they minimize any risk to the public health and environment. Thirdly, adequate public participation is mandatory. The public should have input into the decision-making process. This will serve as an opportunity for the public to have specific questions answered and concerns addressed. Lastly, a state must have an effective inspection and enforcement program. If a facility is permitted to operate, the state must be able to ensure the public that the facility is operating in compliance with all applicable state and federal regulations. To summarize, I feel that states can administer consistent and equivalent programs. There are, however, certain resources that are currently lacking that have to be developed and refined before you have programs which are

consistent from state to state. Development of these resources requires adequate federal funding and federal technical support. It is a tremendous undertaking which requires a firm commitment from state and federal policy making governing bodies.

One final question was whether or not states are capable of implementing both solid waste and hazardous waste programs or must they be traded? State solid waste programs should not be sacrificed for a hazardous waste program. Many of our existing hazardous waste problems are, in fact, the result of past improper solid waste management practices. If not properly managed, todays sanitary landfills may be responsible for future environmental problems. Proper management of society's solid wastes through source reduction, resource recovery and recycling coupled with strict enforcement of our hazardous waste statutes will serve to minimize future problems. Regulation of small volume hazardous waste generators and the proper management of hazardous materials by small businesses and home owners can serve to assist in this effort. Solid waste management programs should complement hazardous waste management programs. The current federal approach of deleting funding for solid waste management programs and expecting the states to assume total financial responsibility is a myopic one. States can assume some of the responsibility but federal support is needed to ensure consistent and effective state programs. This is imperative and, in fact, is the appropriate long term solution. Thank you.

Representative Teresalee Bertinuson:

The next speaker will be Mr. Merrill Hohman, Director, Waste Management Division, EPA, Region I.

Merrill Hohman:

Thank you and good afternoon. I am going to try to address these questions that are in the program outline. Before I do, I want to make one comment on something that Brian mentioned and that was the need for a consistent program to manage hazardous waste around the country. I would argue that since the states have the right to do something more stringent, that what we end up with is quite the contrary. Rather than consistency, we have a complete patchwork, a hodge-podge of hazardous waste management programs around the country. I don't say that in a negative sense. I think that one of the good things in the statute is that a state can be more stringent than the federal government. The net result is that Brian regulates to 100 kilograms; Rhode Island regulates down, I think, to zero on certain materials and 20 on others; Massachusetts is 100; other states are 1,000. It is a complete patchwork. Some states regulate waste oil. Some regulate PCBs, some don't and so forth. So, we have got a very inconsistent program at the national level and I am not sure that is all bad nor do I think it is all good.

In terms of the questions - the first one is "Do the states have the capability to administer and enforce 'equivalent' hazardous waste management programs? What must states do to develop the capability?" When I try to answer that question I identify what I see as some of the problems that I

would like to mention. First, most of the states traditionally have a very competent staff in certain skills, principally engineering, which is the classic skill that state environmental agencies have employed. It has also been the classic skill that the Environment Protection Agency has employed, but it is not the skill mix that we need in order to carry out an effective program. There are other talents that we need. In New England much of the emphasis on hazardous waste and the problems from improper management focus on groundwater impacts. To be able to understand what is happening; to be able, for example, to properly manage those facilities where we require groundwater monitoring wells and laboratory analysis periodically and so forth, we need competent hydrogeologists. We need a large number of them. They do not exist. Furthermore, because they are a relatively short supply skill, those that do exist will be hired by private consultant firms who are not restricted by state salary levels and so forth. So, I think that will be a major problem.

I think another of the problems we also have in many of our states or at least some of our states, as well as in EPA, is turf battles. Who regulates groundwater, for example? Is it the hazardous waste management unit? Is it the state water supply unit? Is it the state water pollution control unit? In many cases it is all three. There are turf battles and disputes as to who regulates. Incidentally, I would admit that the EPA is not 100% innocent - we have turf battles also.

Brian has mentioned the lack of adequate enforcement capability and particularly the ability to level administrative penalties. None of the states in New England have that for hazardous waste management. We think it is a critical problem. It forces the state to either go the long route of going to the Attorney General, who is overworked and who has a lot of other cases - perhaps higher priorities than violations of regulations - to take that case and to prosecute it, including going to court. As Brian has indicated, the net result is 5 or 10 years later you get on the crowded court schedule and you get a cease and desist order from the Judge. Meanwhile the facility has closed, the owners have gone, and that is it. In the meantime, the hazard continues to be there. The federal government, of course, does have the ability to impose some pretty heavy administrative penalties. We have in a number of our states a good working relationship and Brian, for example, in the past has called us up when he feels a circumstance warrants an administrative penalty and called it to our attention. The federal government has then stepped in to enforce and I think that is part of the thing that we can do to help the states. Ultimately, I think the states need that kind of ability themselves.

The states lack budget. Obviously that is a critical problem. They can't get the staff without that budget and I think it is evidenced by the fact that in the news this morning - I don't know how many of you picked it up - there is a threatened strike of employees in the State of Rhode Island starting Monday morning. A number of the employees who will be on strike claiming inadequate salaries and poor working conditions and all the other things are people who work in the Rhode Island Department of Environmental Management and Hazardous Waste Management. Those are the people who are out enforcing the regulations

and they are out on strike. I talked to Bob Bendick last night. He has been running around all weekend trying to assure that things can't slip through the cracks while employees are on strike. I think it is traceable to a lack of adequate budget and adequate salaries. Dollars alone are not the answer though in terms of improving the staffing situation. We have cases where states can't use money even if they have it because their hiring practices are so archaic. In some cases they must go to the state legislature and get job by job approval from some legislative committee. They have civil service registers and examinations which have not been given for years and the time it takes for them to be able to hire people - the lead time - is so long that if EPA awards a grant today, they are lucky if they can get an employee on in 9 months or a year down the road. So, I think that needs to be streamlined.

The overall answer obviously in terms of what I think of the state capability is that the states do not have the ability at the present time to administer and enforce an equivalent hazardous waste program. I do want to qualify that though and say that I am convinced that the states have the willingness and the desire and are making a major effort to get to the point where they do have that capability. I think they should be complimented for the way they are responding to the problems that they do face.

Second question - "Are there adequate financial resources available to the states if the federal government curtails assistance? What will happen if state resources aren't adequate?" Obviously, no. At the present time I think we would all agree on that - EPA and the state people. Again, I do want to comment, however, that in some cases we have states where there is money sitting in reserve because they just can't use it.

In terms of what can be done, we are encouraging the states to take a look at permit fees and so forth as alternatives. I must also say that I get personally frustrated in some of our hazardous waste program areas. We all agree that this is a major environmental problem - people use the word crisis - but when it comes right down to putting your money where your mouth is, it doesn't happen. The states are constrained by severe budget problems, as is the federal government, but in some cases I think we are going to have to make some hard decisions. In the case of EPA, for example, in our Regional office we have curtailed some of our water pollution control work. We have moved those people into hazardous waste work over the last several years. I haven't seen an awful lot of that happening in the states. Maybe the states have got to start taking a look at that.

In terms of what is going to happen if there are not adequate resources, I think that could be anybody's guess. As I say, I think that there is an awful lot of public concern about hazardous waste. There is also a lot of concern on the part of industry who, by and large, want uniform regulation. They want to know where they stand. They don't want changing targets. They want to know what they have to do and they are willing to do it. I think all of those pressures are going to build to the point where if programs fall apart because of inadequate resources, we are going to see a big public uproar much as we have seen in the Superfund program where the charges have been that we are spending the money too slowly. I think you will see more of that at the state level.

The next question is "Solid vs. hazardous programs: must they be traded? Can states pay for both? What will it cost? I think the answer is pretty obvious. Those of you who were here last night and heard Ann Rappaport from Massachusetts describe what had happened to that state's solid waste program - there isn't any in the Commonwealth of Massachusetts, essentially. The federal government phased out the state grants. The staff were all moved into other program areas. We are now faced with a situation where, unless it happens to be a Superfund site, nobody pays any attention to municipal landfills. We have a number of municipal landfills on our Superfund priority list in Region I and I expect that if we don't do a proper job of managing such landfills, we are going to have a lot more.

I also recognize that without the pressure and drive of the federal dollar and a strong federal program, which no longer exists, the states are in a very difficult position. Much as we have arguments and disputes, friendly disagreements, in terms of federal government driving and forcing states to do certain things, the same situation exists in terms of state governments driving local governments to do things, such as to properly operate the town's sanitary landfill. I think that that is going to be a major problem. Unless we somehow or other acknowledge the fact that safe and proper operation of a local landfill is a legitimate responsibility of that local government and that they have got to manage it properly whether or not there is money flowing from Washington or whether or not there is money flowing from the state, we are going to have a real problem. Last night Ann Rappaport also mentioned the fact that in Massachusetts Proposition 2-1/2, which restricted the amount of real estate tax levied, for example, was a major factor in the ability to assure proper operation of sanitary landfills. I am disappointed to hear that kind of comment, principally because I myself, as a resident of Massachusetts, had no idea when 2-1/2 was passed that that meant that any town that was violating state law could continue to violate state law on the grounds that they would have to pay some more money to correct the situation.

Finally, "Will state legislatures pay for "equivalent" programs for their states? Where will the funds come from?" The answer to that is, you tell me. We have a lot of state legislators here. I think that you all recognize the public is out there demanding that you do something. Certainly the public is demanding that the federal government do something and we are trying to respond. I think there is going to be more and more pressure building up on the states. I don't think that it is possible for the states to simply sit back and say we don't have any money and if the federal government doesn't pay for it, we can't protect your health. Everybody maintains that it is the major problem and if it is, I think the money will come from somewhere to solve that problem. If it turns out that in your opinion it is not, then it won't be funded.

We have proposed in EPA a number of different alternatives, such as permit fees or taxes on waste generators as different ways to pay for the program. They all have their pluses and minuses. I encourage all of you that are involved in the legislative process to find out about those different techniques and different schemes and see if some of them might be useful in your state.

Representative Teresalee Bertinuson:

Unfortunately, the same public that is demanding that we do something about the problem - this same public is demanding that we cut taxes.

Merrill Hohman:

That is true. That is also the same public that insists that we enforce environmental laws and also insist that we should stay out of state and local government.

Representative Teresalee Bertinuson:

The next speaker is Mr. Raymond Miyares. He is a partner in the environmental law firm of Bracken & Baram in Boston. Mr. Miyares worked on a report which Bracken & Baram did for the Congressional Office of Technology Assessment as part of their three year hazardous waste control project that we heard Joel Hirschhorn discuss this morning.

J. Raymond Miyares:

It occurred to me in listening to the speakers, both today and last night, that three - perhaps not all four - of a list of truisms that economist Lester Lave has put together are true. The first of those is that, no matter what the situation, agencies can never afford to deal with more than a few major environmental risks or other kinds of risks at a time. This is not just the philosophy of the current Administration or of prior Administrations. I think it is inherent in the idea of regulation. Second, regulation rarely simplifies problems. Third, regulation rarely provides a complete solution to problems. The fourth one - I don't know that I agree with it - Lester says that, even if regulation is the best solution to a problem, doing nothing is often better. It seems to me that a lot of the problems that we have heard recited today and yesterday illustrate these truisms.

It also seems to me that what we are seeing now in the relationship between the federal government and the state governments with respect to RCRA implementation is a new level of regulation: Not only is EPA regulating hazardous waste generation, transportation and disposal, but it is also setting standards by which state programs can be judged. There is nothing inherent in the way that EPA exercises its oversight function that requires this regulatory approach, and I would encourage the states to refuse to look at it as a matter of regulatory compliance. The states have a wonderful bargaining chip at their disposal in dealing with EPA. That is that Interim Authorization is going to end. It has to end by law in 1985, and the states have the option of not accepting Final Authorization from EPA. They ought to be using that as a bargaining chip in dealing with EPA, in terms of what is an "acceptable and equivalent" state program.

The difficulties in achieving equivalency have been gone over, and I will try to summarize them real quickly. EPA has found it to be very difficult to put together an effective program regulating hazardous wastes. The whole task has

become very complex and very controversial. The recent history has been characterized by innumerable delays (not just from this Administration, but from the prior Administration), false starts, frequent policy reversals and, of course, litigation. All these delays, changes and false starts have produced a considerable level of uncertainty for the states.

Some of that uncertainty was probably unavoidable. Considerable technical uncertainty produced regulatory changes and reversals on key points and this uncertainty is likely to continue. We certainly know that we don't have the ultimate "universe" of waste covered by regulation. When the present universe was articulated, it was clearly denominated as being incomplete, and since there have been few changes made to the list, you can probably expect that there will be additional changes.

Regulatory changes have, in turn, provided a moving target for the states. It has been very difficult for the states to try to catch up to this moving target that EPA has provided for them. I understand that EPA intends to freeze the hazardous waste regulatory requirements that the states will have to meet in order to qualify for Final Authorization, and that should help some. But I think the real problem is that the states have their own hazardous waste agenda, and it is not always the same hazardous waste agenda that EPA has provided for them.

In particular, I have observed at least 15 kinds of things that states are doing with respect to hazardous wastes that are not on EPA's agenda for the states. Limited bans on landfilling, for example, requirements for consideration of the use of feasible alternative technologies before approval of landfilling is approved; the imposition of state hazardous waste fees and taxes; the establishment of strict liability of facility owners and generators for the health consequences of hazardous waste activity; the expansion of the universe of wastes regulated; the elimination or narrowing of the exclusions and exemptions - the small generator exemption, for example; the licensing or permitting of waste haulers; more extensive or detailed manifest requirements for tracking of hazardous wastes than what EPA requires; more stringent facility standards; planning requirements for waste stream reduction; on-site environmental monitoring requirements; hazard classification; facility siting; state-initiated cleanups; and variance procedures to balance equities in individual cases. All these things are being done now in at least some states. They are on the states' agenda and are of concern to the states in addition to trying to hit EPA's moving target as they go.

Most states have achieved Phase I Interim Authorization, finally, but it has not been a very smooth process. EPA is constrained to use the standard "substantially equivalent." The law says that in order to receive Phase I Interim Authorization, a state program must be "substantially equivalent to the federal program." EPA's official definition of "substantially equivalent" is "to a large degree or in the main equal in effect." EPA has noted at least two kinds of effects: effect in helping protect the environment; and effect in the sense of requirements imposed on regulated industries and others. One who looks at the regulatory preamble where this definition appears would assume that the focus is indeed on the effects of state programs. In fact, it

seems not to be on effects at all, but rather on the means used to produce these effects. A lot of states ran into trouble in achieving Interim Authorization for this reason. For example, if they did not control identical universe of wastes required by EPA, Phase I Interim Authorization was denied.

To achieve final authorization the statute is somewhat more stringent. It says that the state program be "equivalent" to the federal program - not substantially equivalent, but equivalent. The state program must also be "consistent" with federal programs and state programs in the other states, and provide "adequate" enforcement of compliance with the requirements of Subtitle C.

It looks to me, from the draft guidelines that have been circulated, that the Agency is essentially demanding that states adopt and use EPA regulations pretty much exactly. The other kinds of efforts that I mentioned before are certainly not being prohibited, but there is little incentive in these guidelines from EPA to encourage them and, of course, no credit toward Final Authorization for whatever level of safety is achieved by doing those things.

Moreover, there may be one substantial disincentive: That is the spectre of having the state program declared "inconsistent" or even unconstitutional because it is too much more stringent than EPA's. EPA has announced that it will view as inconsistent anything that prohibits treatment, storage or disposal of hazardous wastes within the state if the prohibition has no basis in health or environmental protection. It seems to me that, if a state believes that it is necessary to prohibit certain kinds of treatments, storage or disposal, a unilateral EPA determination that there is no basis for the prohibition in health or environmental protection is going to result in a rather severe sanction.

Most states adopt one of four strategies for compliance with EPA's requirements. The first is what I call one-to-one mapping - the states set out their whole program, and then they set out all of EPA's program and try to draw lines to connect all the various pieces. This has proven to be necessary especially in states that have been the most innovative. The most innovatives states in many cases have had greater difficulty in obtaining authorization precisely because of their having been innovative.

The second strategy is what I call the federal copy cat approach. The state simply copies the federal regulations or incorporates them by reference. The third is the federal floor approach, by which a state simply makes sure that its program is always at least as stringent as the federal. The fourth is the federal ceiling approach, in which the state says it won't be any more stringent than the federal program.

Each of these strategies has a problem. But notice that all of the strategies are adopted, not to solve states' problems, but to achieve authorization. To the extent that resources are diverted from one goal to the other, I think that the impact of the state efforts is reduced.

With respect to adequacy of funding, the OTA report says that, on the average, about 75% of state hazardous waste program budgets come from federal grants. It seems to me that, in the future, state programs are going to require more money, not less. Therefore, if that 75% is not increased, there is going to be a problem. In contrast, I think the EPA strategy is to reduce that percentage. Indeed, until recently, I expected that the ultimate goal was to reduce the level of federal support for state programs to zero.

Basically, there are only two incentives for state participation in EPA's regulating scheme. One is the opportunity for a state to administer its own programs, instead of the federal government regulating hazardous wastes. The second is to get grants and the technical assistance necessary to a successful state program. The second may not be forthcoming after a few more years. The first may not be the basket of roses that the states sometimes think. It seems to me that, in light of the facts that the states are not receiving the increase in financial assistance that they require, that they don't have adequate technical information, and that they are not being given much latitude by EPA to develop their own programs, they ought to revolt.

Representative Teresalee Bertinuson:

The last speaker on our panel is Jackie Rams. Jackie established the first Washington office of the Association of State and Territorial Solid Waste Management Officials. She was its first Executive Director. She later became Technical Director and carried out several major studies of state needs and capabilities involving hazardous waste management areas. She is now newly associated with Camp, Dresser & McKee, Inc.

Jacqueline Rams:

I'm glad I only have five minutes left because I don't have too much to say. I think that the states would like to perceive themselves as having the capability to run the programs. Historically, the waste programs did reside at the state level. They have been permitting facilities for years and they always worked with their own constituency. They don't want EPA to come in and run their program because they have their own state-specific problems, geographical, socioeconomic and so forth. However, I think that the capability within the states does vary and I think that the states are honest, that there are obstacles that do exist. I would like to just run through them.

The technical obstacles are varied. As we know, there is not enough money for staff. Standards development in EPA has been poor, at best. There is a lack of data out there. There is no proven technology by which they can make decisions that they don't feel will come back sometime later on. We haven't answered the question, "how clean is clean?" The EP toxicity test is certainly unproven and shaky and in some states has been said to be a means of mismanagement rather than a real way of determining whether a substance is hazardous or not. We know that we don't have funds to hire people. Our inspections have decreased so there is a lack of enforcement. Subtitle D has

been completely wiped out and I don't think that is a lurking problem - I think that is a problem that is here right now that EPA is not willing to face and address.

We need R&D for the states. The institution and legal obstacles include lack of money for training. Safety equipment. How to handle going out in the field and taking samples. We need to increase the integrity of the state programs for the public by introducing a degree of hazard approach, so that people can understand what hazardous means and that not all substances within the universe have the same degree of toxicity or have the same hazardous nature.

The moving target issue is a problem the states are contending with. Commenting on the consistency problem - consistency doesn't necessarily mean uniformity. And, equivalency doesn't necessarily mean being identical to, and I think that those definitions are two of the main problems that the states face right now.

What can we do to avoid some of these things? Well, you could go out and try to support the new bill that OTA is talking about to create a tax on generators, because that will provide more money for the states for R&D, greater money for sites, and greater money for us to collect the data that we need to make good management decisions in the future. I think probably the last point I would like to make is about the integration of RCRA and CERCLA and the problems with competing state agencies with environmental statutes in general. We need to start solving that problem.

Merrill Hohman:

After I finished my litany of all of the problems that I saw that were out there in the states, I thought you would be interested in this. Brian passed me a note which said, Mel, if the states can't manage equivalent programs, why did you give me Phase IIA and B? My note back to Brian says, because we can't manage it completely either, so we will sink or swim together. I think that that is probably indicative of the fact that we do have to have a joint state-federal approach if we are going to be successful in regulating hazardous wastes.

Representative Teresalee Bertinuson:

That is probably a good way to finish up. Does anybody have a question that absolutely has to be asked? Okay, thank you.

CHAPTER V

CONCURRENT RCRA WORKSHOP

RCRA Problem Areas for States

Presider:
KENNETH TEDFORD, Assistant Attorney General, Connecticut Office of the Attorney General

Speakers:
JOHN H. SKINNER, Director, Office of Solid Waste, U.S.E.P.A.

STEPHEN HITCHCOCK, Director Hazardous Materials Management Unit, Connecticut

NORMAN NOSENCHUCK, Director, New York State Division of Solid Waste

- Is the small generator exemption creating future problem sites and economic inequities among states? Who should be exempted?
- Is there a need to complete the open dump inventory? What are the effects of its incomplete status?
- Will the national manifest system detect illegal actions?
- Will the RCRA land burial regulations protect human health and the environment? How do they affect the states?
- Can states be made full partners in development of final RCRA regulations?
- What problems are unlisted substances causing for states? Which substances do states want listed?

CONCURRENT RCRA WORKSHOPS: RCRA PROBLEM AREAS FOR THE STATES

Kenneth Tedford:

Another ambitious agenda. I'm Kenneth Tedford. I'm Assistant Attorney General for the State of Connecticut. I represent the Department of Environmental Protection in Connecticut in the field of hazardous waste. Our first speaker will be Dr. John Skinner, Director of the Office of Solid Waste, USEPA. Dr. Skinner.

John Skinner:

Thank You. I will try and answer the six questions that were laid out in the agenda.

The first one is, "Does the small generator exemption create future problem sites and economic inequities among the states and who should be exempted?" As you know, the way the small generator exemption under the federal program works is that small generator wastes are exempted from full Subtitle C regulatory control if those wastes are sent to a state-approved facility. So, if the small generator exemption is creating future problem sites, it's the state approved facilities that are creating future problem sites. And, even if we divert small generator wastes away from those sites, which I think is a very good idea to do, these sites could still cause problems. The nature of the problem would depend upon what level the small generator cut off would be phased down to. If it were phased down to say 100 kilograms per month, there still would be small quantities of hazardous wastes going to those sites. Even if the cut off was reduced all the way down to zero, there would still be wastes from other sources like residential sources; chemicals that people throw out in their everyday refuse would be going to those state-approved sites. So, if the state-approved sites are not safe for small generator wastes, I would offer that they may not be safe for any type of waste. So, I don't think that it's the small generator exemption necessarily that is creating future problem sites, although they may be adding to it and extending the problem to a greater extent than would be otherwise. I think it is the sites themselves.

Now, the second question, "Is there a need to complete the open dump inventory?" I would like to answer that question in the broader context of the following question: "Is there a need for a Federal program to deal with non-hazardous wastes?" In the past there have been two reasons given by policy makers against a federal program in this area. The first one dealt with the appropriateness of the federal role in this area. There are things that are not federal responsibilities. If "non-hazardous waste sites" are of concern to the public; if they are of concern to state governments; if they are of concern to local governments; it's state and local government's responsibility to do something about them and it's the state and local

government's responsibility to provide the finances to deal with those sites. The line of agreement was that federal activity in that area should be limited to several things - developing the standards, which we've done; developing the guidelines for state programs, which we've done; and providing some initial funding - there was about $50 million that was provided in the early years of the program. After that, it's really a state and local responsibility. That's a basic policy decision based on an interpretation of the role and responsibility of the federal government.

Tied into that is a budget priorities decision. There are so many other things to be done; there are so many things that are not being done well; there is such a tremendous amount that needs to be done in the Superfund program and in the hazardous waste program that the non-hazardous waste area just takes lower priority from a budget point of view than these other areas. In the competition for funding, it doesn't prevail as well as other activities. That was a decision that was made in the past Administration and it is a decision that has extended over to the current Administration, and it's a decision, as I said last night, that the Congress, has not reversed. Congress has extended the state grants program in hazardous wastes; and they have provided additional positions in the hazardous waste program above and beyond budget request. But they haven't reinstituted the Subtitle D, non-hazardous waste funding program.

Now, I think there are two facts that may cause that previous policy decision and budgetary decision to be reevaluated. The first one is that that decision was made before the implementation of Superfund effort. It was made before we realized the extent of the problem at "non-hazardous waste sites". It was made before we realized that if those sites are not adequately controlled through some sort of a federal-state relationship, that in the future we will be dealing with some of those sites under Superfund. The decision was made before policy makers realized that we are either going to have to pay now or we are going to pay later.

The other fact that I think needs to be considered is that if there is a trend towards treatment technologies, and incinerator technologies for hazardous wastes, or a trend towards stablilization of and neutralization of hazardous wastes, the non-hazardous residues of their processes will eventually have to be disposed of somewhere. Those residues are going to have to go to non-hazardous waste facilities. Perhaps there is a continuing federal responsibility for proper operation of disposal facilties for "non-hazardous" residues from hazardous wastes that have been treated, fixed and stabilized. In any stabilization and fixation processes there are some long term concerns about how well they contain hazardous constituents long into the future. Some of them look very positive, but the testing is relatively short term: it's a few months; in some cases, a few years. What happens after decades? Does the stabilization break down? Shouldn't someone be monitoring those sites to see if that does happen? So, there are new pieces of information and new considerations that perhaps should reopen this issue as to whether there is a federal role in Subtitle D. However there are very strong budgetary reasons and very strong policy considerations as to what the appropriate federal role should be. We will be laying those things on the table for Mr. Ruckelshaus

when he comes in and he is going to have to make a decision as to where he wants to draw the line.

The third question is, "Will the national manifest system detect illegal actions?" As I said last night, I think the national manifest system is working very well. States are following up on manifests very very closely and, for the most part, I think wastes are going where they should be going.

The next point I already discussed at length last night, "Will the RCRA land burial regulations protect human health and the environment?" They are very good regulations. They are very stringent regulations, but there are major gaps in them that need to be filled and eventually we should be moving towards a system which pushes wastes off the land to the greatest extent practical wherever that is possible.

"Can states be made full partners in development of final RCRA regulations?" If Norman Nosenchuck was here, he would fall over when I say, I think the states have been full partners in the development of the RCRA regulations. That means we consult with and listen to the states. We don't always agree with them and do what they want, but we do give them an opportunity to comment and we weigh their views as we weigh all views and come up with what we think is the best overall approach. We certainly do listen.

And, the last question, "What problems are unlisted substances causing for states?" The big area where there is a problem is with those state regulations or those state laws that say they cannot be more stringent than the federal program. If we have not listed a waste then the state is precluded from listing the waste. Waste oil is one area where there is a lot of state concern. We will be listing waste oil as a hazardous waste within the next year and those states that are constrained by their current legislation will be able to do so as well. So, very quickly, those are the answers to the six questions. Should we break or comment or....

Kenneth Tedford:

Would anybody like to ask any questions of Mr. Skinner? I have one question in regard to changing the regulation of the small generators which has been proposed as a regulatory change by EPA. If we go down from 1,000 kilograms to 100 kilograms as a regulated generator, in Connecticut we would add approximately 5,000 regulated businesses - is the federal government willing to fund the additional staff that is going to be necessary to make those inspections?

John Skinner:

That was precisely the reason why we established the cut off at 1,000. In the first years of the program, we wanted to focus our attention on the larger generators that produce the most amount of waste, whether it is 95% or 99%: Joel Hirschhorn and I can argue that all day. We were trying to focus the regulatory program on the fewer number of people who produce the greatest

amount of wastes nationwide. If we went down to a 100, it would add probably 150,000 generators nationwide and there would be an extensive compliance program. I don't know whether the level of grant support would actually provide the necessary compliance monitoring and enforcement actions. It probably would increase the cost of the program considerably.

Kenneth Tedford:

Connecticut regulates above 1,000 kilograms. In regard to the other generators we are finding that the transporters of these materials do require the small generators to fill out the manifest forms at least as a shipping document. So we are fortunate to know where the small generators are disposing of this material. Has that been your experience?

John Skinner:

In a lot of instances they are just able to take the waste and put them in a dumpster. There is no shipping document. The local trash hauler picks them up and dumps it with the rest of the wastes in their truck. In other instances the haulers are picking up separated wastes and requiring manifests or shipping papers. The haulers are not worrying about the cut-off level, they're asking them to fill out the shipping papers before they'll take the waste, mainly for their own protection, to know what they are getting.

Kenneth Tedford:

With this national manifest system are you finding that states are using a more aggressive enforcement due to the filing of the manifest with each state?

John Skinner:

The states are doing a much higher level of compliance monitoring with the manifest system than EPA is. In many states they are following up on each individual manifest. They discrepancies that we are not finding. But, nationwide we are not finding many manifest discrepancies, even in the states that are doing it. I don't know what your experiences have been.

Stephen Hitchcock:

Our experience has been that we are not finding them because they are not being reported.

John Skinner:

Even though they have to send you the forms?

Stephen Hitchcock:

No, I mean EPA's manifest regulations that require discrepancy reports, as you are not receiving discrepancy reports. I don't think that means there are no

discrepancies; I think it means that you are not receiving the discrepancy reports.

John Skinner:

Are you getting discrepancy reports or are you getting individual forms?

Stephen Hitchcock:

We are getting individual forms.

John Skinner:

And what sort of compliance are you finding?

Stephen Hitchcock:

Not too bad, except for the large number of manifests - we don't have a good handle on the situation because of the volume of paperwork. This is the reason that we don't want to go to 100 kilograms per month at this time. We have a very difficult time in trying to keep up with what we have now. To drop down to 100 would be an impossible task.

Kenneth Tedford:

Anyone else have any questions? OK. Thank you very much.

John Skinner:

I enjoyed being with you.

Kenneth Tedford:

For our next speaker, we have Mr. Stephen Hitchcock who is the Director of the Hazardous Materials Management Unit for the State of Connecticut.

Stephen Hitchcock:

Covering the suggested topics in the order in which they are listed on the program, I will speak first to the case of small generators. As Ken mentioned, originally our regulations were to regulate small generators down to the level of 100 kilograms per month. The legislature at that time said no - you are to keep the level at 1,000 kilograms per month just like the EPA. That was one of the times I think the legislature really did us a favor. We are getting in more than 100 manifests per day. In Connecticut, we track every manifest. It is not a discrepancy report. It is an impossible flood of paperwork. We have one data entry operator and we will have to hire another one because our present operator can't keep up with the flood. Our original intent was to get the first copy of the manifest coming from the generator when the waste load left his plant and then the final copy from the disposal site at the end of the journey. We would then make a comparison of the two.

The sheer labor of it is such that we are lucky to be able to enter in one copy. We do not have as good control over what is happening as we had hoped. We can track in a manner, not as well as we thought, but certainly far better than the EPA system of merely waiting for a discrepancy report from the generator. I think EPA is living in a dreamworld if they think those discrepancy reports are going to tell what is happening in the country. They just do not do it.

This leads into another kind of problem that we have and one I am sure you have too. This is the public perception that if you pass a law, all is well. The feeling is that if we pass a law saying you are going to have all small generators in the system, then we no longer have to worry about small generators. Unfortunately, somebody has to track those small generators and it takes money, a great deal of money. There is a consistent pattern of passing legislation, and thinking the problem is solved. Often times, no money is provided and, indeed, in many cases it's even impossible if one does have the money. However, we do require all small generators to follow the rules and, as Ken mentioned, many of the transporters are requiring them to use a manifest. We have fairly good control on the present situation but the paperload will be just overwhelming, I think, when the cutoff drops down to 100 kilograms per month.

The question raises the issue of economic inequity and if I could ride a hobby horse for a moment here - my Connecticut hobby horse - this is another example of rules that are made and then never carried through, in this case, the Clean Water Act. In Connecticut, we have a large metal finishing industry. Many of them are rather small companies with just a few employees. The managers of these small companies are completely baffled by the state, by the EPA, by RCRA and the whole regulatory apparatus. They don't have the time, the money or the expertise to follow through on some of these requirements. We have insisted that these metal finishers pre-treat all waste water discharges so that none of their discharges go into a stream. We forced the companies to put on expensive treatment systems and then their wastes piled up on the land. Now we are saying, it is piling up on the land; it is hazardous; you have got to take it away and do something with it. The places where they had previously taken it do not meet the RCRA standards, and we are closing these disposal sites down. The time is approaching when there will be no place for the small metal finishers to take their sludges unless they want to go to Niagara Falls, New York, or Pennsylvania or Ohio. Now, mind you, at this same time, the metal finishers in our neighboring states are still discharging their wastes directly into the streams. Because we followed the EPA and the Clean Water Act and required a high level of pre-treatment, we are economically destroying the metal platers in Connecticut while just a very few miles away, metal platers doing exactly the same type of business are discharging into streams just as they were 10 years ago. I think what we need is not for EPA to pass RCRA, or pass the Clean Water Act, or pass small generator regulations, or pass manifest regulations, or pass this or pass that. What we need is the EPA to make sure that the rules and statutes that are enacted are followed through in every state. It is not enough just to pass a law. I feel EPA can be criticized for not following up on such laws and regulations.

The third thing on the program list is the open dump inventory. In Connecticut, of about 150 dumps, we have 27 yet to inventory. Unfortunately, the withdrawal of federal funds has forced this program onto the back burner. If the dump inventory is to be finished, someone is going to have to provide the money because with limited manpower and funds available in our state, our efforts will go to other things first.

Next on the list is the national manifest. Mr. Skinner seems to think it is very effective at the federal level. I think that it is very ineffective at the federal level. As you know, all the federal regulations require is a discrepancy report. The generator makes out his manifest and sends it along with the load of waste. If the manifest comes back from the disposal site saying something other than he expected then he has to report this discrepancy to the federal government. Because the discrepancy reports are not coming into EPA, that does not mean that the program is running correctly. If you are sitting in Washington and no reports are coming in, you say, "This is great, no discrepancy reports; there is no discrepancy." Any of us here in the field know that that is just not so.

We have found even with the New England system where we are tracking shipments closely, things can go wrong. For example, about a year ago, we went in with the State Police and searched a warehouse in Stamford, Connecticut - a company by the name of Trichem. They had hundreds and hundreds of barrels hidden there. The contents and origin of some of those barrels were interesting. For example, a firm in Pennslyvania's wastes were found in the warehouse. Their barrels had all been correctly labeled, and correctly manifested and supposedly had been taken down to Alabama. The company even had the manifest back. We told them their barrels did not go from Pennsylvania to Alabama, but rather to Stamford, Connecticut, and were sitting in a warehouse and that they should come and get them. I can assure you there were many unhappy companies in the Northeast. So, manifesting is not perfect, but I think what it does do is help us keep some track of the waste and in case of enforcement, does provide criminal action against people that illegally transport waste because of misuse of the manifest. We commonly go after them on that basis. I think it is a means of enforcement even though it may not prevent illegal actions initially. At the least, it provides a tool for prosecution.

The next thing on this list is land burial regulations. Our main problem has been with the degree of hazard. You may remember when the EPA was first setting up its system, many of the states - ours, among them - wanted a degree of hazard. In other words, those things that were less hazardous would have less restrictions on how they were to be handled. The EPA said no - there are no shades of gray; everything is either black or white. The result, as I mentioned before, is that metal sludges have no place to go in New England and must be shipped out at great expense. Our own feeling is that something like metal sludge can be safely handled and at least temporarily disposed of safely without the necessity of going to a secure landfill at great expense. We feel that the land burial regulations would be improved if there were a tiered system with degree of risk.

The next subject is on the role of states, vis-a-vis the EPA in dealing with regulations. As I am sure most of you have found as these regulations come out, more and more of them are interpretive. Being from the states we would rather have a state interpretation than a federal interpretation although we would be willing to have, I think, a regional interpretation. Unfortunately, the interpretations always go down to Washington and disappear for about two or three months and then come back. Sometimes the interpretations need interpretations. For example, the financial requirements are quite long and involved and we have, with the help of a grant from EPA, just finished studying them. Of all the companies that sent in their paperwork for the closure and post-closure requirements, not a single one was correct. The reason was that nobody could understand the regulations. Each company had to interpret them in its own way and nobody's interpretation was the same as anyone else's. We need better movement on interpretation of these rules in order to meet the federal requirements as well as the requirements of the states who actually have to run the program.

The last thing on our list is problems with unlisted wastes. Some of them were common ones like PCB's and asbestos were not on the original RCRA list. PCB's in Connecticut however were made "hazardous" by the state legislature. We feel we can deal with asbestos ourselves and that it does not present a great problem. The main worry generally has been with some big volume materials, for instance, paint waste. These regulations are in limbo. About two years ago, the EPA "temporarily" excluded them - temporarily in quotes because that was two years ago and apparently they have been forgotten since. I think this again is a matter of interpretation. Things done in Washington that look fine in Washington sometimes run into problems out in the states.

Kenneth Tedford:

We also have with us Mr. Norm Nosenchuck who is the Director of the New York Division of Solid Waste and responsible for hazardous and non-hazardous programs. I would like to nominate him for Chairman and Chief Executive Officer of the USEPA Fan Club. That was quite a performance on EPA this morning. That would be interesting if you could have the state people examine the new administrator of EPA and let the states vote on whether they would accept him as the Administrator.

Norman Nosenchuck:

I appreciate the comments. I was just digging through here to see if I had some of the comments from a talk that I gave not too long ago in New York City, at the request of Congressman Ted Weiss, at a Congressional District Conference that they have been doing for about 22 years. I was on a panel with Hugh Kaufmann and Linda Greer,and Lois Gibbs; nobody showed from EPA and Congressman Mo Udall had talked about how nobody was going to be there. The point is, it is not a question of hammering on EPA, just for the sake of hammering on EPA. It is a question of trying to recognize that the public trust that EPA had has absolutely been misused. EPA has not adequately implemented their RCRA and CERCLA programs, and that is unfortunate. What EPA has done in general is that it has led you and led us right down the path by

saying that there is no problem, when in fact there is a problem. EPA has refused to acknowledge the extent of the problem. Some of the things that I said this morning are of tremendous concern to those of us that are responsible for state programs, that are trying to develop the appropriate regulatory and enforcement programs to protect the public health and the environment within our own states. EPA, unfortunately, hasn't produced on their end of things. You talk about the open dump inventory. I have followed EPA's Rita Lavelle in testimony before the House, before the Senate, while she was there, and I have heard her tell these Senators, and tell these Congressmen that there is no problem: that the states have the total capability to handle the municipal solid waste program; that EPA knows all the sites that are out there and are open dump problems and not to worry about that. You know, it is unfortunate that you have statements like that. You heard me talk this morning about her philosophy concerning Section 3012, the hazardous waste site inventory portion of RCRA. Her philosophy was, there was no problem as far as she was concerned. The states weren't entitled to the RCRA section 3012 money and shouldn't get the money. It is really unfortunate.

I would like to read to you from my testimony this Wednesday before Congressman Gore and the House Committee on Science and Technology, Subcommittee on Investigation and Oversight because this impacts all of us. This was a public hearing on alternative technologies for hazardous waste disposal. I talked about things like this: I described the New York State Department of Environmental Conservation's policies to minimize the volumes and types of hazardous wastes being disposed upon the land. Secure land burial is not an appropriate technology for many wastes and is not the optimum technology for the disposal of others. Joel Hirschhorn talked earlier about the OTA report, Technologies and Management Strategies for Hazardous Waste Control which contains the following statement on page 156. "...it is preferable to permanently reduce the risks to human health and the environment by waste treatments that destroy or permanently reduce the hazardous character of the material, than to rely on long-term containment in land-based disposal structures." I said that "EPA's continuing failure to formulate a uniform national policy to prohibit land disposal of hazardous wastes which are environmentally persistent, have high environmental mobility particularly in a ground water soil environment, are proven human or animal carcinogens, are highly toxic to humans, plants and animals, or possess highly hazardous physical properties, such as explosiveness or flammability, and to force a transition to more appropriate technologies is a disservice to the American public. It is very difficult to justify and accomplish unilateral state action to ban land disposal of toxic wastes or to require the development of alternative treatment technologies for destruction or detoxification of hazardous wastes without federal action for appropriate and national standards. Stringent requirements on industry by an individual state could easily result in the loss of existing industries to other states that allow land disposal. The management of hazardous wastes is clearly one of the most pressing issues facing the nation today and will continue to be of significant concern for many years to come. Therefore, considering the magnitude of this problem, its projected longevity and the concern of the public, New York State

has focused its attention on two related program elements which are helping to discourage land disposal," and I described them: "The imposition of stringent regulations on existing and future land disposal facilities and fostering the development and implementation of alternative technologies by creating disincentives for the continued reliance on land disposal."

What we suggest in New York is we have realized that a step by step approach will likely be necessary to reduce our dependence on land disposal. Our goal must remain the phase-out of land disposal for the maximum extent feasible. Alternative means of treatment, destruction, detoxification should be the only acceptable methods, starting initially with the most toxic organic wastes which nearly always can technically be destroyed or put into a less hazardous condition using incineration, chemical processing, neutralizations, stabilization, fixation, solidification or other treatment. Organic wastes, in most instances, can be incinerated with proper air pollution controls leaving small quantities of relatively non-hazardous residuals. Many inorganic wastes can be stabilized, fixed, solidified or otherwise immobilized to minimize the escape of inorganic pollutants. Land disposal must ultimately be acceptable only for treatment residues, immobilized wastes and non-treatable wastes. Non-treatable wastes include soils or other materials contaminated with small quantities of chemicals such as spill, cleanup debris. Again, EPA has yet to come up with this national policy. There isn't one. There just isn't one and that is unfortunate.

I also talked about some of the things that we are doing in this area - some of the things that we have encouraged the EPA to do. In New York State we require what we call long-term planning for the major commercial hazardous waste treatment facilities. We have required this unilaterally. At the present time, commercial hazardous wastes management facilities, especially those who plan on land disposal, must submit to our department 10-year development plans which are updated annually and which delineate the development and implementation of high technology alternatives. I described those - incineration, neutralization, fixation, and chemical detoxification, principally to minimize reliance upon land disposal. In fact, approval by the State Department of Environmental Conservation on future hazardous waste landfills will be contingent on the applicant's implementation of their 10-year plan. That is one of the things that we do.

We also have a requirement for on-site monitors. We require our major commercial hazardous waste disposal facilities to pay to the Department a certain amount of money on an annual basis so that we can hire people who are on this site at all times that the site is in operation. Those people work for us. These amounts of money are paid for by the permitees. It is of interest to note even in connection with the closure or the upgrading of municipal open dumps - non-hazardous waste open dumps - where we have concerns that because of the magnitude of the problem and the possibility that hazardous wastes might have been deposited in the past, that we want to have a person on this site at all times. In this case we want the municipality to pay for our costs for these on-site monitors. This is far over and above our normal on-site inspection that we would normally do under our regulatory program.

Audience:

Are you doing that right now?

Norman Nosenchuck:

We are doing this right now. Fortunately, in connection with our program, our legislature, assisted by Maurice Hinchey in the State Assembly, provided us with the capability this past March, through the environmental regulatory fee legislation, to hire additional people in the hazardous waste management area. Where we have been hurting in New York is in the municipal solid waste management program because we have been forced in the past to shift our resources from the so-called Subtitle D activity to the Subtitle C activity because that is where the funds went, to the point where we just don't have enough people in our municipal solid waste program. We have taken the national lead, in my opinion, in resource recovery. I believe that we are the only state that provides construction grants for resource recovery facilities.

The big sleeping giant, the big explosion yet to come in the whole solid waste management program is the municipal waste portion of the program. Under the federal loophole for small generator exemption too much hazardous waste is being deposited in landfills that are not designed to accept it - illegally deposited, I might add, but it is escaping through the RCRA loophole because it is not being tracked. The exemption generally excludes 1,000 kilograms per month - 1,000 kilograms per month is 2,200 pounds. If enough generators, producing even a ton a month, 200 pounds under the federal 1,000 kilogram exclusion, you bring 40 or 50 together just depositing in a particular landfill, then you start to have a major hazardous waste problem. What we are doing is we are creating problems in the future by allowing this activity. The open dump inventory was a real good idea. The federal government, I thought, was to be commended in coming up with the idea to inventory all of the landfills around the country and determine whether or not they failed this criteria. Unfortunately, the federal funds ran out and the EPA terminated all support to the states, as of September 30, 1981, in their open dump activities; on September 30, 1980 they terminated all resource recovery activity support to the states.

I have been testifying about our state policy on on-site environmental monitors for quite some time and I really would like to see the federal government adopt this. Let me read from our policy. "The Department of Environmental Conservation requires on-site environmental monitors at solid waste disposal facilities or sites (solid waste disposal would include hazardous waste, by our definition) that have a potential for serious or irreversible environmental damage or threaten the public health." We have certain criteria to determine which of these facilities require monitors. "Staff and equipment for monitoring will be provided by the Department, but each facility permitee operator is required to fund the cost of the entire monitoring operation."

Audience:

Do you do that through rules or legislation?

Norman Nosenchuck:

It is policy. We put this into permit conditions. I can tell you that we have two commercial hazardous waste landfills. New England should be quite familiar with them because I think that is where most of their hazardous waste goes. You don't have any commercial hazardous waste landfills here in New England. When we initially spoke with CECOS and with SCA and we told them what we were going to do - this and the 10 year plan thing, they went up to the roof -- but they came down and cooperated.

Audience:

Do you write the regs too?

Norman Nosenchuck:

Which regs? We wrote this policy. What we did, is by permit condition, we incorporated these requirements into the permits because our Commissioner has a lot of authority under our State Environmental Conservation Law. These two companies were thinking about challenging us in court and we told them, "Fellows, we will see you there". Reason prevailed and I can tell you that for these companies - it has turned out to their benefit. It is a plus for them when they sell their services nationally, they are advertising that they have on-site environmental monitors at all times. This proves to the people sending them wastes that New York State is taking a very close hard look at their operation; that it is a good operation. Once these companies understood that we meant business - I give them a lot of credit - they both submitted credible ten-year high-technology plans and have paid the amount of money that we asked. This is subject to an annual audit and review and they are entitled to know how we spend this money. They have been very cooperative. It was just initially a question of getting their attention and we got it. Once we got it, they became very responsive and I would like to commend them for their responsiveness. Other companies throughout the country and the federal government should follow our lead on this thing.

Audience:

Also, in the Senate, Senator Dunne has a bill in to create a hazardous waste management council comprised of government and the citizenry and to develop a 10-year management plan for the state, not only for individual facilities but for the entire state.

Norman Nosenchuck:

I'm not a politician. I did not mean to leave out the New York State Senate, because bear in mind legislation that is enacted requires two Houses - and both the New York State Assembly and the New York State Senate have been very responsive and very responsible in dealing with this problem in New York State. From our end of things, as the Executive Department in the

environmental area, we really appreciate it. We have had a lot of very good support from both Houses and we really appreciate it.

Perhaps some of you can take advantage of some of the things that are happening in New York State. On the other hand, we still have to get the federal government to provide at least acceptable minimum national requirements. As a state, I can tell you, it doesn't make us happy to see what is happening at the federal level. It doesn't make us happy to see the EPA inaction during the last couple of years - I know it doesn't make industry happy either. We need a good EPA in a proper oversight role among the states to insure that at least minimum standards are complied with. I believe, in general, that here in the Northeast we enjoy a very high quality of life and we want to protect our environmental heritage for our grandchildren, and their children.

There have been some allegations that without minimum national requirements for hazardous waste management, there might be situations where some state or territory in the nation might use that lack of requirement as an inducement to attract industry. This wouldn't happen if all states had the same level of concern. We are very concerned about that.
We haven't been happy with the troubles that EPA has been going through. There was a terrible lack of national consistency in EPA administering their program, both in RCRA Subtitle C and Superfund. I saw this lack of national consistency firsthand in the construction grants program when I was on loan to EPA Washington headquarters, at their request in 1975 and 1976, as a state person working all around the United States. I saw what was happening in the construction grants program. The same thing is happening here at the national level. I deal with many states around the country and I see what is accepted in one state or another state, in one EPA region or another EPA region. It is unequal.

I submit that in some cases the Phase I interim authorization for a state has been rubber stamped and not fully analyzed. They were rubber stamped to fill the big hungry EPA computer so that EPA could report to the Congress - look at all the states falling in line to take the RCRA hazardous waste management program over. Why do I say they were rubber stamped? Because, unfortunately, too many of those states are now telling EPA - hey, we need one or two more years for full authorization, even though, when they accepted RCRA Phase I they agreed to two years after the landfill regs came in place. The regulations became effective 26 January 1983, which means two years on top of that is 26 January 1985. Many states can't deliver a final program by that point in time. In New York we resisted Phase I authorization because EPA did not live up to their commitments that they put in writing - that EPA will pay for their fair share of the program. We also did not have the capacity to come up with the sufficient amount of people. Our position has now changed because the state legislature has enacted environmental fee legislation, which means we'll be able to hire more people for our hazardous waste management program. We intend to seek full authorization by the first quarter of 1985.

The fact that EPA isn't working on a full partnership basis with the states disturbs me and many other people. The reservoir of experience rests with the state programs. These are the people who are involved very closely with local governments, with industry, in trying to solve problems on a day to day basis. I submit, and I don't know who else from EPA is here, but I told EPA this and I wish that they would react to this, that there are too many people in EPA Headquarters or in regional offices, that don't have this experience, that don't have this knowledge. There are too many lawyers that are involved in the EPA program that are too interested in fattening out their resumes when they go into private industry. I submit all that. You know the track record speaks for itself. These are unfortunate truths. We need people who are knowledgeable, who understand the state concerns. The states need a much better working relationship with the EPA and I wish it would happen at some point in time.

Kenneth Tedford:

At what monthly waste volume do you regulate a generator in the State of New York? Do you use the 1,000 kilograms per month?

Norman Nosenchuck:

It varies on the type of waste. In some cases we go down to 100 kilograms per month.

Kenneth Tedford:

Have you found that to be an unusual burden in paperwork for the agency or for the generator?

Norman Nosenchuck:

Not at all. I think that is a red herring that EPA has been using.

Audience:

Can you explain your environmental fee program?

Norman Nosenchuck:

Let me just get out this piece of legislation. In New York we have a hazardous waste program fee. Let me read from the legislation. "All generators shall submit annually to the Department a fee in the amount to be determined as follows", and we outline it - $500 for generators equal to or greater than 15 tons per year and less than 100 tons a year of hazardous wastes; $5,000 for generators greater than 100 tons per year and less than 500 tons per year of hazardous wastes; $10,000 for generators greater than 500 tons and less than 1,000 tons per year; $20,000 for generators greater than 1,000 tons of hazardous waste. All facility operators are required to obtain a permit certificate for the treatment, storage or disposal of hazardous waste and shall submit annually to the Department a fee in the amount to be

determined as follows and this is in connection with all methods of hazardous wastes - treatment, storage and disposal, TSD facilities: $6,000 for each facility that receives less than 1,000 tons per year of hazardous waste - now these are TSD facilities; $15,000 for each facility that receives more than 1,000 tons per year of hazardous wastes. In addition, for each facility for which a permit is required to operate one or more landfills to receive hazardous waste they have to pay $100,000 and that is for the commercial facilities. If the landfill is on-site or is used just by one facility it is $50,000; $5,000 for each incinerator located at the facility operator's hazardous waste TSD facility. We have $5,000 for each unit which burns listed hazardous wastes for energy recovery; $12,000 for each facility which provides for treatment, storage or disposal of hazardous wastes or one or more surface impoundments.

Audience:

Is this money earmarked for the Department?

Norman Nosenchuck:

That is correct.

Kenneth Tedford:

How much money do you get a year?

Norman Nosenchuck:

Well, this just happened. I will tell you what we are figuring on. This was just enacted, but what we are calculating in the hazardous waste management area, we estimate based on these flat rates, including the transporter rates, an estimated $7,000,000 per year and that includes enforcement and everything.

Kenneth Tedford:

Is there any special procedure for utilizing this fund? Are there any limits as to what this amount of money can be used for? Is it only for enforcement or is it for potential cleanups?

Norman Nosenchuck:

No, this is not for cleanups. We have a separate piece of legislation for cleanups. This is strictly for the regulatory and enforcement part of the program. This is an Environmental Regulatory Fee Bill.

Audience:

What about transporters?

Norman Nosenchuck:

We have fees for transporters and we also permit transporters. I didn't get to the transporter fees.

Audience:

So, this will pay for staff and equipment connected with the regulatory program?

Norman Nosenchuck:

That is correct. We have a separate piece of legislation that was enacted July 27 of last year which provides a state hazardous waste remedial fund to clean up inactive hazardous waste sites - the New York State Superfund program. That is based on fees on hazardous wastes disposed of in landfills, treated by other means, or incinerated on-site. These waste end fees are effective after September 1, 1982. We had estimated initially that we would receive about $10 million a year under this state inactive hazardous wastes Superfund law, but the monies coming in are significantly less than that for a couple of reasons. One, I believe, is the depressed economy. It is a fact that as manufacturing processes decrease, the hazardous wastes also decreases because the waste is the by-product of the manufacturing process. Concerning wastes from the New England states, I am told that some hazardous wastes that were being sent to some of our commercial facilities in New York, are now being sent to other states outside of New York because of that $12 per ton fee for landfilling. They are being sent to the states that have a landfill type of operation and don't charge a fee.

Audience:

Do you put a fee on recycled hazardous waste?

Norman Nosenchuck:

No. Recycling, reuse, recovery have no fee. I have a guidance pack of information here that we sent out to the regulated community in New York State. Recycling, reuse, recovery is exempted. We use this money for staff, and for consultant contracts. We have let out five contracts statewide with engineering consultants to investigate suspected inactive hazardous waste sites in two steps. Phase I is to prepare an initial analysis of all available information concerning the site in order to develop an initial work plan for site investigation. We are doing this on 200 sites also using some of the Section 3012 money. We are getting $667,000 under RCRA Section 3012. The next phase of the work, Phase II, is the detailed site investigation. For Phase I work we estimate $3,000 a site. For Phase II work we estimate about $30,000 to $50,000 a site. In every single case, we notified by certified letter every known owner of the sites that we will be looking at. We told them the type of work that we will be doing, asking that they make information available to us, and told them that once we got the Phase I work finished we will give it to them and give them an opportunity to do the Phase II work if it is required. If they decide not to do that then we will go ahead with the Phase II work. All this work is necessary to determine how severe the site

hazard is. We use the federal hazard ranking system - the so-called Mitre model - and you have to do a fair amount of site investigation before you can even rank a site for National Priority List consideration. That is the direction in which we are moving. We'll also use this money as the state match for the state projects that we are involved in under the federal Superfund program.

Audience:

Could both of you, just for a second, comment of whether and how you think hazardous waste management regulatory systems will either help or provide a barrier to siting, forgetting for a minute the "not in my backyard" syndrome. Do you think that the regulatory programs that you are putting in place in terms of regulating existing facilities or EPA's RCRA regulations and the Subtitle C regulations, are going to have any effect on the siting issues?

Stephen Hitchcock:

I don't think so. Unfortunately, in Connecticut there are very stiff financial penalties for the first company to come in with a site but apart from that I don't think it would.

Kenneth Tedford:

What Connecticut's requirement is is that the first applicant for a site has to pay the upfront cost for developing the regulations which is anticipated to be about $90,000. There is a bill in the legislature to remove that provision from the Act. What we have had a problem with, as Steve has mentioned, is that in Connecticut we have metal hydroxide sludge due to the metal finishers and we have just issued orders to close down the two major dump sites and one has continued to remain open. We issued a cease and desist order yesterday and probably anticipate that they are going to violate it anyway and I am going to have to go and get an injunction against them. It is a very difficult problem because now the metal finishers have to transport it from the valley in Connecticut up to the seacoast in Buffalo. Obviously we don't want to lose that type of competitive advantage and incur the cost to our particular industry. That is a problem that we are confronting. We feel that on a scale on 1 to 10, the metal hydroxide sludge is about a 2 for degree of hazard, and feel that there is technology available to have a dump site in Connecticut. It is a question of where that can be located and whether someone is available and willing, if the bill doesn't pass, to put the money up front to get that particular site. So, we have a difficult situation.

Audience:

Do you see the lack of compliance - the cease and desist orders and that sort of thing - providing an additional barrier to getting new sites?

Stephen Hitchcock:

I think for the moment it is. I hope we can take care of that within a year or two, however.

Norman Nosenchuck:

I don't see that what the feds are doing has helped on the whole siting issue. As a matter of fact, what I am finding out, is that more and more states are starting to resist the importation of wastes from other states as a result of cleanup activities. I happened to be down south last week and I have some information from Baton Rouge where they pointed out the fact that the state of Texas had prohibited the importation of certain wastes from a hazardous waste pit in Alabama. So they said they would ship it to Louisiana and a temporary restraining order was issued in Louisiana. The Court argument on that was going to take place this week. All this happened Thursday and Friday of last week. It is especially interesting to note that more and more states are starting to resist importation, since every state that makes an application for a CERCLA cooperative agreement and makes application for RCRA Subtitle C monies clearly tells the federal government that they will not do that, and yet it is happening and what is EPA doing about it? I don't think they are doing anything about it.

Representative Barbara Bowler:

You cannot actually prohibit, can you?

Norman Nosenchuck:

I am just telling you that it has happened already.

Kenneth Tedford:

I think we will see it more and more in view of the State of Washington's prohibition on radioactive wastes which was sustained by the U.S. Supreme Court. The decision came down this week. We will have a problem now in regard to the states. The states are much more able to take immediate action on enforcement than the federal government is. A lot of the problems in Connecticut are illegal transportation, the waste site that the inspector during the RCRA inspection discovers and we have to take immediate action because they happen to be stacking their drums next to a river or next to some ground water or some wells. So, it calls for immediate attention rather than referral up to Boston and then down to Washington to get the authority to do this. At least with the enforcement people in the state agency we can refer right to the Attorney General's office. We can go in and check on the site and with the spill fund get immediate action and start remedying the situation.

Norman Nosenchuck:

What happens is you are going to start immediate action and they're gonna have to send some waste out of state. What happens if other states would follow the lead of Texas and Louisiana? I know you have one site here in Connecticut, according to the paper, where you have 10,000 tons of waste that you are going to exhume and send it to one of our facilities in western New York. What would happen if we would ban that? Where would it go? That, I think, is the issue.

Kenneth Tedford:

It is obviously the issue. I believe every state should be willing to set up some facility and obviously it calls for new technology and it is much better to destroy it, rather than to landfill it. The landfill is not the best method of disposal.

Norman Nosenchuck:

Let me ask a question of both you gentlemen and the New England representation. How come New England hasn't put into place or been able to site a hazardous waste management treatment facility? How come? You know why how come? Here is what I have been told privately. As long as states like New York are willing to accept the New England wastes you are going to avoid the issue.

Stephen Hitchcock:

I doubt that very much because our manifest records show that Connecticut imports more waste from New York than it ships to New York.

Norman Nosenchuck:

Where does it go?

Stephen Hitchcock:

To our treatment facilities.

Norman Nosenchuck:

Which commercial ones are we talking about?

Stephen Hitchcock:

The four we have.

Norman Nosenchuck:

I'm glad.

Stephen Hitchcock:

If I may make a bit of a challenge - one of our problems has been, I think, what Mr. Nosenchuck has implied or actually has stated, i.e. as more and more states start making their own unique system, it gets increasingly difficult to move wastes between states. For example, the New England states got together and formulated their own manifest system. We have expressed a willingness to accept anybody else's manifest on waste loads going to treatment sites in Connecticut. New York says no to any loads going into its state: it is either New York's manifest or nothing can come in. I think that it is unfortunate in this case that New York wants to fit all the other states into its procrustean bed. I think that is where the EPA has a real role in determining what is best overall and then insisting that the states meet these standards. What the EPA needs is minimum standards and proper oversight to see that every state is meeting these standards. At present that is not what they are doing.

Norman Nosenchuck:

Let me comment on that. Because, first of all, New York has worked with Pennsylvania, New Jersey, Delaware and Puerto Rico and each of these five states have all accepted the manifest from any one of the five states. What we have is a full tracking system. Our system is computerized.

Stephen Hitchcock:

As is ours.

Norman Nosenchuck:

And from the hazardous waste generator we must have the manifest information. That is the thing that is lacking. Hopefully, at some point in time, and the states, incidentally took the lead and I am not arguing between one region or another - but all the states in general recognized that there was a problem at the national level. The federal government said, there is nothing we can do about it. So, the states working together with the generators and transporters of hazardous waste, the Hazardous Waste Management Advisory Council, over a period of a couple of years developed a recommended uniform national hazardous waste manifest form. Now, the EPA has been making some modifications to the manifest procedure. What we did this March is contact a number of states, some of the large states involved in this hazardous waste management. We got their concerns and we incorporated that into our testimony because the information we have is that the form that they are working on will not produce the information the large states need. The large states primarily receive the hazardous wastes. What I was talking about - what you need is a commercial secure chemical waste landfill in New England - you don't have any commercial chemical waste landfills. You have solvent recovery operations and we are pleased that you have them, but in the meantime, we have to accept the hazardous wastes from this site in central Connecticut somewhere about 10,000 tons, if the newspaper article was correct - and that waste is taking away capacity that we need for industry in New York State.

Kenneth Tedford:

We are going to have to close this session now. This has been a stimulating session with differing viewpoints. Maybe you gentlemen would like to have boxing gloves later, but obviously our whole problem goes back to the federal government, back to Washington. Thank you all. It was an informative session. I believe you can split up now based upon the EPA Region you come from.

CHAPTER VI

SUPERFUND WORKSHOP A: EPA REGION I STATES

Part 1: EPA Regional Office Presentations

Presider:
REPRESENTATIVE TERESALEE BERTINUSON, Connecticut, Chairman, ERC Environment Task Force

Speaker:
MERRILL HOHMAN, Director, Division of Waste Management, EPA Region I

- How does Superfund Work? A Step-by-Step description.

- Superfund participation by states in each workshop
  - Sites on National Priority List
  - Specific work done at each site
  - Funds expended on each site

- EPA plans for future Superfund work in each state
  - Estimate of the federal and state shares in projected clean-up costs

- Findings of EPA national study on funding options for state mini-funds.

Part 2: State Presentations

Speakers:

REPRESENTATIVE TERESALEE BERTINUSON, Co-Chairman, Connecticut Environment Committee

REPRESENTATIVE ROBERT EMMET HAYES, Massachusetts

REPRESENTATIVE JAMES MITCHELL, Maine

REPRESENTATIVE BARBARA BOWLER, New Hampshire

ALAN BORIGHT, Legislative Council, Vermont

- Scope and degree of state's hazardous waste problem

- Adequacy of available funds

- Remedies state has sought or instituted
  - innovative legislation

- State mini-fund
  - source
  - mechanism
  - current andProjected fund total

SUPERFUND WORKSHOP

EPA Regional Office Presentation: Region I

Representative Teresalee Bertinuson:

Just so we all know we are in the right place, this is the Region I Workshop and we will follow the program. We will begin with the presentation by the EPA Regional Office by Mr. Hohman. Just briefly according to our outline, he will be going into how Superfund works with a step by step description; EPA plans for future Superfund work in each state; estimate of federal and state shares in regard to cleanup costs; findings of EPA national study and funding options for state minifunds. We have allowed a fair amount of time for this so it can be a really detailed presentation and certainly we hope to have some time for questions when Mr. Hohman is through. With that I will turn it right over to you, Merrill.

Merrill Hohman:

Thank you, Teresalee. To begin with, any time I talk about Superfund and have adequate time to get into detail, I figure I'm in trouble right off the bat. One of my favorite stories concerns an airplane that was flying over the Rockies and there were three passengers on it. There was a priest, a Boy Scout and a very high ranking EPA official As they were flying over the Rockies, the pilot came out and said, we have big trouble. The engines are failing. The plane is going to crash and we only have three parachutes for the four of us. However, said the pilot, you realize of course, that the FAA requires a detailed report in any plane crash and since I am the pilot, it is critical that I get back and comply with those regulations and so he took the first parachute and jumped out. The EPA official looked at the Boy Scout and the priest and said, of course you realize I work for the Environmental Protection Agency and we know so much about so many things that if I were to go down society would disintegrate, whereupon he grabs a parachute and jumps out also. At this point the priest looks at the little Boy Scout and he said, well son, you know I have had a long happy life and I'm well prepared to meet my Maker, he said, and I would love to have you take the last parachute and jump out and save yourself and grow up and be productive, and so forth, and the little Boy Scout says, Father, don't worry. That know-it-all from EPA just jumped out with my knapsack. So, whenever I start talking about the Superfund process and so forth in any detail I feel like I've got a knapsack and I'm at the plane door.

Let me try to go through, step by step, the Superfund process as it now exists and talk a little bit about where we stand in the New England Region and what we have accomplished to date. The Superfund process starts with the discovery of a site. That can occur in any one of a number of ways: telephone calls to the state or to us; a local official stumbling on a situation; most recently in one case in Massachusetts the town Public Works Department cleaned out the attic and discovered that somebody put some 55 gallon drums in the attic of the Public Works Department Office and they

didn't know where they came from since it had been so long since they had been there. So, we can discover these sites any way at all. As soon as we do discover them, of course, they come in to the office and we log them and start a file. That triggers the whole Superfund process, if you will. From that point we then begin a very methodical evaluation of that particular site, working in New England, at least, very closely with our states.

We go through a series of steps to evaluate that site in terms of whether or not it really is a problem and trying to find out all we can about the site. Generally it will start out with something as simple as a file review of any available information. Based on the results of that and other information, we may progress to the next step - you might visit the site; take a walk around the site; no samples, but just a visual inspection; talk to local citizens, for example, who might have some knowledge of what happened at the site. Again, if that step indicates the need for further investigation, you can then go in and possibly take some samples to determine what is on the site. If a suspect site, I probably should call it, makes it all the way through that process, the next step then is the infamous ranking system for inclusion on the National Priority List. I say infamous on the basis of some of the comments that have been made about the ranking system in the last two days, but be that as it may, it is the system we follow. Based upon the information we have on that particular site, generally in close coordination with the state, we will rank that site.

Now, we use a model which was developed for us by Mitre Corporation called the Hazard Ranking Systems Model - HRS for short - which examines a number of factors, assigns point values to each of those factors and then there is a calculation which ends up with a final score for that particular site. Basically we look first at the type and quantity of waste that is involved. Is it a waste which is highly toxic, highly persistent in the environment or is it something for which there is much less concern? Are we talking about a very small quantity of waste or do we know for a fact that there are 20,000 drums of that waste on the site, buried or on the surface? Once we make those kinds of evaluations, we then in that model, include and weight the model according to the potential impact of that contamination on health in the environment. We do it by scoring the threat three different ways: through the air, through the surface water and through the groundwater. We examine, for example, in terms of groundwater or surface water, the extent to which there are water supplies in the immediate area. Recognize, in terms of the groundwater, at least, that when we are doing this we may well not know whether or not those drinking water wells are upstream or downstream, if you will, of the groundwater flow from the site, but we are concerned mainly at this point with the fact that they are in an area within a radius where there could be an impact. When we look at that we also not only look at whether or not there are wells there, but also what size population is served by those wells or by the downstream water supply. We go through that whole process and end up with a score which is called the HRS ranking score.

There are two other factors that we also examine in addition to air, ground water and surface water. We also look at the potential for fire and

explosion and the potential for risks associated with direct contact. Those two factors are used to determine whether there is a need for a possible emergency removal response but they are not used in terms of ranking the site for the long-term cleanup.

The site is then submitted to EPA headquarters for inclusion on the National Priority List. Once it gets to headquarters to be sure there is no cheating, if you will, between Regions or lack of consistency, there is a quality control process with an independent contractor who does quality control checks on all of our submissions. After we get through that process and assuming the score is sufficently high, then the site is published or is proposed as part of the overall National Priority List. This is the process we followed to establish the sites that were on the list that was proposed in December of 1982, our first full National Priority List, of some 418 sites. That list has been proposed and we have sought public comment. We are now in the process of making that list final.

There is one override in the statute which a number of our states have used and that is that under the statute, each state is entitled to designate its top priority site and if that is done that site must be in the top 100 sites on the National Priority List. All of our states have designated top priority sites - many of them early on. I should back up and say that in December we published our first full National Priority List. There had been two prior lists - one in October of 1981 and another one in August of 1982, if I recall the dates right. We published those lists at that time recognizing that it was going to take us a long time to get through evaluating all of the sites and so forth and to have the complete system to actually come up with the National Priority List itself. We did have two interim priority lists and we made a policy decision that if you were on an interim list, you were then eligible for Superfund response at that point in time rather than waiting until December of 1982.

One comment about the National Priority List that I think you should be aware of - you will quite often see descriptions of sites and the description will say, X is the 18th worst hazardous waste site in the country according to EPA's National Priority List, or Y is the second most hazardous site in the country. Scores are misleading. A perfect score, I guess, in the system; that is, a site which scored the absolute worst on every one of those pathways, would score 70.00. The scores of the first 100 sites on the NPL are within one point of each other. So, although we rank them out on the decimal points, you should recognize how crude it is, and recognize that it was based on very limited known information and suspect information about the site. Certainly anyone who tries to convince you that the site that is No. 3 on the list is a worse site and a greater potential disaster than the site that is No. 85 on the list would imply to me that they really don't know the inadequacies in that list. It is a screening device and it does allow us to turn around and identify those sites that at least warrant some further type of Superfund response.

Well, you have gone through this whole process and you now have your friendly neighborhood dump as No. 93 or 21 on the National Priority List

that was published by EPA - what happens? Well, first you must recognize, I think, that under the Superfund Program, the fact that the site is on a national priority list does not mean that you are suddenly going to get a largesse of federal dollars coming in to solve the problem. Before EPA puts money into that site, we will look at a number of factors. One of the most obvious is whether or not there is a responsible party out there that is willing to clean that site up. We also will look at what other actions are happening on that site. We have a number of sites in New England where sites are on the National Priority List, but the state has enforcement action, such as a state consent order or something like that against the owner of the site and the owner is proceeding to clean that site up. One of the considerations we had early on in the process was, if there is federal or state enforcement action against one of these sites, should you list it. The answer that the Agency came up with was, yes, we will list it if the site warrants it based on the score, making the assumption that there are many cases where responsible parties will default on court orders or federal enforcement. They go bankrupt. They can't finish the job and the fund very well may have to be used, so we keep it on the list until such time as we are satisfied that particular site has been cleaned up in a manner consistent with the National Contingency Plan and at that point in time the site would be removed from the list.

If the site is on the list and the EPA decides that it warrants some type of action, however, from the federal level, the first step is to have EPA's contractor prepare an infamous document called a RAMP. They are called Remedial Action Master Plans - RAMP's. I say infamous, because of some of the comments that were made about RAMP's this morning and I will agree that in some cases the initial drafts are not very good. It does take a lot of work back and forth with the state, EPA and the contractor, but the intent of the RAMP is to identify what is known about the site, prior studies and so forth, to scope out the alternatives that might be available to solve the problem at that site. In other words, which kinds of things should be looked at from the standpoint of available technology, and what kind of additional information are we going to need about that site in order to be able to make a proper evaluation of all the alternatives that we are going to examine. So the RAMP will lay out a list of things that need to be done: groundwater studies, air monitoring studies and so forth that need to be done at that site; a time frame for doing those; and a general cost range for doing those. The result is a document which we can then go out to the public with and say here is our proposal for addressing this particular site. These are the kinds of studies we think we are going to have to have. This is the kind of timeframe we are talking about and the process that we will follow, with the types of things that we will be looking at. And, we do try at this point to get public comment back to us on the actions and so forth that we propose to do in that particular document. I would say one universal comment that we get on every RAMP is the time frame is unacceptable. That's a universal complaint.

After we finish the RAMP process, we now have a feel for what we are going to have to do at that site; the amount of dollars involved; and we are now in a good position to firm-up with the state some very basic decisions. Is

it going to be a state lead site, in other words, is the state going to manage this particular site or is it going to be a federal-lead site managed by EPA? We are then able to sit down and work up the cooperative agreement or contract which contains all the assurances that Bill Hedeman spoke about this morning that the states have to make for us to proceed with a site cleanup.

That cooperative agreement, together with what we call an Action Memo, at least under the present process, goes to EPA headquarters. It is reviewed by Bill Hedeman's staff. It goes to the Assistant Administrator for Solid Waste and Emergency Response or the Acting Assistant Administrator, as the case is right now, who actually is the one official in EPA authorized to make money available and to approve that contract. Bill did mention this morning that that process was one that was being looked at very hard right now in terms of delegating to the regions at least some of that authority to speed the process up.

Assuming that what we have developed in the RAMP and negotiated with the state is satisfactory, the funds are made available. We then execute a cooperative agreement if the state has the lead or begin our work if it is an EPA lead site.

At this point the actual detailed process diverts a little bit. I will just tell you what the two differences are. Under an EPA lead-site, which is one where we have a contract with the state but the actual active management of what happens at that site is carried out by EPA, we have already on board a national contractor. (NUS, Inc., handles this region,) who will do the engineering studies and so forth, the field investigation work and feasibility studies, evaluation of the alternatives, all of the classical engineering consultant services, if you will, and will come up with the recommended solution, which under the statute must be, of course, the cost effective solution for that particular site. If EPA continues in the lead, once there is an agreement on the remedy between us, headquarters, the state, and the public, we then go back to the state, work up a contract and cost sharing arrangement for the final remedy and that project is then turned over to the U.S. Army Corps of Engineers who have the responsibility to supervise the actual design and manage the construction, let the construction contracts and so forth for the actual construction at the site.

In the case of a site where the state has the lead under a cooperative agreement, once the funds are made available, then the state, of course, goes out and follows standard procurement practices, hires a consulting engineer, signs a contract after that is approved by EPA, and proceeds to do the engineering studies. They come up with a solution and present that to EPA. Once it is approved by EPA, the funds are made available to the state via another cooperative agreement and the state would then go out for bids, award a contract, and manage construction of the clean up of the site.

One of the comments that was made this morning is the amount of time it takes to go through this whole procurement process from the time that monies

are available. We are encouraging states and trying to figure out ways ourselves to speed the process up. One of our problems is that Superfund was enacted to address what people perceived as a major crisis. Unfortunately, Congress did not exempt it from any other statutory requirements affecting federal procurement; therefore, we have to follow the full federal procurement process, the Commerce Business Daily advertisements and so forth, and you can expect that from the time a design is complete it would take the Corps of Engineers at least 3-4 months to actually have a contractor on site ready to start doing some work with this procurement process. The same thing also applies in the states. The states do have to comply with the federal procurement regulations which require competitive bidding, 30 days minimum and so forth, unless the state is able to do a few things to move in advance.

One of my best illustrations to show what can be done if the state really wants to be innovative occurred at the first cooperative agreement that was awarded under the Superfund program. Maybe it occurred because we didn't know enough about what we were doing in those days. The State of New Hampshire had requested a cooperative agreement to do work at the Nashua, New Hampshire site, the Sylvester site. At the same time they came to us, they went out and began their procurement process for the consulting engineering work. It ended up, as I say, being the first cooperative agreement under Superfund in the country. We had a very nice signing ceremony when the offer was made to the state, but the way the process worked was - we presented the state with EPA's grant offer; the state official signed the grant offer, gave it back to me and then signed the contract with the consulting engineering firm. The state was ready to go and they were off and running. The site has moved along very well because I think the State of New Hampshire had a lot of experience with procurement of that type and was able to shortcut what might have been a long delay. We are trying to encourage all of our states to try to look at that to the extent that they can under their own state laws. I realize that in some states you can't do that. You have to have the money in hand before the State Administrative Office will let you advertise a contract. Anyway, the net result whether you go state-lead or EPA-lead is that ultimately at some point in time there will be the bulldozers and so forth on the scene and whatever the remedy is it will be implemented.

Now I have gone through kind of a step by step process from identification all the way to cleanup. As Bill Hedeman mentioned this morning, the experience we have had to date is that from the National Priority List ranking through the cleanup takes an average of 44 months. Since that is an average, you can well expect that some more complicated sites will take well over four years to have a complete solution put in.

One of the changing things in the process that I have just described is where enforcement fits into the whole process. Superfund clearly has a provision in there that many people read to say you can't spend any federal money on that site until after you have at least given the responsible parties the opportunity to do the work. That led early on in the process to a policy that we would have a very active enforcement process going before

we spent any federal money. The result of that was that before we would award the money to the state, for example, to do the initial studies - the remedial investigation and feasibility study at a particular site - that we would send a Notice Letter to any responsible party and give them the opportunity to come in and talk about doing the work. That got us into some problems at some of these sites when you realize there are 200 or 300 responsible parties, all of whom had to have these formal Notice Letters and some type of negotiation. For us to sit down and negotiate with a responsible party or with a large number of responsible parties as to who was going to do the study and so forth was quite a burden and slowed the process up.

There has been a significant change in recent months on that enforcement process. Right now, as a general rule, we will not send Notice Letters out to responsible parties until we have pretty well finished the feasibility study. That has several advantages. Obviously, it speeds the process up, and when we do sit down with responsible parties, we now have an idea what the solution to that site is going to be and what it is going to cost and we have something that we can talk about back and forth rather than just general concepts. I did read with interest the statement in the paper that Mr. Ruckelshaus, at his confirmation hearings yesterday, indicated that he was interested in looking at cleaning the sites up and then seeking cost-recovery afterwards, implying that at least he is going to look at the extent to which we have to even have that enforcement notice and process before we actually do the construction work itself. If we can drop that, again, that would be another way to speed the program up.

I talked quite a bit about the process itself. Let me go through some of the kinds of questions that were asked in the program - what is happening, virtually, site by site at all of the sites in Massachusetts. Let me tell you where we stand and what we have done to date in New England and if you have comments on specific sites we can talk about them.

To begin with, I said that we had a process of discovering sites. We have discovered more than 800 sites in New England at the present time and frankly, we haven't nor have the states really gone looking yet. These were sites that were called to our attention through a notification process or through citizens, through state files, from existing information and so forth. We have evaluated a number of those sites but we have got a lot more to go and we are working with the states and, hopefully, before the end of fiscal 1984 - in other words, about another year and a half, we will have documented some type of assessment of every one of those sites so that we know which ones we have to explore further and which ones really are not a problem.

In terms of the National Priority List, we have 38 sites on that National Priority List. There are 4 in Connecticut, 5 in Maine, 14 in Massachusetts, 7 in New Hampshire, 6 in Rhode Island and 2 in Vermont. Let me comment on what we are doing in terms of funding and Region I's response to the allegations that the Agency does not want to spend the Superfund money. The Superfund Program was kind of a transitional thing. Before we had funds available under Superfund - the Act was passed in December of 1980 - we were

using Section 311 of the Water Pollution Control Act to respond to spills of oil and hazardous materials. We had to phase in the Superfund program, recognizing that we did not get our first appropriation and allocation of funds from OMB until about June of 1981. So from December of 1980 until June of 1981 we were responding, at least in an emergency mode, to sites in New England using the 311 program.

Since we started the program we have done investigations or response of some type or studies at 195 sites in New England. We have obligated a total of $22.2 million, of which $20 million were from Superfund, with the other $2 million coming out of the old 311 program. I think the Region has done a very credible job. One of the figures that Bill Hedeman gave this morning was that we had obligated $78 million on sites on the National Priority List. Of that, better than $13 million remedial money has been in Region I. We certainly have been doing our fair share.

I would say, however, that the rate of obligations of money varies very significantly from state to state. It also varies very significantly from site to site depending upon where we stand. In terms of major obligations at particular sites - let me give you states first - funds obligated to date by state: New Hampshire is clearly out in front - they have gotten $11 million obligated at sites in New Hampshire; Rhode Island, $7 million; Massachusetts, $2.4 million; Connecticut, $540,000; Maine, $480,000 and Vermont, $25,000. We do not have a very expensive program in Vermont, at least yet.

In terms of major sites - we have had one site in New England completely cleaned up. It was cleaned up in the early days of the program and that was in Raymond, New Hampshire, the Mottolo site. We spent $745,000 at that site with a combination of Superfund and 311. That was a site where the only problem was drums on the surface. We spent that money to clean the surface up and that site has been cleaned up. Of the other major sites that have received obligations in New England, the front runner right now is the Picillo site in Rhode Island. We have obligated $6,500,000 on that site so far and the state now is finishing up a feasibility study to determine what the final cleanup on that site is going to be. Some of the $6.3 million went into studies; some of it went into removing buried drums from the site. So, if you talk about orders of magnitude, I would say that the Picillo site could cost somewhere in the neighborhood of $10 million before we get that one cleaned up.

Second place, right now, belongs to Nashua, New Hampshire. We have obligated $5,500,000 at Nashua. At that particular site we have completely contained or enclosed the site with a slurry wall around the groundwater that was contaminated. We've put a cap on top of it and, in effect, we have built a huge bathtub which is filled with contaminated groundwater. That was done because the first problem we had was to contain it on-site because at the rate it was moving off-site, the contamination presented some very significant health risks. The State of New Hampshire right now is finishing up studies on a long term program for groundwater treatment. When they finish those they will come in with a recommended treatment scheme and after

that is reviewed and approved some time this summer, we will be giving the State of New Hampshire the money to build that groundwater treatment system. I think, in order to give you some idea of that, it is probably going to be another $4 million, raising the NASHUA project up somewhere to $9 or $10 million.

We have other major projects underway. We have given the State of New Hampshire $2 million to do drum removal work and studies at the Keefe site at Epping, New Hampshire. At the Ottati and Atardian Goss site in Kingston, New Hampshire, which happens to be a site where we have had litigation under way for several years, we have just decided not to wait any longer for the Court and we gave the State of N.H. $1.75 million to begin to clean that site up.

If anybody wants some actual specifics, I have got figures including obligations and payments as of February 28 at all of these sites to give you some idea of what we are spending.

(Inaudible audience question)

Merrill Hohman:

Oh, yes, we are intending where we spend Superfund money - if we have somebody out there that we can nail, we are going to go for cost recovery. Right.

Representative Maurice Arnold:

Who files suit, you or Washington?

Merrill Hohman:

Basically my office initiates it. If it is going to be a formal litigation, the Regional Counsel's office in Boston takes it over. It then goes to Washington. Washington takes it over and after massaging it, refers it to the Department of Justice. Of course the Department of Justice functions as our lawyer to bring it into U.S. Court and file the case.

Audience:

In the meantime, who is taking the money on-site if you have an operating corporation? Any experience with them disposing of your assets?

Merrill Hohman:

We haven't. One of the things I was talking about with somebody from Massachusetts during the break is that there are two major problems that I don't think we have yet gotten a handle on from a legal standpoint. One is, if you have a company which is teetering, you know, they are about ready to go out of business, how do you prevent that company from taking their assets and somehow or other moving them around to the point where you can't get

them. I use a hypothetical case of the owner of a particular facility taking the money he had available in the facility or a big chunk of it and, for example, giving himself a $100,000 bonus for his service to the Corporation, then making a gift of $100,000 to his grandniece on his mother-in-law's side who happens to buy a condominium in Florida and lets dear old Great Uncle Frank live there for the rest of his life and my lawyers can't tell me whether there is any way I can stop that or the extent to which I might be able to go back and recover that gift, and so forth. So, that is a real legal question there.

The other legal question that we haven't yet addressed deals with the recognition that some of these sites are abandoned property - prime industrial abandoned property. If we go in and we clean that site up to the extent that it is now usable industrial property, who gets the profit? How do we handle it? Does the federal government take it and sell it and take the proceeds and split it with the state - nobody knows that answer yet, probably because we haven't cleaned up that many sites yet. But somewhere along the way, these are the types of legal issues that are going to have to be brought up in court.

Representative Barbara Bowler:

On that Nashua site, am I correct in thinking that once you put $10 million in it and you have secured it, the intention is not to move anything?

Merrill Hohman:

That is right.
Representative Barbara Bowler:
It is just going to stay there.

Merrill Hohman:

Well, it is staying there but the process is going to be for a groundwater treatment plant to treat that waste over a period of time, so that ultimately the contamination has been completely removed.

Representative Barbara Bowler:

Hopefully the land will be useful sometime in the future.

Merrill Hohman:

Yes. Right.

Representative Barbara Bowler:

Because the owner there made quite a case for herself and claimed that she wasn't paid enough for the value of the land.

Merrill Hohman:

I am aware of that. I am not sure how much value there is to land which is a Superfund site, particularly because if you are the owner-operator you are liable. It isn't worth very much as it now stands.

But, you know, there were comments by a number of people on technology, on the problems with containment and I think that site illustrates the kinds of problems we have with containment. Early on in the process the state's engineer came up with the idea of containing with a slurry wall and cap, in effect a bathtub, containing the contaminated groundwater and that was the process which was followed. But, when we got into that and began to design the process and so forth we became aware of the fact that at least some of the organic solvents that were contained in that groundwater have the ability to penetrate the slurry wall and that there was no slurry wall that we could build that would hold them forever. We estimated that in 7 years, 8 years, 10 years, that slurry wall was going to leak and the material was going to escape to the environment again and present a risk, so we went to a 2-phase operation. We have it held for some period of time as yet unknown, but we are not going to just rely on containment. We are going to treat it completely so that ultimately what is in that bathtub is some relatively clean level of water for a permanent solution.

Audience:

But under Superfund, New Hampshire will be the one maintaining and operating it.

Merrill Hohman:

New Hampshire has to assure O&M and long term payment, right. That site was one in which the whole issue of operation and maintenance was first addressed because that was one of the earliest sites in the process. The state will have a burden. That does get into the decision on the size of the facility. Obviously the bigger facility you build, the fewer years you have to run it. You know, that type of decision back and forth which is all being looked at right now.

In terms of plans for future Superfund work in each state and estimated costs, the only way I can estimate any costs at all is to give you some order of magnitude of what we have already spent. The RAMPs, for example, that we prepare on each of the sites cost anywhere from $15,000 to $20,000 to prepare by the time we get through with them. The field investigations - in those cases where we have actually had remedial investigations, extent of contamination surveys, and so forth - for example, at the Nyanza site in Massachusetts, we have spent about $500,000 in the studies of that particular site. These are not inexpensive jobs by any means. They are very complicated. You have already heard in some of the conversations, some of the discussions this morning, some of the types of problems that are involved; the need in some cases to develop new state of the art for measuring contamination in the environment; the fact that we are dealing in

almost every case in New England with groundwater contamination problems which are very, very difficult to track and to understand what is happening and so forth; all of those things tie together to make the program a very long one.

When we go out to the public, as I say, one of the most common complaints is, "Clean the site up now. Never mind these studies and so forth - let's get this thing cleaned up. It is affecting our health and it is critical that we do it." To the extent that EPA possibly could, believe me, everybody on my staff would love to do it. We are all human beings. The Project Officers on these projects are fully aware that the minute they have that site cleaned up to the point where the public accepts it as cleaned up, they are going to be heroes in the community and everybody likes to be a hero, including me. So, if we can clean them up overnight, believe me, we would do it. Unfortunately, we never cleaned up Nashua, New Hampshire before. No one else did either, so it was strictly trial and error.

Let me just tell you one little story about what has happened at one of our sites to give you some idea of the complexity and then I will close. At the Silresim site in Lowell, Massachusetts, which is an abandoned former solvent recycling facility, a number of the neighbors have a lot of alleged health problems, in terms of miscarriages, high blood pressure, children with coughs and respiratory problems and continually bloody noses, and so forth. The allegations were that the problems were due to the Silresim site and that air pollution from the site was affecting the health of these citizens.

EPA and the State of Massachusetts, a year ago, did what we might call a conventional air monitoring survey of that site. We went up and we measured organics in the atmosphere and so forth to the extent we could, along with the State. The net result was that there was no difference in that neighborhood than in any other urban area that you might traditionally expect to monitor. However, as a result of some other things that happened this past March, we went back and did another air pollution survey of the site and the neighborhood. At this particular time we brought in a van from a Canadian consulting firm. It happens to be a mobile van fully equipped with the latest in electonic gadgetry for measuring trace levels of contaminants in the atmosphere. It happens to have the ability to monitor while it is in motion, so that you can actually drive around the neighborhoods while monitoring. The result of a very intensive week-long study which cost us an arm and a leg, since this was state of the art equipment, was some rather startling conclusions on that particular site.

One was that based on the data we had and the opinion of the health people involved, air emissions from the site itself were not presenting any significant health concern whatsoever to the residents of that site or that neighborhood. However, we did find two industrial plants adjacent to the neighborhood that happened to be dosing the neighborhood with a chemical called Dimethylformamide which, strangely enough, the health people said would produce the types of symptoms that the people in the neighborhood were complaining about for a number of years. So the State of Massachusetts went

in under their existing Air Pollution Control Authority and ordered an immediate reduction in those particular two industrial emissions.

I tell that story because I think it illustrates the complexity - nobody up there ever thought that it might be industry; it had to be the site because it was there and it was on the Superfund Priority List. This is not to say the site is not a problem. It is in terms of groundwater and surface and direct contact and so forth, but it illustrates the complexity. We had to have specialized state of the art analytical techniques to even find this material that we found. It took EPA, the State Laboratory, a consulting firm from Canada and another consulting firm out in Waltham on the 128 belt to discover it and to be able to measure it, so it was strictly state of the art. I think the critical point is that we want to know enough about these sites so that when we go in and clean up, we know the neighborhood is clean. We do not want to make a massive investment in cleaning up a site, proudly stand up and announce that, henceforth your health is protected, only to discover later on down the road that we cleaned the wrong thing up, in terms of the air pollution problem anyway. It is indicative, I think, of the complexity that we have to deal with. So there is everything you wanted to know about Superfund in Region I and were afraid to ask.

Representative Teresalee Bertinuson:

Thank you. Just in case Mr. Hohman missed something, we can take a few questions.

Brian Strohm:

Do you feel that the current process adequately addresses the potential health risks associated with these sites? In other words, at this point in time, there has to be an inquiry or a lot of concern generated at the local level before you can justify the type of monitoring that is done.

Merrill Hohman:

Well, I will tell you. Brian raises a good point - the extent to which you do these kinds of studies. The real reason that we ended up doing this kind of study at Lowell, happened to be fortunate circumstances. After the study that was done a year ago last summer by EPA and the state with our conventional monitoring looking for the conventional contaminants, the State of Massachusetts found out about this so-called Taga Van, which stands for Trace Atmospheric Gas Analyzer, or something like that, and heard that this was state of the art and said, gee, let's bring them in sometime when they are going through Massachusetts. Let's see how it works. They brought them in and put them on the site at Lowell and they played around for a little while and the van then left and went off on another job. That cost the state $5,000 for the afternoon, to give you some idea, and that is all the money they had available to do that. But they were interested in seeing how it worked and what they could find out.

Having done it, however, they suddenly discovered that the pressure on them to announce the results was tremendous. The people had seen the van there and if you don't release the results you are hiding something - that type of syndrome exists at all of these sites. The net result was that the state went back to the consultant and the consultant frankly said, we tried it out; we did not have any standards; we had no quality control; we're not sure what the instrument readings were; and the state said you have to tell us what you think it was and they did. The state got a report. Unfortunately the report said these were various forms of amines. Many forms of amines are very significant in terms of health risks and what came out then at the end of February was that the state had discovered high levels of amines on this site and therefore this was a health risk. It got to the point, frankly, where the Governor sent the Civil Defense people up to start preparing plans for evacuation.

Fortunately we had been in the contracting process and were able to get the Van back the following week and we discovered that it was not amines at all. That particular instrument actually measures the contaminants in the atmosphere by being set to a particular atomic weight of a material and it then calculates and counts the number of atoms. Literally, that is what it does in a sample of atmospheric gas. It then calculates out - you get so many parts per billion down to three decimal points or something like that. What happened was the molecular weight of the amine, which they thought it was, and the molecular weight of the dimethyl formamide - a completely different kind of material - were very very close. You can't blame the state, you can't blame the consultant. I mean, they weren't asked to go in and do a rigid protocol. Lo and behold, you know, they showed up as the same thing and when the report was requested the only thing the consultant could say was, it looked like amines - 300 parts per billion or something like that.

As I say, we went up and at that point the concern was so great that we would not even accept the state of the art. We also had samples taken and moved to a laboratory in Waltham that had spent a lot of time and effort and were specialists in measuring amines of various types for some purpose or other and they discovered it was not amines - it was amide - which was a different compound. There were different levels. That is the type of thing you get into on these sites, however. Because of experiences like this you may be very very upset with the Environmental Protection Agency because I won't give you the results. The reason I won't give you the results is we have been burned enough by mistakes in the past. We are going to be very sure those results are properly quality controlled and correct before we let them out because once you get them out there and discover you made a mistake, there is no way to retract it and take care of that public concern.

Robert Cheney:

I have a question. My name is Bob Cheney and I'm with the New Hampshire Attorney General's office. As I understand it, before you can move into the cooperative agreement phase you first have to, as you have explained in your procedures, notify the potential responsible parties in the case. What you

try to do is get the responsible parties to clean it up before Superfund has to spend any money. You send the notices out to responsible parties and what kind of feedback are you looking for? What kind of factors go into your determination which allows you to eventually conclude that the responsible parties aren't going to do anything, so let's continue on with the cooperative agreement?

Merrill Hohman:

Well, I will tell you what I would like. It is a letter back that says, go to the devil, because then I could move right in and I can sue the company afterwards. That is the ideal thing. What bothers you is the letter from someone who comes back and says, let's sit down and talk because you then start negotiating and that takes time - any kind of negotiating does. In order to protect our ability to cost recover we have to be reasonable in the demands that we present somebody when they say they would like the opportunity to clean it up themselves.

For example, let us suppose that we have a cleanup which is going to cost $5 million. Well, if you are a lawyer for a responsible party and I send you a letter and tell you to respond in 24 hours, you call me up and I say, fine, come in tomorrow morning. You walk in and I say it is going to cost $5 million. Are you going to do it or not? You say I want to talk to my client. I say, no, it is now or never. Well that is probably going to be viewed sometime by a judge as a very unreasonable situation to put a responsible party in and the agency may lose their rights to cost recover. It has to be a judgment call and so forth. I think the important thing now is that we changed that policy. We are at least now able to go all the way through the study, note what the solution is before we demand a responsible party to come in and do something.

Robert Cheney:

I am looking at the situation where we begin a state enforcement action on a particular site and it continues on and during the course of the state enforcement action, state negotiations, the site gets listed on the National Priority List. I am wondering what I can do, as a State Attorney, in getting the proper documentation together which is going to convince somebody at EPA when we decide that the state enforcement action is not going to go anywhere, it is going to take me three years to get the case heard in court and we want to go the Superfund cooperative agreement route. I am wondering what kind of documentation do I have to present to EPA. Would it help to have the documentation ready to go to present to EPA so that it shortens that lagtime or EPA coming in and now making its own request of the responsible parties? If I have already gone through negotiations, gotten a rejection of my settlement offer - will EPA just pick that up?

Merrill Hohman:

It is going to depend on case by case and the judgment that our lawyers have to make. I happen to subscribe to the philosophy that once we publish the site on the Priority List, if you had something to do with that site, you have a responsibility to check it out and come in and offer to clean it up without us having to chase you. That is not agency policy. It just happens to be my personal philosophy on it.

Robert Cheney:

In that instance, if they brought enforcement action and the other party is contesting ... Why would you have to go any further than that?

Merrill Hohman:

I think in those cases, for example, where people are under a state enforcement order and haven't done it - my argument with the attorneys in some cases has been - why should I give them a chance to say no to me too. He has already refused to clean this site up, even though it was not me that asked him - it was the state. So, the heck with him. Let's go. Never mind fooling around with the negotiating.

Audience:

You mean you did that?

Merrill Hohman:

On a case by case decision, but it is a decision right now that has to be made by Washington on that type of situation. One of the suggestions I have made on streamlining Superfund is a legislative change which says that the Fund shall be used in every case and then the judge shall sue responsible parties for cost recovery. Just flat out, say, let's go clean up and then do cost recovery. But the statute right now basically does not say that. It says the President can spend money from the Fund only upon determination that a responsible party is unable or unwilling to clean the site up. That is why the interpretation is that before we actually do the physical cleanup at least, we have to give the responsible party the opportunity to do the cleanup instead. That is when you get into big multi-generator negotiations and so forth, if they come in and express an interest in doing it.

Audience:

In order to get Superfund dollars the state has to sign a cooperative agreement and I've seen a couple of these and I have had to work on one recently and quite frequently, cooperative agreements have a section called Special Conditions attached to them. Obviously, EPA is in the driver's seat. If we don't like the Special Conditions, you can say, I don't want to give you the $4 million, so we are not exactly in the position to negotiate very well on these. Sometimes we find that those Special Conditions are a

little tough for the state to swallow. I'm just curious. What is EPA's philosophy in terms of listening to the state's concerns on those? As I said, you are in a position, at least economically, to say take it or leave it.

Merrill Hohman:

That is probably EPA philosophy. If you want our 90%, you are going to do what our Special Conditions say. There are some in there that cause a lot of problems. Right now our Cooperative Agreement has, I believe, 35 Special Conditions attached to it. Most of them are boilerplate. If we had a particular unusual circumstance at a site we would add 36, 37 and 38. For example, as I recall, one of the most recent additions of Special Conditions to the standard list is that if the state has litigation against responsible parties underway, they will withdraw that litigation in state court and join EPA in Federal District Court, since that is where you have to recover under Superfund. You can't recover in a State Court. Those kinds of things are in there and they cause a lot of problems. They are in there to assure, from a legal standpoint at least, that the sanctity of the Fund is protected; the EPA's rights to recover 90% of the money is protected.

Audience:

Given the problems that some of the states have with Special Conditions, do you know if that is affecting at all the number of cases where states have assumed the lead versus when they are leaving the lead?

Merrill Hohman:

No, it has not been a factor at all.

Audience:

Is there a breakdown that you know of between the ones that have...

Merrill Hohman:

Well, I will tell you - whether or not there is a state lead or an EPA lead, depends on the state to a great extent. In New Hampshire and in Rhode Island, every site we have something going on right now is a state lead. In Massachusetts, are out of the 14 sites, one or two are state-lead - the rest are federal-lead. The reason for that is Massachusetts now has their own Superfund. They have 14 sites on the federal list. They have 54 sites on the state list and the philosophy in Massachusetts is, look, we have a limited resource. We will take our people and clean up the sites that the federal government isn't going to help us clean up and have the federal government take the lead on those where the federal dollars are going to go in. That is, I think, the rationale that they are following - trying to stretch out available resources.

Audience:

Do you have any idea nationwide how many states have taken on the cooperative agreements as opposed to the EPA lead? Is one more expeditious than the other?

Merrill Hohman:

Depending on how you play it. I don't know what the state breakdown is. I think Bill mentioned this morning about 44% of the Funds go out through state cooperative agreements as opposed to federal lead and two-thirds of the sites have cooperative agreements - some kind of figures like that. Depending upon how aggressive the state is willing to go; it can be faster for a state. Example: the New Hampshire approach at Nashua, where all the time that we were negotiating the work that was going to be done in the cooperative agreement, the state was also out getting bids and doing the negotiations so that the day we made them the grant offer, they accepted it and immediately signed their consulting engineering contract. They can go faster, if they are willing to do something like that, than we can. The same thing might well be, in terms of construction. In terms of the start of actual construction in the state of New Hampshire, again, they were in with us negotiating the money in the cooperative agreement for their construction of the slurry wall and cap. They were out advertising for bids before they ever had money in hand. Again, it was a very, very quick process. The state of New Hampshire knows how to do it.

I have other states where the states have had funds for about 9 months and they do not yet have a contract for the engineering studies, for a variety of reasons, lack of resources and so forth. It depends really state by state as to the situation - which state has the experience and so forth. The State of New Hampshire is probably unique among our environmental agencies in that the State of New Hampshire actually awarded design and construction contracts under EPA's water pollution control construction grants program. They knew how to do it. In most other cases, the states themselves never actively awarded a design and construct contract. Rather, they managed and the local governments did the actual contracting. New Hampshire has people who know how to do federal contracting procedures at the state level. Many of our other agencies do not. They have to learn and it is a slow process.

Speaking of the construction contracts, I have one more comment I wanted to make. There was a comment this morning about Superfund and that it wasn't a Superfund. I just got curious. I sat down and did a little figuring out. Superfund is a great program. I have got $1.6 billion over a five year period. Over the last ten fiscal years EPA's water pollution and construction grant program has been at a $35 billion level - 10 times what is available for Superfund.

Representative Barbara Bowler:

Just a quick question and there is probably a good answer to it. You said when there is a federal lead - there is an outfit called NUS?

Merrill Hohman:

Yes.

Representative Barbara Bowler:

It just struck me that they have a monopoly in this region.

Merrill Hohman:

That is right. We give them a monopoly.

Representative Barbara Bowler:

How did you arrive at that?

Merrill Hohman:

Competitive bidding. National competitive bidding.

Representative Barbara Bowler:

How long does it last?

Merrill Hohman:

They have, I believe, it is a three year contract, with two renewable one year options or something like that. It happened to be the largest contract ever awarded by the Environment Protection Agency.

Representative Barbara Bowler:

They do all of your lead work?

Merrill Hohman:

All they have to do, if I want them to do engineering work for me, all I do is get the okay from headquarters. I give them a piece of paper with a task order and what I want them to do and they go do it. They then bill the Agency.

Representative Barbara Bowler:

They must want there to be a federal lead whenever possible.

Merrill Hohman:

Sure, sure. They have performance requirements and everything else. Sure, they would like everything to be federal lead. There is more opportunity, more work for them. That is one of the things that we try to encourage states and we have suggested to some of the states, particularly where you

have a lot of sites. Why don't you look at what we did? Why go out and have separate competitive procurements on every single site? Why don't you go out and get a blanket, like EPA did? In some cases the response is, well, we don't think that would be acceptable in our state: you end up freezing everybody but one firm out. EPA took a lot of criticism when we did it because of that. On the other hand, I think the Agency decided that the ability to have a rapid response and not have to go to national advertising everytime we wanted to hire a consulting engineer was worth it. We did it and it is a good way to go.

Representative Teresalee Bertinuson:

Okay, thank you. You have been very generous with your time and your responses. I think we will move now into the second half of this program, which is basically a review of where the states are from our point of view. The people who are going to be on the panel come up.

Merrill Hohman:

Feel free to call us in the Boston Regional Office at any time and we will be happy to get you the information.

SUPERFUND WORKSHOP

State Presentations: Region I

Representative Teresalee Bertinuson:

Since we are rolling pretty well, we will keep right on and get a perspective of what is happening in our states. What we are going to be talking about for each state is the scope and degree of the state's hazardous waste problem. This is intended to mean basically cleanup problems rather than dealing with siting and taking care of what we are generating now since we are focusing, not on Superfund specifically perhaps, but on the way we are able to respond to the existing problems: adequacy of available funds; remedies the state has sought or instituted including innovative legislation; and then discussion of the state's mini-fund, the source of that fund, the mechanism by which it is collected and disbursed and current and projected fund total, if you have a fund. I am going to take the prerogative of leaving myself to last since I seem to have been on all day in one role or another, so we will start with Representative Hayes from Massachusetts.

Representative Hayes is a Member of the House of Representatives Joint Committee on Natural Resources and Agriculture, which recently passed this state's first Superfund legislation. He is also one of three House members to be appointed to the state's newly created Special Commission on Hazardous Waste and also represents the Town of Holbrook, which is the home of the Baird McGuire Chemical Company that currently ranks 18th - this is one-upmanship on where we are on the Superfund Federal Priority List. Mr. Hayes has also served as a Selectman for five years in his hometown of Whitman, Massachusetts.

Representative Robert Emmet Hayes:

Thank you very much. To begin with, the scope and degree in Massachusetts - presently Massachusetts has about 52 known hazardous sites. We have an additional 351 suspected sites which are going to require some on-site investigation. Adding to that another 500 landfills which we suspect of having potential problems as well and maybe we can get some feeling of the magnitude of the problem. Fourteen of the 52 known sites in Massachusetts are presently listed on the National Priority List. Two of them are in the top 10, called Woburn and Ashland and, as stated just a moment ago, one of my communities, Holbrook, is presently 18th on that list.

The state has an estimated 12,000 generators of hazardous wastes with only about one-quarter of those, approximately 3,000, presently registered and identified. We know of about 3,000 who have voluntarily identified themselves so that we do have a problem in that area in the way of further investigation and identification. Of these several hundred thousand tons of hazardous wastes generated in the Commonwealth each year, roughly 70% of that requires out-of-state disposal. Obviously, a large number of the sites in the State of Massachusetts involve groundwater contamination or potential

groundwater contamination and we have a particular problem with one site in Bedford Harbor which does not lend itself to the current Mitre Model for the ranking in the National Priority List and thus we have a feeling that it is of a greater magnitude than would at first appear.

As to the adequacy of funds - on March 24th of this year the Governor signed into law the state Superfund Bill. I call it a Superfund, but I guess it really isn't a Superfund by any means, just as the federal Superfund of $1.6 billion is not totally adequate, so too, the $25 million recently provided by the Commonwealth is not sufficient either. We do believe that it is an important first step and that it provides the Commonwealth with a pool of money to draw from immediately. If we look back in past history, beginning in 1977, the state addressed the funding issue through four different appropriations from a general fund with a total sum of $8 million. The difficulty was that they were all site-specific and thus they were not there necessarily when they were needed most and many times were based more on political decisions than technical considerations.

The state fund provides for $25 million of general bond authorization to be paid back in part through cost recovery on the guilty parties and also on fees levied against the hazardous waste transporters which will then, in fact, be internalized back to the generators to make up any shortfall each year. It is difficult because it is a new program.

Other innovative ideas in cost recovery - the law provides in Section 21E that the state Superfund provides for treble damages against the guilty parties. It also allows the Commonwealth to place a priority lien against the property itself. We are looking actively at source reduction and we are hoping that the fee mechanism provided in the law will help. Further pending right now in the Legislature is an additional piece of legislation which would allow the Division of Environmental Quality Engineering to assess fines directly against the guilty parties, thus avoiding some of the lengthy civil or criminal procedures that now have to take place. We are hopeful that we can get that passed through the Legislature.

The Siting Act in Massachusetts, Section 21D, - Section 21E, the Superfund, is the third part of three laws; 21C passed in 1979 was the Management Act; 21D passed in 1980 was the Siting Law; and then finally in March of this year, the cleanup bill, the Superfund.

The Siting Act, passed in 1980, was unique in that it mandated negotiations between the community and the body which wished to place the hazardous waste disposal facility and that is rather important, in our minds.

Finally, again, I would stress that there are tremendous efforts on the state level directed at source reduction. We feel that that is going to be a major focus. That is what I have for my presentation at this point. I guess I would say that representing a community that is 18th and having talked to many people in Administration and the Legislature, we recognize the laws that we have on our books right now will not solve all our problems and we stand ready to modify them when necessary and increase the funding

where necessary to see that the hazardous waste issue is adequately addressed in the Commonwealth.

Representative Teresalee Bertinuson:

Thank you very much. Next we will have Representative Jim Mitchell from Maine. Representative Mitchell's district also includes the McKin Company site which is a Superfund Priority Site. You didn't give us your number.

Representative James Mitchell:

It is No. 33.

Representative Teresalee Bertinuson:

There isn't that much difference between 18 and 33.

Representative James Mitchell:

We have five Superfund sites in Maine and 60 other possible sites that have been investigated from time to time. We also have an ineligible site - a waste oil dealership that was abandoned with 35,000 gallons of PCB contaminated oil in a vat. The fellow went bankrupt and left it with us.

In 1980 we passed a comprehensive hazardous waste management scheme which included the licensing of generators, transporters and disposers of hazardous wastes. The plan, promulgated and implemented in the Fall of 1981, established a mini-Superfund, which was basically to be used for emergency purposes. It is administered by the State's Bureau of Oil and Hazardous Materials Control. We enacted a very large fine for illegal dumping of hazardous wastes - $50,000 if you happen to dump wastes in Maine. We did that to curtail a very serious problem, which developed in the late 1970's with people coming into Maine from industrialized areas with tankers full of wastes - the trucks were just full of wastes and just leaving them. In fact, at one time we had 12 trailertrucks full of hazardous wastes sitting in the town of South Berwick, Maine, unidentified. We had them for quite some time.

Our Siting legislation is unique. We require restrictive covenants to be written into deeds of lands so that people will be made aware where poisons and hazardous materials have been dumped. We have also tried to establish a hazardous waste exchange to deal with hazardous wastes. Because some people's wastes are other people's tools, what we are trying to do is arrange a system so people can trade-off the wastes to someone who can use them for a beneficial purpose. I don't know how that is working out but we do hope that it does work out.

(Inaudible question from audience.)

Representative James Mitchell:

Yes. We have a particular problem with waste oil. A number of the neighboring states have declared waste oil to be a hazardous substance. In Maine we did not want to do that. I think it was the feeling of the Legislature that if we take this waste oil and burn it we could save a lot of energy and a number of bio-mass burners were constructed in the State at the beginning of the energy crises and any oil waste we got would certainly help out. Because the other states have declared waste oil a hazardous waste, a lot of the waste oil from the other New England states started pouring into Maine and unfortunately, a lot of the waste was contaminated, especially with PCBs. We tested six loads and five of those loads were contaminated. The reason they are contaminated is because other states put fees on generators making it very easy to take PCB contaminated oil, especially transformer oil, and mix it into waste crank case oil. It sort of disappears there. It is very expensive to test it to see if it is there and you get rid of it illegally. There is a bill in the hopper now that would deal with that which would place a tax on the transporters of waste oil and the generated fund would be used to test waste oil and provide oversight for that program. We would like to continue receiving the waste oil for awhile but if we can't clean it up, I think the next Legislature will probably deem it a hazardous material.

There are five old sites in Maine which are Superfund sites. Last week the Governor submitted a bill to the Legislature that would establish a program which would add personnel to the Department of Environmental Protection and give them responsibility to deal with these old sites, evaluate them and work with them and the EPA. The Governor also proposed a $2 million bond issue to meet the state's share of the match. One of our sites - the second site - which is No. 86 is a public site which requires the state to provide 50% of the match.

Some of the other things that we have done in Maine include a bill for a very comprehensive transportation of hazardous waste plan which would require special licenses and special training of people who are in the business of driving around the state with loads of hazardous wastes. We created an Environmental Health Unit two years ago and that agency has begun to do its work including a health study in my district. We have a fairly comprehensive toxins in the workplace law that we are reviewing and we will be including radioactive materials in it. We are also going to try to pass legislation to require that employers (of any city or town) provide a list of where all their chemicals and hazardous materials are. One reason for this is because we don't like the thought of our volunteer fire department's rushing unaware into buildings where there are a lot of chemicals stored.

We have had a tough time with pesticide regulations, especially in Aroostook County, so we have established a citizen's board that licenses applicators and the chemicals themselves and is given the power to prohibit the use of some pesticides in the state. One big pesticide problem we have is DDT. A lot of farmers bought it; stored it in their barns; and now they can't use it. It has been there in some cases 10 or 15 years and they are calling up

and saying, I've got a ton of DDT. They pick it up and take it off their hands and the state is stuck with it. This is a serious problem. The Pesticide Control Board provides an invaluable educational service, with a lot of their time spent educating the applicator of the pesticides. We also have a bill in the hopper now on the identification of hazardous wastes. We don't track a federal list entirely and a lot of people in Maine don't think that is appropriate because there are some localized conditions.

Our mini-fund has a $9,000 balance. It is used for emergency purposes. There have been several responses and we can sometimes recover the money but people aren't always willing to pay and consequently sometimes we end up in court. There is a bill in the Legislature that would increase the fee. Industry is opposed to it. It would also establish a system where the fee would rise with the toxicity of the chemical. We have had to take money out of our Maine Coastal Protection Fund which was created to clean up oil spills on the coast to clean up some hazardous waste spills along the highway and a lot of people in the Legislature think that this is an inappropriate use of that fund. That is where we are now. I would like to talk to you briefly about the McKin site in the town of Gray.

It is very easy to sit back at a meeting and discuss all of the technical issues related to resolving the hazardous waste problem but until you have been with a group of citizens who have had to live with the problem a long time, I don't think you can really understand the full impact. In the town of Gray, and I represent about two-fifths of the town, there is a gravel pit which was purchased by a company called the McKin Company. In 1963 McKin started disposing of some wastes there. In 1969 there was a major oil spill in Casco Bay, the Tomana oil spill. The Texaco Oil Company funded an expansion of the McKin Company site which sat on an aquifer in the gravel pit, probably the worst place you could ever dispose of anything. The Company signed a contract with Texaco and took all of the waste oil debris, seaweed, oil soaked hay, etc. up to Gray, which is about 20 miles inland. They burned a lot of it. They bought and picked up used solvents at factories, especially trichlorethylene and they threw it on the ground. They used big fires for disposal. There is a lagoon there.

Also, in 1973, many housing lots sold in this rural area, and an FHA housing project was started. The people who bought these houses were generally the working poor. They didn't have much money. There was no municipal water supply so none had its own well. In 1973 the well water in all the homes in the area became contaminated. It had a peculiar color and a peculiar smell. Those events all happened simultaneously. People now think that the aquifer was already polluted by the previous activity of the McKin Company and it was the pressure of all these new wells that sort of started draining the aquifer quickly and brought all the pollution to the surface., So that is essentially what happened. These events occurred in 1973 and in 1975. The water was deemed unfit to be used. Until 1978, the State Civil Defense went to each house every week and delivered water. There was nothing done. The neighbors became terribly upset, as you would expect and they protested. There were a lot of press releases and finally the Federal Government gave a grant, I believe it was a Federal Housing Authority Grant

- to the town for $300,000. The town matched the grant with $300,000 and a water system was installed in this rural area. The entire operating budget of the municipal government of Gray is $300,000 anually. The town borrowed the money with a five year bond. It is now paid off but it accounted for a fifth of the budget for five years. The problem was solved.

From 1980 until 1981 is the period which I consider the period in which all government agencies - the town, the state and the federal government all said there was no problem at McKin. There was just no problem there. Government felt there was no threat and it was only the persistence of the neighbors and the use of the media and the willingness of people who lived there to embarrass public officials that finally got someone to move. The state moved in 1982 when we authorized a $50,000 study. I think because of that study that Gray was selected as No. 33 on the site list. Without the study we would have been much further down on the list. It is very frustrating for the people who have to deal with it. The homes that they have saved money all their lives to buy are worthless. No one wants to live in that neighborhood. Three or four neighborhood women have had miscarriages. They all blame the chemicals. It is a terribly frustrating and difficult experience. I think that it is very important that we always keep those people in mind. Their lives, really for the most part, have been destroyed by the activities of this company. That is all I have.

Representative Teresalee Bertinuson:

Thank you. We need to remember the human part of this problem. It's easy to get hung up with figures. Next we will hear from Representative Barbara Bowler from New Hampshire. Barbara is a member of the New Hampshire Environment and Agriculture Committee and has been actively involved for many years in developing New Hampshire's hazardous waste management policy.

Representative Barbara Bowler:

Thank you. What we just heard from Jim I think points out why no one trusts anyone else. The credibility gap between government and people and the problems in siting, I think, stem from this kind of non-involvement when you should be involved and trying to say there is no problem when there is a problem. You will be happy to know that because of Terry's guidelines about what I was supposed to talk about I have scratched about three-fifths of what I was going to talk about on legislation that we have in New Hampshire and will talk about the cleanup problem primarily.

We got started, I don't know if a lot earlier than anyone else, but in 1979 as a result of the work of the Governor's Task Force on Hazardous Waste, legislation was filed and passed - a regular hazardous waste management law and it included a mini-cleanup fund. We also had legislation regarding a local review committee siting and we also gave the authority for towns to levy fees on hazardous waste facilities as they came in as sort of an incentive for siting. The Management Act itself skirted somewhat the siting process problem and we have had a Supreme Court decision in New Hampshire regarding the Stablex Case - you may have heard of, in Hooksett, which

struck down the Superior Court judge's decision to uphold an ordinance that was passed primarily to keep a facility out or have a referendum at the local level. The Supreme Court struck that down.

The cleanup fund started out with an appropriation from general funds and a generator fee as its primary means of raising revenues. We overestimated the revenues that would be coming in from that generator fee by about 90%. In this year's session of the Legislature we have a couple pieces of legislation and are trying to do something on the cleanup fund. One is to increase the size of the generator fee and that will go into the cleanup fund. Another bill which would have to do with hazardous waste transporters would place a fee on them as well as other licensing and permitting requirements on the transporters. We are hopeful that the estimates are a little closer to the mark on the transporter fee and what it will do for the fund. The fund is used for match to Superfund money and also for our own sites that are not eligible for Superfund money. It serves a dual purpose. Our figures seem lower than Massachusetts. We have perhaps 60 uncontrolled sites at the present time. We have about 367 hazardous waste generators and 12,000 tons of hazardous waste annually.

Another portion of the budget this year to help in the cleanup fund, which, by the way, as of June 30th, will have a balance of somewhere between $3,000 and $4,000. There is $1,500,000 in bonding to go into that fund. When the generator fee increase bill came to the Environment and Agriculture Committee, we found that unlike in the past where we have deliberately not put a fee on recycled wastes, there was a fee in the bill for recycled waste and we amended it to take it out, feeling it is very important to set an incentive there to recycle and to reduce the problem in that manner. We have not worked that out yet all the way because the budget has passed the House and is now in the Senate and they have a fee on recycled waste. That is kind of a policy decision that I think we have to come to grips with and that we should use any incentive that we can to keep the waste down.

Another problem that we found with the budget that we took issue with through the vehicle of these bills, was that the $1,500,000 bonding that is supposed to help in the cleanup fund will have to be paid off from that fund and, in essence, that lowers your ability to have enough money to work with. We felt it was one of the only ways that the general public would help in the cleanup effort. We can't expect the generators and transporters who aren't involved in the business of dealing with this problem now to have to pay the bill for the past 50-100 years of abuse that has gone on. It isn't all their fault. They are not the only ones who will benefit from the cleanup, so we feel definitely that the bonding should be paid off from general funds so that there is a public participation in solving the problem.

Representative Teresalee Bertinuson:

Next we will hear from Alan Boright, Legislative Counsel to the Vermont General Assembly and currently staffing the Committee on Energy and the Environment.

Alan Boright:

My expertise in this subject stems to the day before yesterday when I was called by the Council of State Governments and asked to make a presentation here. I managed to arrange a 15 minute interview with a middle-level bureaucrat and I'm not going to waste much of your time.

Basically, we have two federal sites. We have five generators. We have no disposal facilities. We do have comprehensive environmental hazardous waste management statutes and regulations. In terms of a cleanup fund, this year for the first time we have appropriated $200,000 to our Agency of Environmental Conservation for the stabilization of sites. The money is supposed to be used on the first site - the Burlington site where they had a coal gasification plant. When that is done then they can go to our other site which is the municipal dump where machine tool and electroplating industries started dumping in 1946 or so. We have had, for a number of years, a contingency fund generally for hazardous wastes spills that is established from fees on people that are discharging wastes into the waters of the state. Beyond that, the adequacy of available funds is quite meager. The newspaper says we are facing the largest deficit ever. I was hoping that one of the Assistant Attorney's General would show up to talk about remedies that this state has sought or instituted but apparently the office doesn't have enough travel money to attend all their cases. So, she is not here. We are still searching for other sites and we hope we don't find them. I think that is about all I have and I think I set the record.

Representative Teresalee Bertinuson:

I represent a town that was turned down for the federal Superfund list so I don't know where that puts me! Connecticut has four sites on the list and as far as the scope of the problem, we are a small densely populated state with a long history of manufacturing, small metal shops where stuff has been oozing into the ground for 200 years.

We took our first legislative action to try to deal with cleanup - it was really more of an emergency response in about 1978 or 1979 - the same time that we wrote a statute that enabled our Department of Environmental Protection to develop regulations to track RCRA which was just then moving through its regulatory process which is not yet finished. About that same time we created a fund called Oil Spill Emergency Response Fund, although it could deal with any kind of spill of hazardous materials and I believe we put $200,000 in it. We are not in the same league with Massachusetts at all. We called it, optimistically, a revolving fund but like most of those it revolves out but not very much revolves in, although we do have the ability to go after the offenders but we haven't had too much luck. Perhaps we will as time goes on. That money has been used up and it has been helpful to have it available to be used for immediate response and then go after the violator as best we could afterwards.

Last year we passed our surcharge legislation. We hesitated to call it a mini-fund or mini-superfund because it isn't really. It doesn't really have

the same function as the Superfund although certainly part of it can be used but I guess we tried to get more mileage out of the same amount of money. It assesses a flat fee per gallon or per weight on generators. It is assessed based on what is put on a manifest. We assumed that would be the easiest way to implement it and we had worked out the legislation rather carefully. The year before that we tried to get it through and we were unable to get the legislative support for it because of industry's objections. By last year, industry had accepted the fact that this was something that they really needed to do for their own credibility and it was happening in other states and we did work it out. What we found to be the greatest bone of contention was what that money could actually be used for. We felt a great need to use some of that money to build up our ability within the department to regulate and enforce cleanup laws that we had. Industry was very reluctant to do that so we, in a sense, got around that by saying that one of the things that we could use that money for was to hire people to complete the inventory that has never been completed of potential sites and we are beginning to do that. That fund now has about $80,000, I guess, from that original $200,000 when we put the surcharge into effect last year. We had estimated that that surcharge would bring in something like $1,000,000 to $1,500,000 a year. So far, we have overestimated - not by 90%, but at least the first year, something like $700,000.

We have legislation this year that is moving through the process - it hasn't gone all the way yet, but I believe it will, that will add out of state generators. The way our law was drafted last year there was no way to pick up people who were moving into the state and even though we feel that we don't have much capacity in the state for disposing of wastes, we are a net importer, so we are missing the boat to some extent on waste that is brought into the state. We hope to pick that up by legislation we are passing this year. Again, it is pretty hard to get a figure there. We are guessing that will bring us about $80,000.

That fund now can be used for emergency response. It can be used for the 10% match. It can be used for personnel to complete the inventory and also some administrative costs and the other thing that we added to that that we thought was innovative, and I don't believe we have used it yet, but we did say that that the money could be used for replacement of drinking water. We also, at the same time, passed a fairly extensive and broad law giving the Commissioner power to require a violator to provide an alternate source of drinking water. We found that, although the Commissioner could go in and make somebody clean up, he couldn't make them provide water. In our state, as in many states, people go months and years drinking bottled water. It is not clear who is actually responsible to make sure that they have drinking water available. We are hoping that the combination of the authority that we gave the Commissioner and the ability to use some of this money for that purpose will help us to begin to address that problem. In Connecticut, as in most of New England, our biggest problem is what happens to the drinking water if you get contamination.

I think those are the high spots of where we are as far as our own attempt to try to meet the problem. We really do not have ability within that fund

- and that is why it really is not comparable to a Superfund - we really don't have the ability to use that money to clean up old sites unless it is under an emergency.

The other thing we discovered this year was that we packaged that money so that it is unavailable to clean up potential threats. We have several hundred or several thousand - numbers begin to not matter any more - drums of potentially damaging substances and we are not really sure what they are, standing in one town, because the barrels aren't leaking and we can't use the money. Somebody is tempted to go and poke a few holes in the barrels and then apparently we could use the money because it would be an emergency response. We have legislation in to try to address that and say that if there is a clear threat of potential damage that we could use the money for that.

I think that completes this part of our presentation. Perhaps there are members of the panel that would like to ask questions of each other. I think we are all representing the states here from different aspects and maybe we could get some exchange. Yes?

Alan Boright:

I have one other comment, which I forgot. Our largest site is a proposed southern connector. We have a highway going right near it. Apparently the plan is to use some of the DOT funds to do partial cleanup. I don't know whether you would call it an innovative solution to put a road through your hazardous site, but I would keep it in mind!

Representative Teresalee Bertinuson:

Our problem is quite the other way in Connecticut. We have just discovered 80 DOT sites that they have been using for many years to bury whatever they wanted to get rid of and we are not really sure what they are. Some of them are old gloves and old tires and some of them are old pesticides. So, we went the other way. Barbara?

Representative Barbara Bowler:

I forgot to mention and I don't think anyone else has, which doesn't mean it isn't happening, but our cleanup fund law requires us to allocate if there is a request, $60,000 of it annually for any town where there is an application for a hazardous waste facility. That has to be divvied up if you had more than one. It may be a different kind of use for the cleanup fund in that we give them a certain amount of money so that they can hire their own experts to ask their own questions and hopefully satisfy their concerns.

Representative Teresalee Bertinuson:

That is interesting. In our siting legislation we wrote in that the applicant would provide some money for the towns. It is always interesting to find out new ways to get funds for this.

Brian Strohm:

Just a general question. The OTA recommends putting a fee on generators of hazardous wastes from the federal Superfund. Currently the fee is placed on generators of chemicals, virgin products and petroleum products and the state cannot impose a fee on those same industries. Does anybody know if that legislation would preclude states proposing a fee on hazardous waste generators if it were to go through?

Representative Teresalee Bertinuson:

I was interested - I didn't hear enough about those proposals to know if those were supposed to take over when the present Superfund law is sunsetted. I wasn't really sure.

Representative Barbarar Bowler:

No, it was a new funding base for the present Superfund, the way I understood it. I had the same worry that you do that we might be prohibited from ...

Representative Teresalee Bertinuson:

A lot of us have drafted our laws to get around the preemption and I suppose we may have to go the other way. If they were going after the generators - although for most states to go after the feedstocks wouldn't work because a state like Connecticut wouldn't collect much of anything.

Brian Strohm:

That could pose a real problem, definitely, for the state of New Hampshire's fund and yours too.

Representative Teresalee Bertinuson:

Yes, I think it would for most of them because, as I said, they were written deliberately to try and avoid that.

Representative Barbara Bowler:

Of course he did also say that they send some of it back.

Representative Teresalee Bertinuson:

It was being proposed as a major source of funds for the states. We should watch and see the way that legislation develops, if it does go anywhere. I certainly agree with that thrust. I think that the legislation should try to lead to some kind of remedies which that would tend to do by giving a cost disincentive to generating. Steve?

Audience:

Representative Mitchell, on your oil fund, which perhaps most other states don't realize, as I recall your oil fund comes from taxes put on oil coming into Portland headed for Canada. But you are now tapping that for chemicals that have nothing to do with oil?

Representative James Mitchell:

We have had to borrow from that fund. It is just a borrowing so it has to be ... The administration seems to be interpreting the definition of the fund in a broader and broader sense and I think they are going to get into trouble if they don't stop it.

Audience:

Is it written in the statute what it can be used for? How was it originally determined what it was to be used for?

Representative James Mitchell:

It was originally to be used for clean up of oil spills and that has been interpreted as oil spills throughout the state, although I believe that it was intended to be used to clean up oil spills that happen on the seas on the coast.

Audience:

That was by statute, was it?

Representative James Mitchell:

Yes, although the statute says to clean up oil spills.

Audience:

But you could make a statutory change and tap it for other things too, at least in theory?

Representative James Mitchell:

Well, money has been borrowed from that fund to clean up hazardous waste spills on the highway and then we try to recover that money and put it back in the fund.

Representative Barbara Bowler:

Is there much money in that fund?

Representative James Mitchell:

It is the third largest fund in the state government in the state Maine.

Representative Teresalee Bertinuson:

How big is that?

Representative James Mitchell:

$6,000,000. It is at its ceiling so the tax has stopped.

Representative Teresalee Bertinuson:

It builds up to that?

Representative James Mitchell:

Yes.

Audience:

I would like to ask you a question about the surcharge legislation that you have. In Massachusetts, when we passed the mini-fund legislation last year, there was obviously a lot of work done in terms of trying to get a generator tax as opposed to bond money. Besides the obvious political problems with getting that through, the other two questions that kept coming up over and over again was the fact that we did not know who the majority of our generators were; and secondly, that it would act as a deterrent to proper reporting of hazardous waste on the manifest system. My question is, did you, especially in the deterrent question, did that come up in Connecticut when it was going through and how did you wrestle with that?

Representative Teresalee Bertinuson:

Not specifically, although that is a good question. I don't know. We went on the basis that the best way to go is to use the manifest because it was the easiest. I guess we all know that not everything that is generated is manifested and that is an enforcement problem that I suppose we will gradually begin to pick up. The thing that concerns me more is that I don't think that there is any incentive for recycling. Again, we are making some changes with that this year to correct some of the problems where sometimes the same waste is being assessed twice and where it is transported into a treatment facility and treated something else is transported out. I think there ought to be a way to craft that law so that it would encourage recycling. I think we ought to do something that would make it cost effective to recycle and perhaps also make it more costly if you are transporting it to a landfill rather than to some site for treatment. We really don't know how much we are losing and the fact that we are getting much less than we expected may be an indication that we are losing more than we thought we would. We have had a substantial amount of metal hydroxide sludges - which are our biggest hazardous wastes by far - delisted over this past year. I think there are something like 2.8 million gallons which represents companies that in normal economic times would generate about 10 million, so that is quite a substantial amount of what we had been basing it on to begin with. David?

Audience:

I have a question for Representative Mitchell. Even in cases where you don't have oil that is contaminated with PCB's, are you concerned about heavy metals and other contaminants in wastes, crank case, or other waste oil and the burning of those without sufficient controls?

Representative James Mitchell:

Well, we were discussing a waste oil bill just last week and we were concerned about this issue. In the legislation which is still pending, we are exempting contaminants that occur in normal engine wear because we found that if we looked at it carefully we could get all these very small amounts of innumerable hazardous substances in crank case oil. That was the definition we put in and I presume that the Department of Environmental Protection will write some rules that will define that more clearly. That is what we did.

Audience:

Does that include lead that you are exempting?

Representative James Mitchell:

If it is a result of normal engine, normal wear, what would be normally found. Trichlorethylene is another product that is found in waste oil.

Representative Barbara Bowler:

How costly is it to check this waste oil that is coming to you?

Representative James Mitchell:

Very costly. That is why we have to put a tax on it.

Representative Barbara Bowler:

Is it worth it in the long haul?

Representative James Mitchell:

Well, we think it is. But if it doesn't work out I think it will be a hazardous material. Last night they said that the EPA may deem it a hazardous material.

Representative Teresalee Bertinuson:

Yes. Quite a few states do now. Any more questions?

Representative Robert Emmet Hayes:

One of the reasons that the site in Holbrook was listed as the 18th most serious, I guess, on the national list was that right now it poses a threat to the water supply which is supplementing some 90,000 people. It is a problem that has received a great amount of attention over the last few weeks. High rains at the site have caused the 72 years of contaminants to come to the surface. The chemical company there has been manufacturing DDT, chlordane, creosote, pesticides, herbicides, disinfectants, and as routine procedure just cleaned their vats out and let it leach out into about a 5 or 6 acre swamp area. When three municipal wells were put in in the 50's, they drove the main pipe right through the bad McGuire property and hooked into a main, backfilling it all with nice clean gravel. Through a period of some 20 years, the chemicals were leaching down, hitting the gravel and racing to the wells. All three of those wells are now closed, but the river that runs adjoining to the site also runs to the reserve reservoir for the Braintree, Holbrook, and Randolph water supply. Some 90,000 people use that. They are very fearful - in the summertime that normally would supply some 30% of the total water demands. If the contamination does reach it, we have a real serious problem. That is one of the reasons that I think it reached that high ranking - 18th.

Representative Teresalee Bertinuson:

How much progress has been made on cleaning it up?

Representative Robert Emmet Hayes:

I have to say this - Mel Hohman and I and a lot of other EPA people are getting to be old friends now. About a month ago the situation was really serious and we had to bring a little pressure to bear and do a little show and tell down there. We had some legislators come down, some newspaper people came down and Channels 4, 5 and 7 in Boston picked it up and from there it just became a media event and because of that pressure and because of some of the adverse publicity that EPA had been receiving, they came in very quickly and in the last three weeks more has happened to that site than has happened in the last year. They have authorized and are now spending $192,000 in immediate action. They completely fenced off the five acre site. They are putting some wells in to test the movement of the water. There is a surface contamination problem, but there is also a subsurface contamination problem because the vein of gravel seems to run underground all the way to the Richardy Reservoir, so there is a question of not only that you have to watch what is on top of the river, but also what is happening underground.

So, EPA has been very responsive to us. We were able to get an emergency appropriation from EPA with a turnaround of about two days. Congressionally we worked to make sure that the 80 or so signatures that had to be in place were all in place so that when they made the request, the gentleman at the end knew what was coming and that has helped, but it is a similar situation. The publicity got them to move, but also heightened the fears of

the community and right now the reported cases of cancer are increasing daily. Initial review of the cancer registery and a review of health data for the community hasn't shown anything out of the ordinary, but it is difficult to tell the people in the community that. So, everytime we have somebody coughing or sick they think it is directly related to it. That is something that we are going to be faced with for years because the cleanup there - it is a five acre site contaminated for 72 years and it is not going to be cleaned up in six months or a year or maybe even four or five years. They simply cannot go in there and bulldoze out what is there. They are talking about probably trying to leach the groundwater out and then put it back in over a five or ten year period trying to purify the site. The RAMP is nearly completed. We will have a better handle on the problem at that time, but the real danger at this point is that people are looking for that immediate resolution to the problem and it is not going to happen. That is a very serious problem that we have to deal with.

Audience:

Especially since compounds like chlordane do not leach readily at all.

Representative Robert Emmet Hayes:

Correct. Back in the 40's, they had some sizable government contracts for DDT, creosote, what have you, and the fear is that because the contaminants are believed to have traveled at a rate of six inches to three feet per year, that the material closer to bed rock is even more lethal than what we have at the top. Right now on the five acres when you scratch the earth it becomes black and the next day it gets blacker and blacker and it certainly is a serious problem. The other problem that we face is that if it has, in fact, been traveling at that rate, it could be at bedrock right now which is a cracked granite and we might have some serious contamination going on underground that we are not aware of. It is a difficult situation. We are hopeful now, with the state action on the $25 million and I feel better. I feel like the dirty kid with the most money right now after listening to the others, but we are one of the older industrial states and the rivers have acted as a magnet for leather and shoe industries and we are finding these every day.

The number of sites in Massachusetts, 351 suspected, is increasing daily. I was given this task early this morning. The chairman of my committee was going to handle it and since he is my chairman, I just asked one question. What time do I show up? You know, in doing some research for my presentation, my numbers changed three times. It was first 10 and then 14 and then from 50 it went to 52 and from 250 it went to 351; and I am sure by the time I finish, it will probably be out of date as well. We have, in the Commonwealth of Massachusetts, a very vigorous program where locally we have tried to put a local hazardous waste coordinator in each community and we are hoping to supplement some of the state monies and state activities by having somebody in the community doing some of the groundwork for us - going out, checking the companies that we have listed versus what they know is out there. We feel that will go a long ways to getting the other approximately

9,000 generators listed. Our fear is that a lot of those people don't realize that they are, in fact, generating hazardous wastes. They just don't understand what they are doing. We are confident that the 3,000 that we do have listed and registered are by and large producing the vast majority of hazardous wastes or generating it in the state of Massachusetts. We recognize that it is important to continue our efforts to get a handle on the other 9,000.

Representative Teresalee Bertinuson:

Those local people - are they municipal employees, state employees?

Representative Robert Emmet Hayes:

Yes, in fact, as a Selectman, I was the local hazardous waste coordinator. By and large you will find that it will probably either be a Board of Health member or it will be a fire or police officer - someone who has some powers there to go in and make on-site inspections.

Representative Teresalee Bertinuson:

They do have the power to go in? Is that delegated from the state agency?

Representative Robert Emmet Hayes:

Yes. They have that authority.

Representative Teresalee Bertinuson:

We just had legislation similar to that this year to allow the Commissioner to delegate some authorities. It sounded as though they were also going to try to do some education, that kind of thing? Liaison?

Representative Robert Emmet Hayes:

Correct. We have been holding a series of educational forums to try to educate the public as to the dangers of hazardous wastes and to be on the lookout for the water in the stream turning color. In years gone by, people said, you know the water changed color - that's it. But now people are becoming more cognizant of the impacts and it has worked. We don't have hazardous wastes coordinators in every community in the Commonwealth yet but we are working to try to get them.

Representative Teresalee Bertinuson:

It's a good idea. Anything else? Well, thank you all very much, the panel and the audience and we will see you in the morning.

CHAPTER VII

SUPERFUND WORKSHOP B: EPA REGIONS II AND III STATES

Part 1: EPA Regional Office Presentations

Presider:
JUDY BORGER, Minority Executive Director, House Conservation Committee, Pennsylvania

Speakers:

Part I:
ROBERT OGG, Chief, Hazardous Waste Sites Branch, EPA Region II

STEPHEN WASSERSUG, Director, Division of Waste Management, EPA Region III

- How does Superfund Work? A Step-by-step description.

- Superfund participation by states in each workshop
  - Sites on National Priority List
  - Specific work done at each site
  - Funds expended on each site

- EPA plans for future Superfund work in each state
  - Estimate of the federal and state shares in projected clean-up costs

- Findings of EPA national study on funding options for state mini-funds.

Part 2: State Presentations

NORMAN MILLER, Legislative Research Associate, New Jersey

NORMAN NOSENCHUCK, Director, New York State Division of Solid Waste

REPRESENTATIVE ROGER MADIGAN, Pennsylvania

- Scope and degree of state's hazardous waste problem

- Adequacy of available funds

- Remedies state has sought or instituted
  - innovative legislation

- State mini-fund
  - source
  - mechanism
  - current and projected fund total

SUPERFUND WORKSHOP

EPA REGIONAL OFFICE PRESENTATIONS: REGIONS II AND III

Judy Borger:

I am Judy Borger, staff for the Minority Republicans on the House Conservation Committee in Pennsylvania and I have been asked to preside today. We are going to get started very quickly because our time is somewhat limited. We are going to begin today with presentations from two people from EPA regional offices, Regions II and III. I am going to introduce both of them. I understand Steve is going to be giving an overview and then each one is going to do a separate part of the presentation.

Steve Wassersug is the Director of EPA Region III Division of Air and Waste Water Management. He is responsible for RCRA, Superfund and air quality in the states of Pennsylvania, Delaware, Maryland, West Virginia, Virginia and the District of Columbia.

Robert Ogg is Chief of the Hazardous Waste Sites Branch, EPA Region II and is responsible for the Superfund program implementation in the states of New York and New Jersey. Gentlemen.

Stephen Wassersug:

I guess I start. You can tell the EPA'ers - same suits, same glasses, same hirsute features. Here we are with our uniforms on for the day. This is not a large audience so I guess I will make this informal and since we want to save some time what I thought I would do is to put up a couple of overheads since the request made of me was to go through the Superfund program and how it works, how it doesn't work, what are the issues and what are the problems associated with it. Now, I say, how it doesn't work because I know there is a lot of concern on the part of people in the audience that don't understand the details of some of the issues that are involved.

I want to use some graphics because the Superfund program is complex and what I hope to do is try to orient you to the details of how it operates: how we identify the sites, where they come to us in the beginning and then how we move through the process of handling each of the sites.

We have got hundreds and hundreds of sites - thousands, in fact, that we have not even dealt with to date. We determine our sites through complaints that come into the Regional office. We determine them through the Superfund notification process. Congressman Eckhart, in 1980, developed a list as he canvassed various industries and we received a lot of information regarding potential sites that way and we received a good deal of the information from the states also. There are various ways in which the Regional offices begin to identify each of those sites and start a process. That does not mean, that in fact, it is a site that is serious enough that it will make Superfund and, in many cases, some of these sites that we in fact start off with may be mis-addressed or something like that. Nonetheless, we have to review these.

One of the problems that we have in reviewing these and looking at these sites through the Regional Office standpoint is that we also have a hotline that we operate at this point in time in the office and as we identify the sites and try to investigate these sites, more come in than we have been able to investigate and identify them and clear them off our lists. That is one difficult issue.

In going through the sites, the key step here is the preliminary assessment at which we will review all the available data that we can find on a site. When I speak about available data, there is a good deal of data that the states, cities and perhaps industry, already have regarding a site. It may be years old but nonetheless, it is still something that we would look through and try to determine whether or not further investigation and study is required. I think that is an important aspect of the program.

Another aspect of that preliminary assessment is the fact that the state plays a very key role here in doing the inspections sometimes instead of EPA or with EPA's contractor and through the Section 3012 program grant which you may have heard about earlier today, there is some significant grant support that is available on a one-time basis with which the states will go out and do additional investigation over the next year or two.

As we move further, if we find that there is no problem at any of these sites, then, of course, we will just put "no further action" and we have rankings and lists and everything else in each Regional office and we will, in essence, put that in the file until a further indication tells us we need to go back out to that site. However, if we do feel there is an issue there, and there may be further studies that are required, we will go through a site investigation at which time we will make a determination as to whether or not, in fact, the site does have a problem there and will begin at this point to do a little more that relates to the Superfund aspect of the site.

What we will begin to do here is to rank the site under the hazard ranking system, which again, you may have heard of and the site will receive a score. When we do rank a site, we rank it basically under three pathways for purposes of prioritizing it under the Superfund program. Those pathways are ground water, surface water and the air route - in other words, air pollution problems that may occur from that. To determine the severity of the ranking we would look at the population of the area. Is it densely populated? Also, the depth of the aquifer and whether it is contaminated and the toxicity of the material that may be occurring in and around that site.

A site that has an actual problem - one that we identify where perhaps the drinking water is contaminated right now will receive a higher score than one that has the potential to contaminate a drinking water source. So there are ways in which the scores will be somewhat different. I don't want to say that the scoring and the way we rank it is a perfect process. It isn't. It is a good process on the one hand, but if a site should receive a score of 60 and another site receives a score of 30 it does not mean that the site at 60 is twice as bad based on the criteria that is used.

We also look at the site for two other pathways and they are very critical pathways also. One is direct contact, meaning people having access to walk on the site or to become contaminated with some material in that area. The other one would be fire and explosion. The reason why we do that is we want to determine, if there is a potential for some kind of an emergency at the site - for example, two chemicals that may come into contact with each other - two drums, where they would be quite explosive if they did come into contact with the air or each other. We may deal with it by putting a fence around the site to prevent and contain the emergency from occurring or at least people limiting access to the site.

The reason why I want to discuss both areas is because when we rank a site for fire and contact or direct contact, fire and explosion, we may go the removal route. On the other hand, if we look at it from the long-term cleanup - as I said, groundwater, surface water and so on; this is the long-term route that we have chosen which is remedial action in cleaning up the site. Those would be the basic differences. However, many of the sites and I will talk about them in Region III and will show some slides of some cleanup at a site - many of the sites will at first have a removal action that will be taken, such as putting up a fence, giving somebody alternate drinking water supplies, or just segregating drums that are on a site. An action may go that route first and then it will be followed by a long-term remedial cleanup.

That, alone, is an issue that I think is of concern to many of the citizens in the community out there. Naturally when we go out to inspect a site, EPA is out there in his moon suit, in a sense, and it creates a great alarm in the community that is there. Well, the next thing is of course is if we do discover something that needs to have some action brought, the citizens, of course, want it done immediately. Well, if some of the action - when we take a removal action, we are attempting to prevent and mitigate an immediate and significant risk of harm to human health or the environment which means we are not necessarily under the National Contingency Plan taking a long-term cleanup, but the citizens expect us to move in in many instances and do that long-term cleanup. That is an issue and a conflict, I think, as we do some of the investigations and we make a determination to go for removal versus remedial.

There are other criteria under which removal action can be brought. First of all, generally we are talking about cleanup that will be done within six months or so. Generally we are talking about something that will not cost more than $1 million to clean up. We are talking about limited scope, limited types of actions there.

On the remedial side, though, we are talking about a process that, in fact, from the planning stages through the design stages, the construction-cleanup stages, is going to take years. I think that is the issue in terms of how we spend the dollar. Are we spending it right? Are we getting the contractor to do the proper job? Are we looking at a way to clean that up so that we do not have to come back in future years? That is a key issue for us in terms of the long term cleanup. The other key aspect about a remedial cleanup is that unless a site has been scored under the Hazard Ranking System and appears on the National Priority List, a site cannot get remedial funds.

Back in November of 1980 or so, a list of about 119 sites came out which was called the Interim Priority List, under which EPA then began to move to clean up some sites. Under the law we were required to come out with a list of 400 sites.

It wasn't until December of 1982 that we proposed a 418 site list, which is now in the proposal stages and is going through final regulation adoption, I think, about August or so. What is key there is that we, on the other hand, are working as if those sites are already on the list, in a sense, that we are beginning in many of those sites the planning actions and requirements to move ahead. I think there is no delay, at least from our standpoint, and I will go over some of the statistics in our Region, in terms of what we are doing in each of these sites.

There is an issue between us and the states at times regarding the hazard ranking system. We work with the states very closely to develop jointly the data necessary to rank the site. In not every instance does the state agree with the hazard ranking system or do they agree with the data that we use that shows that the site is as severe as it is or isn't as severe. We develop a list, not necessarily made up of recommendations from the states, but one in which we think we have the worst 400. The list doesn't close just because one time we publish that and that is the end of it. Every so often we plan updates and at this point in time we, in our Region now, are planning to add about five more on the 419 that we have. In fact, a few will drop off it that we've cleaned up at this point also.

Let me go through some of the other things. Quickly, if a site - any questions anyone? If a site is not ranked, I think, one of the things to understand is assuming a site got ranked and did not come out in the top 419, would citizens in your community be upset? Does that mean nothing could happen? It does not mean that, in fact, because we still have an enforcement program in which we may select many of those sites we think have responsible parties and create environmental problems and we may deal with those sites even if they are not ranked in the top 400. I think that is also key.

When we have the sites ranked at that point, what we do from a stragegy standpoint within EPA is work to categorize the site schedule. So, we look to see whether or not the states have already begun enforcement against some of those sites. In our area, a number of the sites have already undergone state enforcement or are in the process of undergoing state enforcement because for quite some time the states have had the lead and know the sites and have brought appropriate action. We are not looking to obligate funds or the strategy or the program at those sites at this time unless the states feel that their enforcement remedy is not going to work and we need to more aggressively pursue that situation. There are times when the state has pursued the enforcement case. It may take years in the court for it and they may decide to also pursue the Superfund cleanup at the same time.

At many of the sites, we have responsible parties come in to us and in some instances offer to clean up, but not necessarily to clean up to the degree we want it cleaned up or offer to do the planning phase but not necessarily

commit to the entire cleanup phase. For each and every site we begin to make a determination as to whether or not the responsible parties are, in fact, cleaning up to the degree they should and whether or not that is the proper strategy to use. Notice letter is sent out to responsible parties - again, a requirement in the Act - and there is an opportunity for the responsible parties to meet with us.

Let me quickly, now, go through the Superfund process here. (See Figure 1.) This is the remedial Superfund area. These are the stages that we would be involved with, beginning with the Remedial Action Master, the master plan identifying the site and some other characteristics in regard to the site.

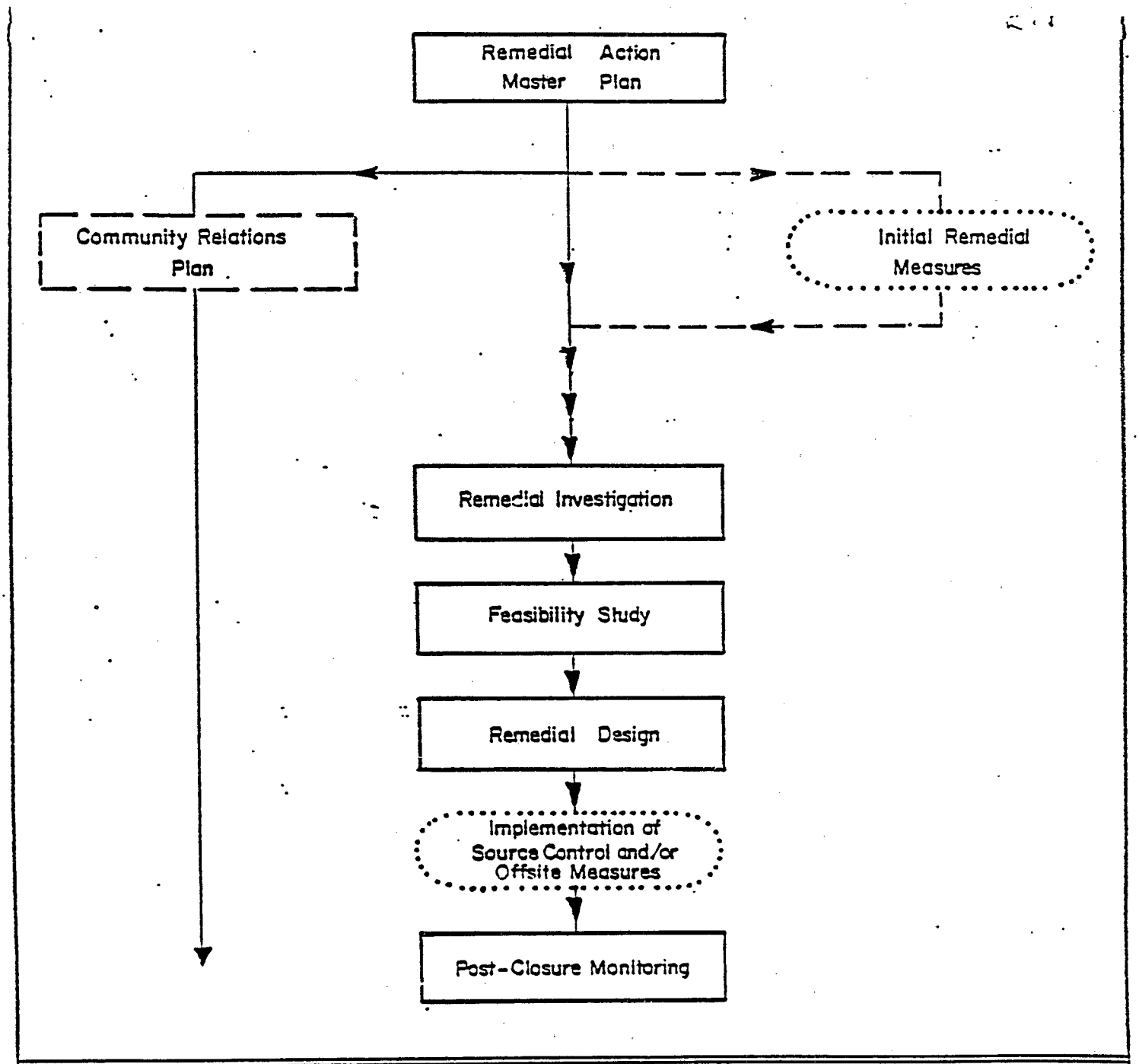
The next step down you might see initial remedial measures. There are times when, through the remedial process, we might want to do something quickly and it's appropriate to do it, like put up a fence or whatever. So there are some actions we can move ahead of the entire planning process that would otherwise be part of the long-term remedial cleanup. Now one of the issues that is key through the entire Superfund process is the Community Relations Plan. It is important to involve the community in all the details, in all the issues and public meetings that are required. It doesn't matter whether they are required or not, they are very critical to the process.

The remedial investigation: here we're speaking about going out to the site, doing some of the details that are required such as to inspect the soil, the barrels, the drums, everything on the site and the details we would need to do that long-term cleanup to determine just how hazardous the waste is, where it should go, how deep in the soil it might be, etc. The feasibility study would begin to tell us the kinds of options that are appropriate in cleaning up this site.

One of the critical criteria in cleaning up a Superfund site on the feasibility study is making sure we balance the fund. Now options come in anywhere from low capital and high 0 & M to high capital and low 0 & M as has happened in some of our states and I know the states themselves, are concerned that they think EPA is going to force the low capital, high 0 & M because the state would be picking up the high 0 & M cost. That isn't true -- that didn't happen on the site cleanup that we're involved with at this time and we worked very closely with the states on this.

Remedial design gets into those elements as you can tell, which would be designing for whatever construction or cleanup is required in the process and that would also be key.

Now I think the important thing here is the state involvement all through this, whether or not the state takes the lead and the state goes ahead and wants to clean up the site itself using the Superfund monies or whether it has EPA take the lead is an issue and a negotiated part through either a cooperative agreement or state Superfund contract in each phase. So in each phase we are negotiating with the state agency that is key and the state agency, of course, must be putting up a percentage of cost, basically 10 percent if we're talking about a private site and at least 50 percent if we're



SEQUENCE

Fixed

Optional

ACTIONS

LEGEND

Public Participation

Study, Investigation or Design Effort

Implementation Effort — Class A - Initial Remedial Measures
Class B - Source Control Measures
Class C - Offsite Measures

USEPA Contract 68-01-6449 Workorder #6	GENERAL APPROACH TO SITE CLEANUP	FIGURE 1

A 1210

talking about a public site. So their share is 10 percent or 50 percent or more.

Judy Borger:

Could you point out specifically where the state would have to put up the 10 percent?

Stephen Wassersug:

The state would be putting 10 percent or 50 percent up as we go through this phase, the remedial investigation, the feasibility study, remedial design and this phase in here, which is in essence the construction phase or whatever source control program is required. Basically out of the general fund we pay the 100 percent to start off with that phase which is the overall master plan, remedial investigation, feasibility study, and design.

Norman Nosenchuck:

Do you limit your state participation to 50 percent for publicly owned sites, Steve?

Stephen Wassersug:

No, it can be higher than that, of course, and I think that's an issue that we're going through at this point in time, Norm, to determine within the state's structure just how involved that municipality or public utility may have been in just the degree as to whether it should be 50 percent or higher. That is an issue that is still evolving at this point as we go through our first municipal sites.

Judy Borger:

This morning it was expressed a couple of different times that there may be a change of thinking at EPA to now have EPA pay 100% of the feasibility study rather than the state put up that 10%?

Stephen Wassersug:

The problem that we have here in the states is that not always are they ready and able at that point in time to put up the 10% or 50% as required. The Agency made a determination that in the planning phases the state would have to participate, as opposed to phases down here which are required by the law, I believe, that they participate. I think what is being relooked at this time is whether or not that policy within the Agency should change. The other aspect of that right now is we do have contract money within EPA and it is an enforcement contract in which we do go out now and do this phase ourselves, if the states are not willing to participate or can't participate at this time. We will go out and do this phase as if to go through an enforcement effort so that what we are speaking of here is we will do the equivalent of this and then we will litigate. The reason why we do the equivalent of this is because

to go to court against responsible parties, we need to know what options are required to clean up the site in accordance with the National Contingency Plan. That is the issue on this phase. Yes?

Audience:

What is the EPA's position with regard to a publicly owned site, if in fact, the community has gone to their insurance carrier and have obtained some sort of agreement to do everything right up until the implementation of source control. Has there been a policy developed?

Stephen Wassersug:

Yes. There is a policy being developed right now. I believe Lee Thomas, in testimony in Congress indicated that we want to move quickly through this phase. This is where EPA is being hung up at this time - trying to get through this. I think we are all being hung up in this mess. I think the issue here is we want to move and we don't want to be stifled in this phase at all. I think that is the overall goal - now what was your question again - I lost it.

Audience:

Well, the basic question is this. In a publicly-owned site, if, in fact, the carriers are willing to provide the money, what is EPA's position?

Stephen Wassersug:

What we have here is the same situation as if it were a privately owned site, unless they are willing to sign that they are going to go through a commitment to clean up the site. I have just gone through one that is in western Pennsylvania - the same type of issue - and even though I have up front a carrier or responsible generator willing to sign on the dotted line that they will go through this phase - they don't want to sign a blank check because they don't know what it is going to cost them at this point. They also don't know if there are additional responsible parties who might turn up that they want to share the burden with. We have had to turn the state down in this case and we have had to say, unless that company is willing to commit up front to whatever it is going to cost in regard to the preferred option, then we will not settle with them in this phase at this point. I would assume it would apply to any carrier. It would apply to anyone, whether it be a municipal or private site.

Audience:

Is that true in the case of GEMS, Mr. Ogg?

Robert Ogg:

Yes, I was going to mention that. I know which site you are talking about. Two things happened on that site. One, it was not brought to our attention

until we were way down the track, that this money was available. Second, as Steve just mentioned, this policy had been floating somewhat and they are finally firming it up to say that we should just proceed and get the studies out of the way and then talk to responsible parties. The fact that there may be money there is still a bonus to that community because they may be somewhat liable and this could provide their share to pay us back for the cost.

Stephen Wassersug:

Now, of course, there will be the recoupment issue from the carriers also which they may want to, you know, share some of that. I mean there's probably a lot of other ways in which it could still be accomplished, as we are working with our responsible party. It could still be accomplished and it could be done through EPA, I guess. This gives you an outline of the remedial process. (See Figure 2.) The data base under which it is developed is not extensive at this point, but I am just trying to give you an idea of how long it takes to do a remedial action master plan, remedial investigation and feasibility study, design and construction and the average site cost.

I think that average site cost somewhat is probably low at this point. I think it's going to go up. When we talk about average site cost in our area, we're dealing with five acre sites and we have some that are 50 - 60 acres. So I think that is actually going to go up. But, it does give you some flow of the overall schedule. If you're a state and you're interested in figuring out what it's going to cost you, you can probably put into the formula an amount, an estimate, how many sites are going to require Superfund cleanup times these costs, 10 percent share or 50 percent share or whatever happens and it will give you some idea of the overall magnitude of the problem, which to us is growing.

Let me conclude by just going over some special issues and special problems that I think relate to the overall process. I think the issue of publicly owned sites versus private and the ability or desire on many of the municipalities' parts to support this effort is going to be a very severe problem for us. Some of them just can't come forth at this point in time and support that effort. Philadelphia is a good example on the other hand who put up $5,000,000 and needs to put up about $7,000,000 more to clean up a site within the city.

States taking the lead. Within our region, for some unknown explanation, we do not have states taking the lead on any Superfund site, which means when we take the lead we go through the process that involves our contractual arrangements, the Corp of Engineers etc. We would like to see more state leads within our states. Part of the problem occurring in our states is that the state does not have Superfund staff, designated Superfund staff, so they claim they cannot put people on the Superfund payroll, and match it and get the supporting effort.

The state matched money. In our states right now, it's going year to year, as opposed to some kind of a bond or fund. Regarding Pennsylvania and Delaware, much to their credit, Pennsylvania put up $1,000,000 last year, which we fully matched and has expired. So we can't do anything else in Pennsylvania right

THE REMEDIAL PROCESS

	TIME*	COST**
REMEDIAL ACTION MASTER PLAN	2-3 MOS.	$25,000
REMEDIAL INVESTIGATION/FEASIBILITY STUDY	3-9 MOS.	$250,000-$750,000
DESIGN/CONSTRUCTION	6-12 MOS.	$3-7 MILLION
AVERAGE SITE COST	≈	$6 MILLION
NUMBER SITES REQUIRING SUPERFUND		?
- LESS RECOUPMENT		?

- Figure 2 -

now until July 1, until they have some additional funds. However, Pennsylvania is coming forth with a budget request of three million for next year and we're really looking forward to that and we feel we can fully match it with $27,000,000 by the projects that we have on the books: the design, the construction and other things that are on the way at this point in time. But, on the other hand there is no assurance that in the outlying years within these states that what we're going to do is start a project here or there and all of a sudden, bang, there's no further dollar amount in '85 and '86 and I don't know what that's going to mean.

The use of interim remedial measures -- I think one of the things we may have to look at in EPA is how we can get out there when we have a situation that is not a screaming emergency. Not this emergency that I talked about earlier, but one in which we can do something a little quicker under the remedial phase of the program that we haven't been able to do under the emergency removal program. I'm looking into that to see what efforts we can do along that line. I think it takes a long time to complete the remedial phase of the program. There's no way around that at this point under the guidance, but I think it's important to understand we're still going forward and spending a lot of money. Cleaning up these sites is a very difficult process. The science is new. The engineering is somewhat new, but we just don't know what is happening in each of these sites at every point in time. So the upfront studies are very critical.

Community relations plans - I mentioned that, and the issue of dealing with the communities and I will say that EPA has credibility problems, but the states have problems too. In fact, in some of the states I deal with, dealing with citizen groups, the states have less credibility than the EPA does at this point in time when we go speak to these groups. I think both of us have this problem right now. It's very difficult to convince them that this process, that cleanup, what we're asking for is appropriate. Eighty six percent of these sites have not been investigated at this point. That we have to do. Delays by responsible parties: we have to move quicker on that. EPA state enforcement scheduling, we have to pay more attention and get more expedited scheduling from the enforcement standpoint also.

Acceptable disposal facilities in states. I think that's an issue as we go through the process. Those other states are not wanting to take the waste from Pennsylvania all the time, as an example. We're going to have to look into that. I think the other thing is in our case when the states do take the lead and hopefully they will, are the state contract procedures going to delay them? So that the states, in looking at and trying to move, hopefully they can advance their own contract procedures and work the process as quickly as they can and hopefully it will be faster than this. Bob, do you want to add anything to that or go through your states?

Robert Ogg:

Let me just emphasize one of the points you made. I just want to emphasize this issue of the O & M cost because I think that's a very severe issue that has to be addressed. We've seen it hit us right in the face in the state of

New Jersey where we're now ready to do the construction jobs on a couple of sites. It is or can be a very expensive part of the project and is not one that we go out and really sell and brag about. We've had basically three jobs come in, in New Jersey. The first two literally had very little 0 & M costs. I just say that to emphasize the fact to Steve that we're really not trained to gear these studies one way or the other. They are really just cap maintenance. There's going to be a cap over the landfill. Make sure the grass is still growing and the cap maintains its integrity.

The third one, which we just announced on Wednesday night, will involve groundwater pumping as part of the scheme and that 0 & M cost, the site is Price's Landfill, will probably double the price of the cleanup job. We are probably going to put in about $10,000,000 worth of capital costs and they're probably going to have to pump groundwater for at least 10 years at $1,000,000 a year. That is something that I think the state legislatures have to take into account.

Stephen Wassersug:

All right. Just quickly, I'll go through our statistics in Region 3 to give you an idea of where we are from the national perspective. (See Figures 3 and 4.) What we have is about 15, 17 percent. Pennsylvania is among the top, I don't know, 2 or 3 states over all in the country as far as the number of sites. The next statistic is EPA's Superfund Removal Program status. (See Figures 5 and 6.) Just to point out that we have had actions on the removal side in Region 3 and I pointed out earlier that we're talking about the screaming emergency kind of thing. That may have been where we put up the fence, where we have given some people alternate water supplies and they have run anywhere in cost from $22,000 for a site to, I believe, $985,000 to a site. So therefore, you can see the wide range of what we might do in that area.

I just want to point out that quite a few things are happening in the enforcement area also. (See Figure 7.) Under the new policy that we have within EPA on remedial investigation feasibility studies, where we will not entertain somebody offering to do it and not doing the cleanup also, I expect to be involved in more litigation and much sooner as far as some of the site work that will be done. That doesn't mean we're going to slow up the cleanup process because I think that can go simultaneously.

This is just a quick idea. A pyramid chart, which I like to display. (See Figure 8.) In our region we have 49 sites as I showed on the NPL, National Priority List. This is the number of dump sites that we have overall, the number of RCRA sites plus dump sites. Dump sites, I'm referring to abandoned whereas RCRA, of course, I'm referring to the ones under control in that law. Overall, we have quite a few, but hopefully, of course, the issue is we don't want to see these RCRA sites become NPL sites. That's the key.

The other problem that we have, as I indicated earlier, that in Pennsylvania alone, some 500 have not been inspected to the degree that we know what's

USEPA

REGION	TOTAL DUMPSITES	PRELIMINARY ASSESSMENTS	SITE INVESTIGATIONS
1	714	386	76
2	1866	597	191
3	1428	552	279
4	3002	1155	188
5	2838	33	4
6	2193	1574	286
7	1139	424	65
8	553	188	28
9	1247	578	63
10	793	19	9
TOTALS	15773	5506	1189

- Figure 3 -

REGION 3

STATE	TOTAL DUMPSITES	PRELIMINARY ASSESSMENTS	SITE INVESTIGATIONS
DC	5	2	2
DE	61	43	24
MD	145	56	19
PA	804	290	176
VA	243	67	17
WV	168	93	41
TOTALS	1426	551	279

- Figure 4 -

EPA SUPERFUND REMEDIAL PROGRAM STATUS

PHASE	SITES	OBLIGATIONS (10^6)
RI/FS	78	26.2
DES/GN	20	3.8
CONSTRUCTION	14	26.3
IRM	18	18.6
TOTALS	71	$74.9

- Figure 5 -

EPA SUPERFUND REMOVAL PROGRAM STATUS

NATIONAL	OBLIGATED	COMPLETED
IMMEDIATE	122	107
PLANNED	9	6

EXPENDITURES = $27 MILLION

REGION III		
IMMEDIATE	18	15
PLANNED	2	1

EXPENDITURES = $3.8 MILLION

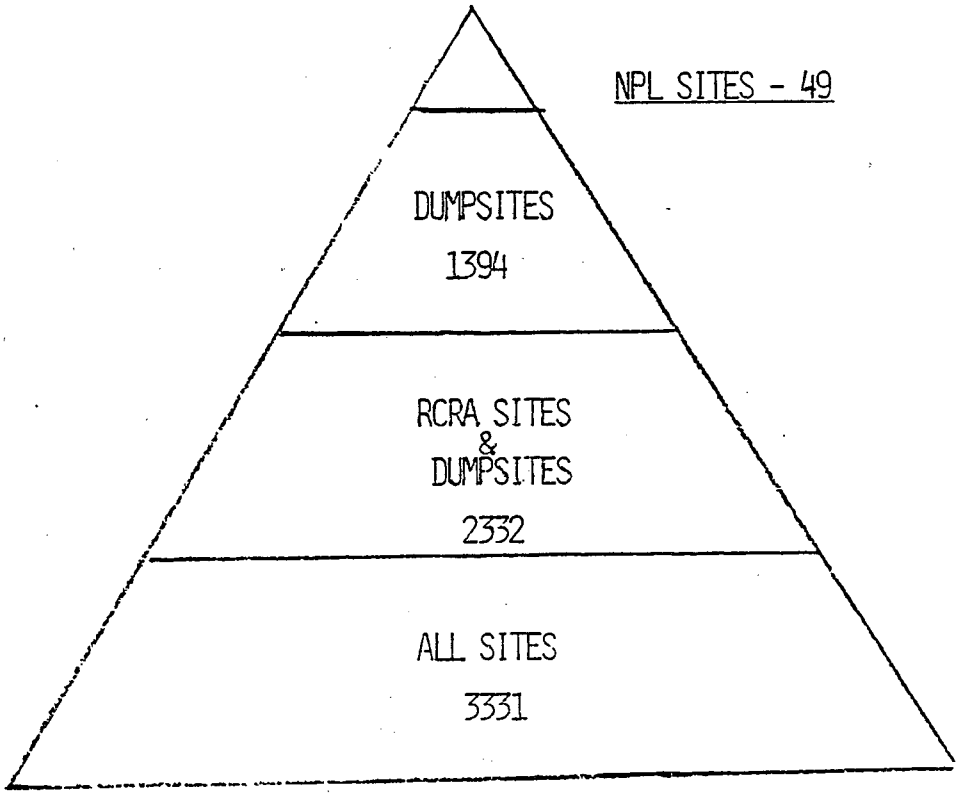
- Figure 6 -

EPA SUPERFUND ENFORCEMENT STATUS

CASES REFERRED TO DOJ	26
SETTLEMENTS (INCLUDES CONSENT DECREES, ADMINISTRATIVE ORDER W/CONSENT, CONSENT AGREEMENTS, AND VOLUNTARY COST RECOVERIES)	39
SETTLEMENT DOLLARS	$148,000,000
UNILATERAL ADMINISTRATIVE ORDERS	6 SITES, 122 ADMINISTRATIVE OR
CASES IN NEGOTIATION	74
NOTICE LETTERS	
SITES	135
PARTIES	2500

- Figure 7 -

TIP OF THE ICEBERG?



- Figure 8 -

there, we know whether it's a problem or not, while it's only 10 in Delaware at this point in time. They're way ahead of the game.

Region 3 site status. (See Figure 9) Numbers on the NPL again are broken down by Pennsylvania and Delaware. FY83 cleanups: four overall, three in Pennsylvania, the number of studies that are on the way, the number that are planned. This is just the plan for '83. We have a kind of a schedule (not included) on the next chart which will show how we've got it just about all planned out. We have some idea of those that are not going the enforcement route, whether or not we are going with the master plans, the remedial investigation feasibility studies or the actual construction and cleanup or whether it's going enforcement or whether we have a responsible party in state cleanup involved. So there is a schedule for each one and we could probably go over that if anyone's interested.

This is interesting, to show the bucks that have been obligated and spent, but I think the issue here is that one site alone captured some six million dollars: in Pennsylvania, the Old Forge site in March or February. (See Figure 10.) What you have here is a big distortion when you go from the planning side of expenditures which, as I said, are only $25,000 or $300,000 per site and then all of a sudden you go into construction, as next year we intend to go into construction with quite a few more sites. Because we're doing the remedial investigations this year, you can see how that is going to be skewed in the next few years overall in the Superfund program.

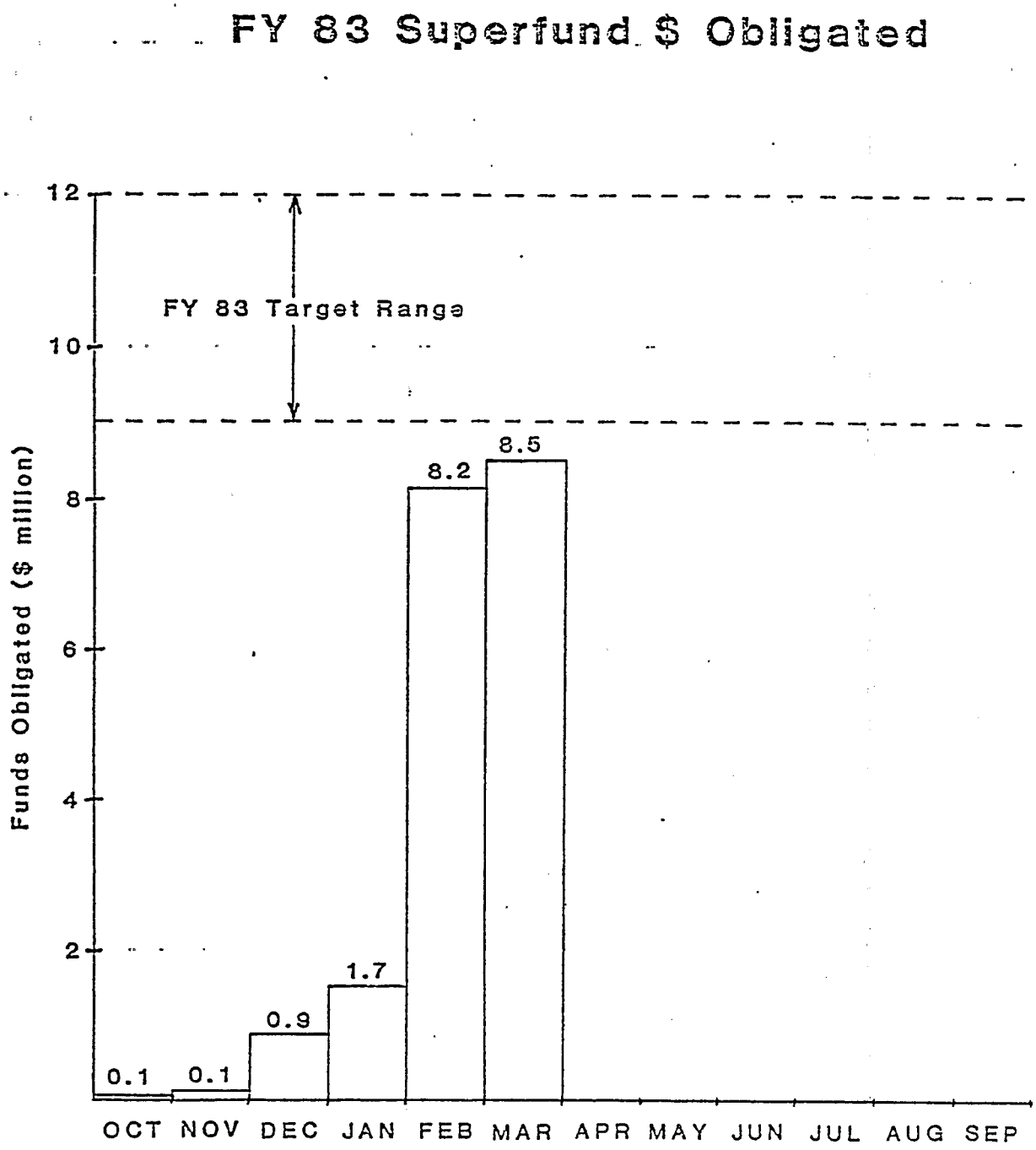
This is an example of four sites: Tybouts Landfill, Wildcat Landfill, Great Chemical, McAdoo. What I just tried to do here and what we've been doing for all our sites is schedule out when the RAMP has been done, will be done, our estimates for when the feasibility study will be done. There is no guarantee that we can fit everything into every block and I'm going to be sure that there is going to be a cleanup at the end. It may go over by six months or whatever. But, what we are trying to do is at least have goals for each site so that we can begin to identify these and make sure that our staff and the states know what commitments we are shooting for across the board. I think the key thing here is that the states must know for the financial aspect and they're pushing us on others too and we have to know so that between the two of us we can plan this cycle all the way through for each and every site. There's not enough resources between the two agencies to get the job done if we're stepping on each other.

The last thing I just wanted to put up was a map in the Philadelphia area. (See Figures 11 and 12.) I guess I don't need to tell you that most of the sites from the Superfund 418 list, I think something like about 30 percent -- 35 percent in that range, come from the four states New York, New Jersey, Pennsylvania and Delaware. Delaware has 8 sites. It's a small state and when you look at that from a per capita basis of cleanup, they are going to have a tremendously high burden. Higher than probably the other states when you look at the cleanup costs per citizen in this state overall. But that just gives you an idea in the Philadelphia area the kind of concentration we have and I am sure if you saw overall New Jersey and New York, you'd see the same kind of thing. Do you have any questions on those two states or any issues?

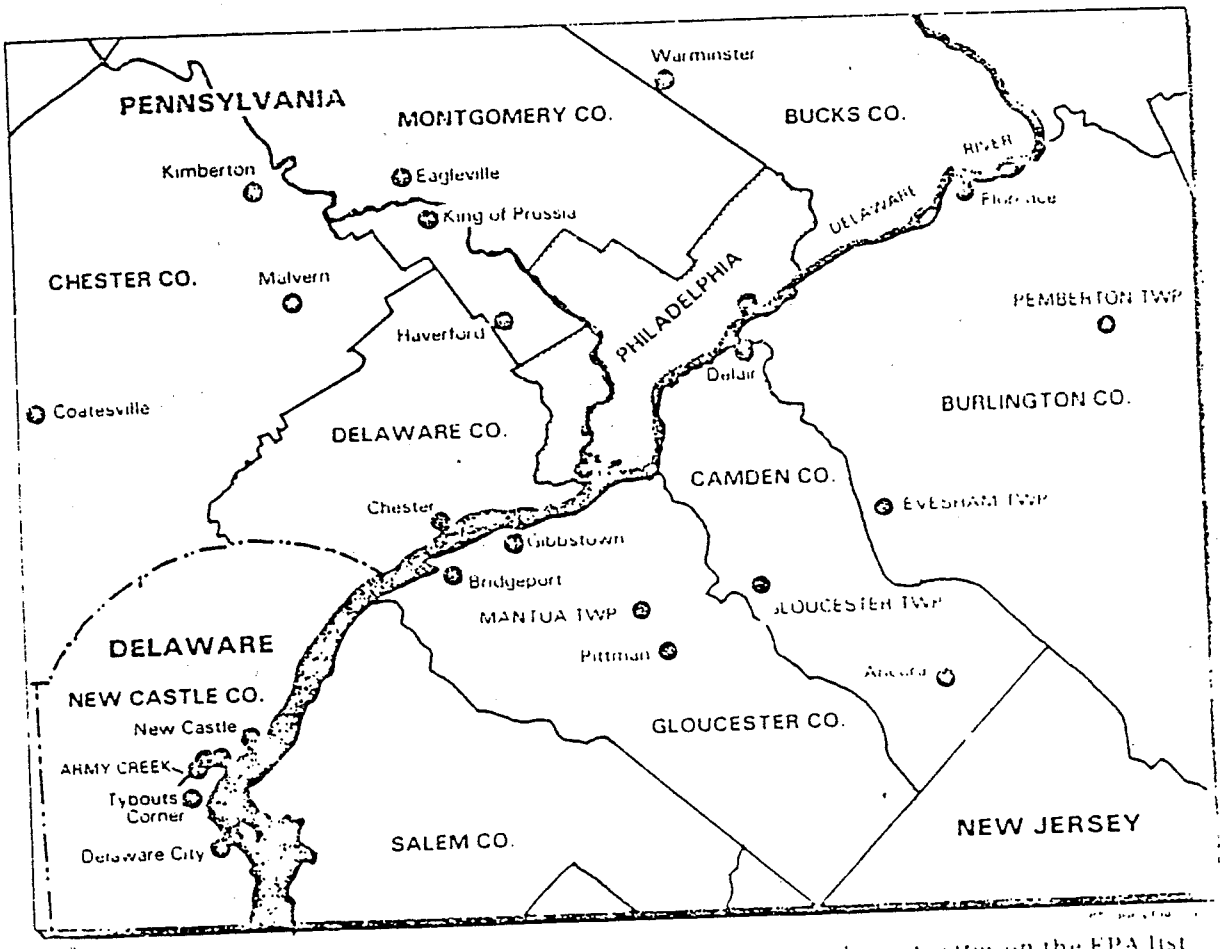
REGION III SUPERFUND SITE STATUS

	REGION	PA	DE	MD	VA	WV
NPL SITES	49	30	8	3	4	4
FY 83 CLEANUPS	4	3	0	0	1	0
FY 83 STUDIES						
- UNDERWAY	3	3	0	0	0	0
- PLANNED	14	9	4	0	0	1
FY 83 MASTER PLANS						
- UNDERWAY	23	14	4	2	2	1
- PLANNED	6	4	1	1	0	0
ENFORCEMENT	8	6	1	0	1	0
RESPONSIBLE PARTY OR STATE CLEANUP	5	5	0	0	0	0

- Figure 9 -


FY 83 Superfund $ Obligated
FY 83 Target Range
Funds Obligated ($ million)
12
10
8
6
4
2
0.1
0.1
0.9
1.7
8.2
8.5
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP

- Figure 10 -

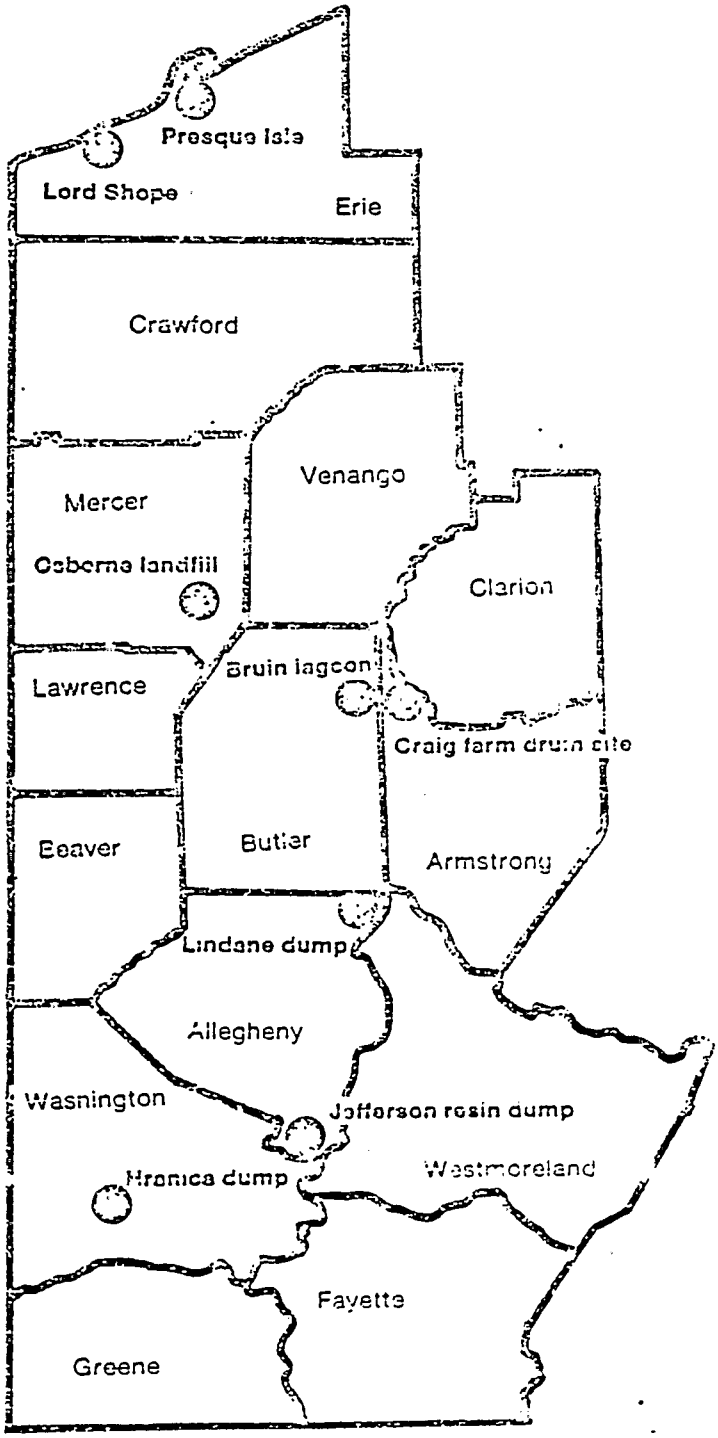


hwest Philadelphia in October; the map shows places in region with waste sites on the EPA list

- Figure 11 -

Where the dumps are

Hazardous waste sites in Western Pennsylvania on EPA list of 418 worst



- Figure 12 -

2 of 5

Norman Nosenchuck:

Can I ask a couple? You take the lead mostly in your area, Steve. How do you determine how clean is clean? Who makes that determination?

Stephen Wassersug:

We with the state.

Norman Nosenchuck:

That's joint? If there's disagreement, how do you arbitrate that?

Stephen Wassersug:

Well, we haven't had it yet, Norm.

Norman Nosenchuck:

I'm glad to hear it.

Judy Borger:

What about Lehigh Electric, Steve?

Stephen Wassersug:

At Lehigh we went to the negotiation, sat down and reached an agreement with the state on just how much soil had to be removed, how many barrels, where the barrels had to go, whether they had to go to a special incinerator or a landfill. We really were able to negotiate out everything with good communications all through the process. Now on Lehigh we did have an issue with our headquarters regarding the soil and just how much soil had to be removed, whether it had to be below 50 parts per million. But I think we resolved that also with our headquarters.

To a degree the citizen groups almost have more control over us. I mean, if they aren't happy with what has to be done, it's not going to be done. Lehigh was a good example where the citizen group, before we started taking action there and when we were going to take our first phase and take off the drums, were going to lay down in the road and prevent us from cleaning up the site because they were not satisfied with the alternatives. So there's a kind of a mutual thing that has to go on here and a high rate of communication has to take place.

Norman Nosenchuck:

Are you happy with the quality of RAMPS in Region 3, Steve?

Stephen Wassersug:

We are improving it. We started off, like with anything, with a new contractor and everything. I think we've been happy with the quality of the contractors that we have to use overall, especially how they started. Sometimes there is a bit of a delay overall, but I think we're okay.

Norman Nosenchuck:

I'm talking about the quality of the draft RAMPS and things like that.

Stephen Wassersug:

Yeah. I'm just saying I don't think we have the same problem. I don't know, maybe you do Bob, but I don't think that we have -- at least it hasn't been brought to our attention that it's that poor that we need to do it over and over again.

Norman Nosenchuck:

When you take the lead and you have the Corps of Engineers doing the work and the state comes up with the money, they deposit the money to your account?

Stephen Wassersug:

Right.

Norman Nosenchuck:

And when you draw down a payment it's 90%/10% each time.

Stephen Wassersug:

Well, I --

Norman Nosenchuck:

Bob knows why I'm asking the question.

Robert Ogg:

To tell you the truth, I don't know the answer either.

Norman Nosenchuck:

I don't need the answer to that. What I'm asking about for everybody's benefit is this: where the state takes the lead, you get what's known as a letter of credit and the credit has a certain amount of money involved. For arguments sake if you have a site that's $1,000,000 I would expect $900,000 from the federal government and $100,000 from the State of New York. I intend to spend the $900,000 federal first and then spend the $100,000, you know, that's just good business, and --

Stephen Wassersug or Robert Ogg:

That's your good business.

Norman Nosenchuck:

That's correct. That's good business and is, responsive to the state taxpayers. Now there's been a dialogue on that and it appears in some cases, and I want to know if this is a uniform national policy, that they are saying no, for every payment take $9 federal, $1 state and each payment will be at that share or if it's a state, local government operation, not a private site, it will be the 50/50, or 30/70 or whatever. I need that answer. That answer I need. All the states need that answer and that's why I asked that question.

How much training do you have to give to the Corps of Engineers to get them up to speed, Steve?

Stephen Wassersug:

Not much. We were concerned and the states were concerned when they first came on board, and the citizens also. I don't know whether or not they put their best people on or they were trying to do a Cadillac job to show that they could do it since we had the first site that they were involved with in the country under federal lead. However, we were extremely pleased by the way they handled the contracts, the deadlines we put on them, the contract officers and the way they overviewed the contractor and the site and the way the selection was made. There were so few minor glitches on that first site that even the citizens were pleased. I mean there were some scheduling slips of a week or two, but we didn't have anything that was broad and we didn't have anything that we couldn't deal with with the Corps.

Norman Nosenchuck:

Who's paying for those people? Is that coming out of the federal Superfund Program?

Stephen Wassersug:

The Corp you mean?

Norman Nosenchuck:

Yes.

Stephen Wassersug:

There is a charge. There is a 90/10 charge for the Corps time also.

Norman Nosenchuck:

One of the concerns I know from Donald Lazarchik of Pennsylvania, early on as you know, is how much was it going to cost the state? I hope that's been resolved by now.

Stephen Wassersug:

It has been resolved and he has the fee. He knows what it's going to cost. He does admit that the cost isn't high. He was just concerned about the principle of whether or not the state should have to pay the Corps for oversight. He does admit, I think, that they did a pretty good job, that they did the contract work that they should have done and everything else, but I think he was concerned more about the principle than anything else and we have a policy statement for him on that.

Norman Nosenchuck:

I raised the question on Don's behalf. You said cleanup can go on simultaneously with litigation. Is this a Region III policy or a national policy?

Stephen Wassersug:

Well, Tybouts Corner is a good example where we have a case in court at the same time we're going through stages of Superfund. I think it's a case-by-case issue as to whether or not certain sites lend themselves to both at the same time. Now sometimes the overlap can be detrimental. In other words we have what was called dual track earlier on. I think we are also concerned in the regional offices the dual track does not work as a policy across the board, but it may work in certain instances.

Norman Nosenchuck:

My other question is how long do you wait before you start the Superfund cleanup, when you're involved in litigation? I don't know if anybody is here from the New England states, but I was sitting in lunch next to someone from the Attorney General's office from either Vermont or New Hampshire or another New England state and they were complaining bitterly because of what was happening in Region 1. I know there's nobody here from Region 1, but I hope they're addressing that on the other side. It's like ping-ponging and the state is coming out with the short end of the stick.

Stephen Wassersug:

Well, we're concerned about the enforcement too. I mean, in some instances we thought we went ahead rapidly to enforce and one of our key cases is sitting in federal court for two years and still doesn't have a trial date.

Norman Nosenchuck:

But while it's in court, you've moved ahead with the cleanup?

Stephen Wassersug:

We moved ahead with the cleanup. That's right. Now the other thing I want to conclude with is in the recoupment phase. We will recoup on every site, which means we will go back for all the Superfund dollars spent in any site and we would hope that the states would join with us on the litigation so that they would share if we did recoup 50 percent or 100 percent, whatever share the state was entitled to they would receive that share back from that recouping action.

Robert Ogg:

In fact, in both New York and New Jersey on any recoupment action we're inviting the state to join us in the law suits so that we can go at the same time, against the same people, have one trial if the trial is necessary and one request. As was pointed out by the folks in New Jersey, it also makes sense for them at that point in time to tack on an injunctive type relief to pay for the O & M costs. If they can get those out of the responsible parties before we're well into the O & M expenses they may be able to get some pot of money out of the people up front.

Norman Nosenchuck:

How much money do you estimate you are going to spend in Region III for the total Superfund cleanup, Steve?

Stephen Wassersug:

Which, this year?

Norman Nosenchuck:

No, total program.

Stephen Wassersug:

Let me run some calculations and I'll give you the answer before the next hour.

Norman Nosenchuck:

Can I ask you a question? Do you think from your perspective there's a need to extend the federal superfund legislation?

Stephen Wassersug:

Well, I -- that's why I was glad I postponed the answer a bit. We are lucky that we have our states sort of getting on the train first. Pennsylvania is doing a real good job. It's sort of a first come, first served. Even though you have a priority list and that's the way it works, our states seem to be somewhat aggressive in their pursuit. So when you say that, I guess, I have

to feel grateful that our states are at least going to use what is available now. Now the issue is, I think, and everyone has said it within the agency, we can clean up 170 sites overall using Superfund. Now that doesn't mean the others don't get cleaned up. But, the others fall into other categories of cleanup. We do have a lot of voluntary actions which have taken place, some of which the states have negotiated to the tune of 1 to 10 million, whatever it is, per site and we have also. So we've got to take some credit for that. The other thing that we have, of course, is the other grouping which is enforcement actions. Now I guess from the standpoint of where we are at this point in time and how fast we are going and where we expect to be, I think it's going to be difficult.

Norman Nosenchuck:

Well, from your perspective, I mean as one of the ten regional directors in this area, do you see any need, from your personal perspective to request an extension of the Superfund legislation beyond September 30, 1985?

Stephen Wassersug:

I think that if the -- remember I showed you that more than half of our sites have not been inspected at all to determine whether they are potentially Superfund sites. I guess if it turns out that many of those are also going to be Superfund candidates and we really have some more severe problems, I think we're going to have to deal with it because the time that's involved right now to identify those sites and clean them up probably would not be enough under the current act. But on the other hand, I think it's going to depend somewhat on just how many more enter into the process that need Superfund cleanup.

Norman Nosenchuck:

Steve, to follow-up, you're talking about doing the additional five or six hundred site investigations that Pennsylvania hasn't done yet. Do you foresee any more funding coming on the federal level for the states to do that? Now I know that Pennsylvania has applied for the $486,000, their share of that $10,000,000. Do you see any more of these kinds of monies coming to the states to in fact do preliminary assessments and investigations?

Stephen Wassersug:

Right now I don't see that happening. I don t know of any other development to provide more money. I know that states had been doing it in the past using their support staff and they felt it was partly their obligation to do it, to determine is a there a problem out there. I mean they have the same screaming and concerned citizens once the site was identified and appears on some list some place. So I guess it's a joint responsibility. I don't know exactly how many site inspections Section 3012 is going to accomplish.

Certainly, I don't think it's going to do them all. But on the other hand, we would hope that based on the data we had when we identified those sites that we really got the big ones. The problem that we are having is with the hot

line and with other indiscriminate dumping that is occurring at this point in time. A number of sites like in Philadelphia, Tysons and others are coming to us by telephone calls or hot tips or whatever and they never even appeared on the original list that we have. I don't know how many of those are out there, but they are certainly also going to use Superfund resources too.

Judy Borger:

Bob?

Robert Ogg:

The National Priority List, as Steve mentioned, has 418 sites and actually it's 419 sites now because of the Missouri dioxin situation. Of those, 65 are in New Jersey, which has the most of any state, 26 are in the state of New York. I also have Puerto Rico and there are five down there if anyone is interested in the Carribean.

At the moment we have signed 10 Cooperative Agreements and seven State Superfund Contracts. Three Cooperative Agreements are in New York. Our work plan for the rest of FY83 calls for an additional eight studies. If you remember Steve's overhead the RIFS type work to get started in New York and 10 in New Jersey. This is really going to boost the workload. It also looks like in FY83 or close to FY83 we would have two more design construct type agreements with the State of New York: Love Canal and PAS and three in the State of New Jersey.

I just want to comment again and emphasize the cost figures a little bit. Steve independently did his overhead of what the average cost for a site would be. I don't know if we're both indoctrinated the same way or we have similar experiences, but the feasibility studies we're funding do range from about $250,000 to $500,000 with a high of 750. We have funded some initial remedial measures which are really surficial cleanups, the drum type removals and they are running one and a half to two and half million dollars and the actual cleanups appear to be anywhere from 3 to 10 and I really think Prices Pit will go up to 13 million. I think Love Canal will easily go up to 20 million as Bill Hedeman said this morning. What that means simply is you see a sharp rise in expenditures required both by the federal government and by state governments as projects proceed and as the whole program proceeds. A quick example is the Burnt Fly Bog site in the state of New Jersey. The feasibility study cost $340,000. That meant the state had to put up approximately $34,000 -- $33,000. The cleanup that will be funded next which will cover about 80 percent of the cleanup of the area is 4.6 million dollars: larger than a factor of ten. There is one area that still has to be studied and the guesstimates on that could drive the cleanup costs to $11 million. The state's share has gone from $33,000 in 1982 to a potential $1.1 million in 1983. As Norm asked, what is the total share? - If we assume about two-thirds of all the sites will have funded actions in each state at $6 million a shot, that is $300 million and that acceleration from 10% of the study phase which is about 10% of the project is happening now and leaping up into the construction phase in 1984. That is a steep rise in costs that both parties have to bear.

Kate Parker:

Did EPA contribute to the tremendous cost to clean up Chemical Control Corp?

Robert Ogg:

Right now, under the ten cooperative agreements in contracts, there is about $27 million in federal monies. There is about $1.6 million committed of state monies and there is around $1 million worth of credits. There are little sites out there which received some monies prior to Superfund or early on. The funding began under the 311 fund out of the Clean Water Act and Chem Control did receive about $4 million of federal monies and about half of that was Superfund reimbursing 311 fund. There are also several other sites in New Jersey where we had put several million dollars in cleanups prior to Superfund. Technically to answer your question, yes, there is some Superfund money.

Norman Miller:

There was a ninety to ten match only this time the state had the ninety and the federal government had the ten.

Kate Parker:

Well, why is that?

Robert Ogg:

Chem Control cleanup started prior to any mechanism like Superfund. Chem Control started prior to the passage of Superfund.

Kate Parker:

And the state can't recoup the money?

Norman Miller:

We couldn't wait either.

Robert Ogg:

They absolutely could not wait. The state is actually petitioning us for recoupment and I think they will be turned down. It just does not fit the mechanisms that are under way so far. Chem Control final cleanup is one of those we want to fund. Hopefully this month we are going to sign the agreement to finish the work at Chemical Control and get a comparison - there is a total of $28 million?

Norman Miller:

$27.5 million later they're going to clean it up.

Robert Ogg:

The contract for final closure is going to be about $600,000. Hopefully, we really are at the end of Chemical Control.

Kate Parker:

New Jersey has 60 plus Superfund sites?

Robert Ogg:

65 sites.

Kate Parker:

Are most of them privately owned or are many of them state or municipally owned?

Robert Ogg:

Most are privately owned. I forget the exact number. About 5 are municipal sites. Senator Dalton mentioned the Gem site - that was a municipally owned site that required a 50% match.

Kate Parker:

Does EPA have any idea what it is going to cost New Jersey to come up with the minimal 10% share for all those 60+ sites?

Robert Ogg:

If we look at the possibility, which I hope is a probability, of getting about one-third of the sites cleaned up through private parties, that is really an off-the-head estimate, based on what we seem to be running into. There are some sites out there with deep pockets on the part of the responsible parties. We are talking about 40 sites. If the average cleanup costs at each site is $6 million, that is $240 million of which you need about 10%.

Norman Miller:

Plus 50% if it is publicly owned.

Robert Ogg:

Just for the Superfund portion of the work on the National Priority List and therefore you are talking about maybe $30 million of cost sharing.

Judy Borger:

I think Kate brings up one of the frustrations of the states in trying to determine how much money they are in fact going to have to have. The problem is that we have a budget coming up that is supposed to be adopted by July 1 and how much money are we going to need to be assured of having our 10%, if in fact we're going to get all that money out of the General Fund.

Robert Ogg:

In New Jersey, in early April, we had a large announcement between EPA and the state DEP announcing the state's four-year plan for cleanup. Let me back up for a second. There are many more than 65 sites in the State of New Jersey. That four-year plan for the state encompassed much more than 65 sites. That was an attempt to put some order into the budgeting process.

Stephen Wassersug:

You can't do it for the next five years, you can do it, I mean, you can come up with a number, but the confidence level of that is very low. Within six months of each of the budget years I think we can come out with a number that has a very high confidence level, like Pennsylvania, as a state, coming up with perhaps $3 million. We estimate that knowing the duration of the projects; knowing where we are in each level; we may not be able to put much more than $27 million into it at this point in time to match their $3 million. We may be able to do a little bit more. Again, that is the limitation there. Then when we get into next year at this time we are also going to have a new confidence level to do 1985.

Kate Parker:

Let me ask another question. Mr. Wassersug, in your comments you said something about the state shouldn't feel that all those sites that did not make it on the National Priority List will not get attention and then you talked a little about that and you said something about those sites that have been identified and which have responsible parties. Don't an awful lot of Superfund sites not have responsible parties?

Stephen Wassersug:

Sure, but where we do have responsible parties, we are looking at those from the standpoint of bringing an enforcement action. Where you can't find a responsible party, let's say we have an emergency of bad drinking water or whatever problem, we can carry out a removal action because you don't need to be ranked. We have some sites that haven't been ranked on the National Priority List that have still received Superfund money. That would be the removal money. So there are still some actions that we can take to insure the people in that area, at least, that we have contained that emergency.

Kate Parker:

It seems to me that this process is an ongoing one and we are just at the beginning of it. I know that the Reagan administration doesn't feel that way. I heard Rita Lavelle say to my horror in early December in Washington that we were going to have all these sites cleaned up and in fact she had already taken care of most of them and there wasn't very much work left to be done and Superfund wouldn't have to be reauthorized. Yes, Judy was there. Anyway, will there not be a new Priority List once these sites really have been addressed in a responsible manner? Will we not then move on and try to address more of the thousands of sites that we all know are out there?

Stephen Wassersug:

Sure, but we won't be doing that though when we conclude the 419. We do that constantly. As I said, we are in the process of taking two or three off from our Region at this point which have had action and been cleaned up. We are also in the process of adding four or five right now. So what I am saying is that will always go on every quarter. We will be identifying them and some that might have ranked low in the past we are not going to just put them off to the side and not look at them. There may be some low-level monitoring program to come back at that site because we may suspect something or we may have erroneously looked at the hazard ranking system. It may have to be upgraded and the site may be ranked considerably higher.

Norman Nosenchuck:

May I ask the question, Steve, have you in any case so far in Region III put sites on the list unilaterally or have all the sites been submitted by the state?

Stephen Wassersug:

No, we have put them on unilaterally.

Norman Nosenchuck:

You put them on unilaterally?

Stephen Wassersug:

Yes. Only a few. When I talk about a few, it is a handful. What happened was - let me just point out that if the state believed that - you know, we discussed it with the state of who was going to go on there and they said, oh, we don't think you are right - we think you did this wrong, you did that wrong. In two instances in one state - Maryland, I believe, we did not put them on there because we had made some calculations incorrectly and they had brought to our attention the data that we did not have. In other instances, though, the state may not have been able to support its allegation that it shouldn't be on there and, in effect, the score was retained.

Norman Nosenchuck:

When you put them on, how do you handle the question of operation and maintenance? Isn't it a fact that the state, before they put the site on the list or nominate them, in every single case have got to write and sign a statement to EPA that they will provide, therefore, the operation and maintenance for that particular site?

Stephen Wassersug:

That is if they are going to receive remedial funding or dollars to clean up the site, I believe.

Norman Nosenchuck;

No, but in every case, in every case, I know this because I have to do this for New York - in every case we have to certify up front when we nominate the site that we will provide for the appropriate costs - if it is necessary - of operation and maintenance. I ask, how does the federal government handle that?

Robert Ogg:

The actual commitment to the O&M comes at the point in time we are signing the Cooperative Agreement for design and construction.

Norman Nosenchuck:

I agree, but if you will check your correspondence you will see that we are asked to sign a letter, because I have had to sign them.

Robert Ogg:

You did sign such a letter, that's right.

Norman Nosenchuck:

Because I was requested to sign it. Why was I requested to sign it? Because that was the guidance given to me. The question I am asking is how does the federal government unilaterally put on a site and then address the issue of O&M. I have been told and I will check my notes, by your people in Washington, if the O&M doesn't come forth then they are going to drop that site from consideration.

Stephen Wassersug:

After a period of time. My understanding was that we would take and develop a Superfund list based on the worst 400 sites. What we did not want to see happen was to come up with a ranking, go through the whole Superfund program, and clean up those that did not represent the worst sites that needed to be cleaned up. If we put a site on the list but a state did not agree and I

don't want to say what doesn't agree means, but let's assume they thought we did it wrong or whatever; the state has the option as to whether or not it wants to pursue cleanup of that site using Superfund. Now, the site given to us, if I recall earlier, would remain on the list for a period of a year or two, I believe, and after that period of time if the state did not wish to pursue that we would in essence go through some narration, I believe, in the Federal Register as we have done with the other ones that have been cleared or whatever and probably drop them at that time.

Norman Nosenchuck:

I don't care who adds them on. However, my real concern is that the more sites you put on you are effectively reducing the amount of money available to those sites that are able to move ahead. You are not giving any credit to those states that are ready to move right out front right now. I'm not going to put Bob Ogg on the spot and say, why didn't we get a response to those six applications and only got one. We celebrated the first anniversary last month. Am I wrong, Robert? Acknowledge the number.

Robert Ogg:

I will respond, Norm. You sent in six applications for cooperative agreements to start studies at six sites in the State of New York last April.

Norman Nosenchuck:

That's right.

Robert Ogg:

You did it based on information I provided to you. Part of that information was incorrect, as it turned out. You provided those applications because you believed you could receive 100% state funding on all those sites.

Norman Nosenchuck:

We were told that. You are representing the United States of America, the federal government.

Robert Ogg:

I, representing the United States Government, misrepresented it on three in that...

Norman Nosenchuck:

Who is going to pay for our exercise?

Robert Ogg:

I incorrectly indicated that the municipal sites - the three municipal sites of that group would also be eligible for the 100% funding. As it turned out, they were not and I informed you shortly thereafter.

Norman Nosenchuck:

But this was only a policy change and isn't it a fact, Robert, that very clearly, headquarters could have maintained their previous policy and made them eligible for 100% funding? Isn't that a fact?

Robert Ogg:

It was a policy decision to require the 10% funding.

Norman Nosenchuck:

Yes, but isn't it a fact that there was a policy that the federal government, up until that point in time, up until May 1, 1982 was providing 100% funding for municipal sites?

Robert Ogg:

That's right.

Norman Nosenchuck:

What I am trying to point out - this is what I said earlier and I continue to say - the fantastic ping-ponging, the guidance, conflicting guidance. To this date the states do not have a compendium of information. I gave that note to Bill and he promised me ...January 21. There is such a lack of comprehensive guidance to this program it is unbelieveable. There was a policy in place prior to May 1, 1982. You submit your application for a feasibility study under a cooperative agreement and the feds would pick up 100% of the funding, clearly, and based on good faith - and I'm not blaming Bob Ogg - based on his telling us that it was factual policy, we submitted the documents. They got it in time. To this day, we haven't received an official response back on any of them. What we did - have we received an official response back on my applications?

Robert Ogg:

Look in Connie's March 8 letter to you.

Norman Nosenchuck:

March 8, 1983. That's about 11 months and a couple of days. He has not responded to those applications. He has not responded. All he referred to was on the Sinclair Refinery on the ...

Robert Ogg:

No, no, he mentioned all six in there.

Norman Nosenchuck:

What did he say?

Robert Ogg:

Take a look at that letter. Basically confirming what you have been told before that the applications were not - I forget the exact words - they are not eligible for the 100% funding. We have prepared our new work plan addressing all 26 sites ...

Norman Nosenchuck:

Let me correct your memory. Of those six sites one was the Olean Oil Field.

Robert Ogg:

That's right.

Norman Nosenchuck:

How much money did the state contribute to the feasibility study at the Olean Oil Fields?

Robert Ogg:

$50,000?

Norman Nosenchuck:

Was it 10%, 50% or 0%? It was 0%. I checked it, Robert. 0%. I'm telling you.

Robert Ogg:

Nice going Norm.

Norman Nosenchuck:

Damn right. The fact remains that you still could have given us, even with the change in policy, the cooperative agreements on the ones that weren't municipal. The fact still remains, and that I find most disturbing.

Judy Borger:

What is the current policy if you received an application prior to May 1, '82 and you haven't acted on it as yet, but you received it prior to May 1, '82?

Will you require the state to pay 10 percent of the feasibility study or will you as was in the guidance document at that point in time pay 100 percent of the feasibility study?

Robert Ogg:

The fascinating answer just brought to my attention is that we apparently processed Olean in January of 1983 without the cost sharing.

Norman Nosenchuck:

January 20, 1983. I checked it because I had been under the impression it was 90/10 and I was corrected by my own staff and I went and I said it can't be right; show me the application. I was astounded when my staff was right and I was wrong. It was 100 percent. That's a fact. You can check it out.

Stephen Wassersug:

Certain ones, I recall, were grandfathered at a point in time before that date and they were listed. That may be one of them. Because we had one.

Norman Nosenchuck:

All the other ones had been listed, Steve. All the sites we turned in were listed in the initial listing. The only point I'm trying to make and I'm not picking on Bob Ogg, Bob has worked very closely with us, but the problem is the frustration that he sustains in the lack of guidance or the flip-flopping in EPA headquarters. I think it's enough on that subject because I don't really want to put either of you on the spot on that thing. So all I'm trying to point out for everybody's benefit, some of the problems, the real world problems that the states experience. You know that cost us a fair amount of effort. I personally had to go to the Commissioner to get him to sign off. Everybody in the state worked in an expeditious manner and we sent them all down and it's unfortunate that they weren't approved. You know what happened. Again, I submit to you, just check Olean and see if I'm not 100 percent correct on what I just told you.

SUPERFUND WORKSHOP

State Presentations: Regions II and III

Judy Borger:

Okay. If there's not another more pressing question, I think we'd better move on to Part 2, the State Presentations. Next on the list is Norm Miller. He is the Research Director for all of the New Jersey Senate and Assembly Environmental and Energy Committees and has had more than extensive experience in the development of hazardous waste legislation in New Jersey. Norm.

Norman Miller:

You just gave me a promotion to my boss' position. Actually, I am not the Research Director though I'll take the salary and the position. I am a Research Associate with the Office of Legislative Services, nonpartisan staff to the Legislature in New Jersey.

The program suggests that I talk about the scope and extent of New Jersey's hazardous waste problem, as well as what we're doing about it. I'd rather devote the bulk of my time to the second half of those, for two good reasons. One, because I don't think it is profitable for me to rehearse for you the extent and scope of our hazardous waste problem - it's well known, probably by everybody in this room and others and, second of all, because it's less painful for me to talk about what we're doing about the problem than about the problem itself. We do, as indicated, have 65 of the now 419 sites on the National Priority list, a distinction with which we could do without; four of the top 10 and I think the worst in the nation. At any rate, we have been in the hazardous waste cleanup business for a long time. It seems like several decades. I think that the flip side of the grim story is that we have developed a very solid, comprehensive and what we hope will be an effective program to deal with the problem, and I would like to share the many components of that program with you today.

From my presentation it may appear that we attacked the hazardous waste problem with a good deal more systematic and designed approach than we actually have. These pieces came together somewhat more chaotically than this presentation would suggest, but at any rate, I think it is all together now, and I would like you to think of our program now as a series of links in a chain of hazardous waste regulation.

First, funding . . .
The centerpiece of our program, as you heard today, is the "New Jersey Spill Compensation and Control Act" which became law in 1976, probably before most of you heard about hazardous waste. (P.L. 1976, c. 141; N.J.S.A. 58:10-23. et seq.). We had not heard about it either. The "spill" in that title refers to oil spill and the curious history of the "spill act" is that it was conceived, designed, and enacted as an insurance policy against an East Coast Santa Barbara-type incident with the advent of the drilling operations in the Baltimore Canyon trough offshore in the mid-1970's - after the sale of the oil leases. As history records, relatively little if any commercially producible

supplies of oil or natural gas were discovered and most of those projects have been abandoned, but by a very fortuitous stroke of some anonymous drafter's pen, that act regulates not only petroleum products, but "hazardous substances." That turned out to be fortunate indeed because it enabled us to use the considerable combined revenues of the chemical and petroleum industries to attack a problem that began to bubble up a site at a time since 1976 and the rest is history.

That act, of course, prohibits the discharge of hazardous substances into the environment, but the most prominent feature, obviously, is the spill fund it creates, which can be used for the cleanup and removal of hazardous discharges; which is strictly liable for all damages, direct or indirect, resulting from the discharge of either hazardous substances or petroleum and petroleum products in the environment; which funds a health care task force about which I will tell you more in a few minutes; which provides a 10% state match for Superfund cleanups; which provides for the replacement and restoration of wells that may be contaminated as a consequence of a hazardous discharge leaching into ground waters; and, which we hope will be used for other longitudinal long-range research studies related to the adverse effects of hazardous discharge exposure.

We therefore regard the Superfund as a cheerful subsidy, when we can get it, but by and large, our own fund has enabled us to deal promptly and responsibly with most of our most serious sites. The Chemical Control site at Elizabeth was, of course, our own home-grown Love Canal. $28 million of the Spill Fund monies went into that site; about $3 or $4 million federal funds went into it. As Bob indicated, we are just about completed with that.

That kind of central hazardous waste discharge event in New Jersey's history gave credence to both the New Jersey Spill Compensation Fund and to the fact that we had a problem, and has enabled us to overcome the political and economic resistance that otherwise might have made it impossible to develop a ready and consistent supply of money to deal with the problems that we have. That fund, however, did run dry - cashflow dry. It can't really be exhausted because we have triggers and accelerators in it which provide that when the claims against the fund exceed the balance in the fund at any given time, an accelerator kicks in and we double and triple the contribution. So it is really an inexhaustible fund, but at any given time, obviously, it could have cash-flow problems, as it did during the clean up of Chemical Control, when we were, in fact, spending money faster than we could possibly take it in, even at two and four times the contribution rate. There appeared to be crises during that period of 1980 when all the monies were being really centralized at Chemical Control. What we were to enact as a contingency fund was a hazardous discharge bond fund - a $100 million bond fund - the monies of which can be used to clean up sites which are either ineligible for Superfund or for which monies were inaccessible or unavailable from Superfund or from our own Spill Compensation Fund. The bond fund, enacted as P.L. 1981, c. 275, is a fund of last resort, but at any rate, it remains a ready supply of money for us to deal with the sites on an immediate emergency basis. It can only be used, however, if the spill fund is dry at that point and if Superfund has not scheduled the particular site on its list of priority sites.

The only other fund that I want to talk about was created in 1981 by the "Sanitary Landfill Facility Closure and Contingency Fund Act" which was Senator Dalton's act, as a matter of fact (P.L. 1981, c. 306; N.J.S.A. 13:1E-100 et seq.). As its title suggests, it does two things. One, it simply assures that there will be enough money available when sanitary landfills close to see that they are closed properly. What has happened in New Jersey, and what probably happens around the country, is that when sanitary landfills reach capacity and, indeed, exceed capacity in many cases, unscrupulous and irresponsible owners and operators simply walk away from what are relatively worthless pieces of property, leaving the municipality as the owner of record and with a big cleanup and closure bill. This act tries to address that problem by requiring that an escrow account be created from a surcharge on disposal for each sanitary landfill, which will set aside monies under the control of the Department of Environmental Protection so that when a landfill reaches capacity, there is no economic incentive at all for the owner-operator to walk away from it. He will have monies available which he can use for nothing else, so he might as well use the escrow monies for closure. It also allows the department to monitor these closures.

The other component of the act creates a contingency fund, in obvious recognition of the fact that much of our hazardous waste is dumped in landfills, mixed in with, and disposed of with, solid waste. It is not a great secret to anybody. The second half of that act creates, again from an additional surcharge on disposal, what is in effect a spill fund for solid waste. The contingency fund, like the spill fund - is strictly liable for all damages, direct and indirect, resulting from the irresponsible dumping, storage, and disposal of solid waste.

Audience:

Do you still require bonding in those facilities, plus the money put into the escrow account?

Norman Miller:

No, no, this escrow account was conceived as an alternative to bonding because nobody would bond landfills.

Audience:

And EPA approved it?

Norman Miller:

EPA doesn't have to approve it. It is our own fund. It is our own fund, because nobody would give operators and owners of landfills bonds. This was the alternative, to require escrow funds.

Norman Nosenchuck:

Are you correct in this? I thought, Norm, that there were funds available from insurance companies that are supplying monies through various insurance policies for closure and post-closure activities.

Norman Miller:

I suppose that well may be the case in an individual situations. What we set out for was to see if we could require bonds and the industry just went bananas. They preferred this measure.

Norman Nosenchuck:

Industry might have preferred the measure but I know the insurance is out there and in New York State the Legislature and the Assembly passed legislation asking us to examine this issue and see whether or not what the feds were doing was adequate to provide money for our purpose and we are finalizing that. As a matter of fact, we have ICF going to work for us, the same ones that did the work for E.P.A.

Norman Miller:

I suspect the premiums are going to be pretty high, aren't they?

Norman Nosenchuck:

I don't think they will be that high. We have spoken to some insurance companies already.

Norman Miller:

At any rate everybody seems to be reasonably happy here except those who own landfills. The problem with this, of course, and we are starting to experience it now, is that those landfills that are one and two and three and four years away from closure, which is indeed a great percentage of New Jersey's landfills, will not have enough time to develop from these contributions into the escrow accounts the amount of money necessary to close, whereas those that are five, ten, fifteen years away, of course, will have time to develop the funds. So, guess what? Some of the legislators in the districts of those that have landfills that are about to expire want to pool all these escrow accounts and put it into one comprehensive liability fund, if you will, for solid wastes - and have everybody dip in as they need it, so that the irresponsible people who have not been putting money away all this time can dip into it, close their sites and walk away, leaving the rest without any money, presumably later on.

Norman Nosenchuck:

I think New Jersey is to be commended on the actions you've been taking but I wanted to make the point that there is insurance available.

Audience:

Do you require this list whether they are municipally-owned or privately-owned?

Norman Miller:

Yes. It has been a source of great discontent in the municipalities. There have been a number of bills introduced to exempt municipalities under the theory that they need not be protected from themselves, but the bills have not as yet gotten anywhere.

All this has been under the "fund" rubric: that's the money. Under the rubric of "knowledge, awareness, information and research," we are about to enact - it has passed three of the four legs of the legislative component of the process - a bill (Assembly Committee Substitute for AB 280) to require the comprehensive testing of all public water supplies in the state for 14 volatile organics and PCB's and, indeed, on a bi-annual basis, for any other toxic substances that may show up in abnormally high concentrations in the drinking water. It creates a Water Quality Institute of health, environmental, academic and other officials to establish maximum contaminant levels for these substances. Once those levels are established it gives the Commissioner of Environmental Protection the power to enjoin any water supply company from continuing to supply water after one year if it has not brought its water into compliance with this standard. That won't take care of the whole problem by any means, but it will address the question of toxics in drinking water supplies for public water systems. The counterpart bill, A-3356, which has just recently been introduced, will attempt to do pretty much the same thing for private wells, that is, it will prohibit a contractor or developer from getting a Certificate of Occupancy or a construction permit until he has certified that the water from the well is in compliance with the standards of the Water Quality Institute. In other words, it will require that all water from wells that serve as the principal potable water supply for new housing be in compliance before the construction permit is issued. With respect to existing dwellings it will simply require that a test be taken and that the results of that test be submitted to the prospective buyer at the time that the buyer-seller agreement is entered into.

Senator Dalton has two Bills which you heard a little bit about this morning. "The Right to Know," which of course is the "Worker and Community Right To Know Act" (Senate Committee Substitute for S-1670) would require the labeling and dissemination of information about toxics in the workplace and in the community. And, the birth registry bill, which will create a registry of birth defects (S-1751).[1]

Both of those I think will help raise the awareness of the consequences of toxic exposure. Hopefully they will work at the front end, that is, they will preclude illness and minimize toxic exposure. However, at the back end, for victims' compensation suits, they'll provide a reliable base of information on which law suits for compensatory damages can be based, and provide the record of such exposure, and, of course, the information can be provided to medical

technicians in the course of managing and treating the prospective victim, and in discerning epidemiological trends.

We also have created a health care task force (P.L. 1981, c. 456; N.J.S.A. 158:10-23.12 et seq.), as I mentioned earlier, a Department of Health task force directed to implement a program to classify and evaluate threats to health posed by exposure to hazardous waste discharges, determine those at greatest risk, and conduct diagnostic examinations and epidemiological analyses of exposure victims. A similar bill (A-3080) will require longitudinal hazardous discharge exposure surveys of individuals living in areas proximate to hazardous discharges and initial and longitudinal diagnostic testing as may be necessary. Those surveys are to be funded out of our Spill Fund as well.

Okay, under the rubric of "prevention," we have a bill that is well on its way through one house of the Legislature - the Environmental Cleanup Responsibility Act.[2] We acronymed it ECRA to rhyme with RCRA. It requires that businesses and industries on sites that in the course of their business, manage, treat, store and dispose or otherwise deal with hazardous substances, be it petroleum or otherwise, prior to closing or transferring operations to a new site, submit an environmental cleanup plan for the premises to the Department, have that plan approved, and detoxify the site before it can effect transfer or sell the property.

There is - not a companion bill to it - but a bill something like it that deals with residential property and requires that deeds record any use of a particular piece of land, if that land is within a one mile radius of the hazardous discharge site identified by the Department (A-3017).

Other components of our program fall under the rubric of prevention. We have a waste oil recycling program which is only about a year old. We have not been able to evaluate it yet but at least it provides a legal place for us to dump waste oil - I never knew what I was supposed to do with mine before this Act. We have a hazardous waste recycling bill - we don't have a program - we have a couple of ideas about how to encourage the recycling of hazardous waste which is really the best idea of all. The newest proposal for the Spill Fund, if indeed we change the mechanism of taxing, and that is under constant review, is to try to tax both at the disposal site and at the source of the generation - and give a credit of one against the other. A fall-out of that, one of the minor benefits of doing it that way, is indeed that we will provide a financial incentive for recycling, that is, if you get a credit of one against the other, then what you recycle does not get taxed.

We also have bills pending, though they haven't gotten far in the process, to develop a hazardous waste registry whereby the users and generators of hazardous waste can exchange needs and wants and supplies and the state has offered to serve as an intermediary, but since industry does not trust the government to hold that information confidential, the idea has not gotten very far. The Chamber of Commerce in the State of New Jersey does have such a registry but it is not extensive and it has not been all that successful.

We have now got a bill just going to the Legislature which will require the inspection and replacement of gasoline storage tanks below ground that are made of corrosive materials. Hundreds of millions of gallons, of course, are leaking into the groundwater almost monthly. This bill would require that tanks more than ten years old, be replaced by new ones made of non-corrosible materials.

Under the rubric of "efficiency:" again, this is a spin-off of the Chemical Control incident. We, of course, require annual audits of the Spill Fund and the Hazardous Discharge Fund and we will create a Hazardous Substance Contingency Response Task Force in a bill well on its way to passage, which creates a task force comprising members from the Departments of Health, Environmental Protection, the academic community, Cook College, Stevens Institute and some of the other academic institutions and industry experts which will develop a protocol of how to go about cleaning up a site in the most efficient manner.[3]

The State was criticized severely in an 11-part series in our upstate newspaper, The Star Ledger, which alleged that the Spill Fund monies were grossly mismanaged at Chemical Control, that we spent much more than we had to, that it took longer than it should have. The creation of this kind of task force would be a response to that problem. It will also develop, on the basis of its recommendation, a protocol for prioritizing sites on the state level which will be used to remove what has been a long-standing local disincentive to clean up. The problem, in many cases, is that there is a small spill, and a local unit of government, be it county or municipality, would look at it and say, well, if we clean up the site ourselves it will cost us; if we wait and let it get serious enough, then somebody else will pick it up; either the state or federal government or somebody. The reward for being responsible and going in and containing the site immediately and cleaning up was that you did it with your own money rather than somebody else's. This local disincentive was deemed inappropriate and so what this priority list will be used for, among other things, is to reimburse local units of government that go in with their own monies and clean up when their turn in line comes. So that when your turn comes up you get your money back if indeed you used your own money to do it. That will hopefully minimize some of the damage which would otherwise turn small spills into large ones (See A-285).[4]

We have very recently imposed criminal penalties for hazardous waste violations and for misrepresentations on a manifest and held everybody responsible for signing off on a manifest form strictly liable for failure either to submit a manifest or, indeed, to misrepresent any information on it.

The licensing and permitting procedures for hazardous wastes - that is a bill that is only one step from passage and will be passed before the year is out, that requires scrupulous checks of all of the people involved in the transporting and handling of hazardous wastes between generator and disposal site (Assembly Committee Substitute for A-901). It authorizes the Attorney General to subpoena any information, check witnesses, all business associations one has, and provides the authority to deny a permit to anybody who has broken an environmental law in the state or indeed is a business associate of anyone who has.

Finally, we enacted a year ago - and you will hear more about it at a later session - a "Major Hazardous Waste Facilities Siting Act" (P.L. 1981, c. 279; N.J.S.A. 13:1E-49 et seq.). We thought it quite inappropriate to do all this and then not give people a legitimate, legal place to put hazardous wastes that they want to legally dispose of. We have a rather comprehensive and exhaustive procedure for establishing a commission which will decide how many hazardous waste sites we need and what kind they should be, where they should be, and have them indeed designate sites as needed and invite private industry to come in and take one of them rather than have the government simply respond to requests from individuals to have it here and there and inspect the sites. The state government, through the Commission, will decide where the best place is to put them, then have industry come in and bargain for those sites and accept those sites and begin operation. So they will be government-sited, industry-operated major hazardous waste facility sites. It's an exhaustive public information and public participation process.

Audience:

I was going to ask if there was a schedule on that?

Norman Miller:

There is. I'd rather you talk with Rick Gimello, who will be a speaker on one of the panels tomorrow morning. He has got all the charts made up. Like all of our charts, they have a lag factor but he is pretty much on schedule. The exhaustiveness, however, of the public participation and what we expect will be the exhaustion of an almost inexhaustible series of legal remedies may well preclude any such site being located in the next several years but it's all we can get in overriding home rule objections.

The Executive department of our government has issued a four-year plan of 132 sites and we estimate over the next four years it will cost $200 million to clean up those 32 sites.

UPDATE

Since this presentation, several of the pending bills referred to (footnoted in the text) have been enacted. Their chapter numbers are indicated below.

1 The "Worker and Community Right to Know Act" has been enacted as P.L. 1983, C. 315 (N.J.S.A. 34:5A-1 et al.); the birth defect registry was enacted as P.L. 1983, c. 291 (N.J.S.A.26:8-40.20).

2 ECRA has been enacted as P.L. 1983, c. 330 (N.J.S.A. 13:1K-6).

3 Enacted in somewhat different form as P.L. 1983, c. 222 (N.J.S.A. 58:10-23.20 et al).

4 Enacted in somewhat different form as P.L. 1982, c. 202 (N.J.S.A. 58:10-23.15 et seq.).

Judy Borger:

Thank you, Norm. Now we'll hear from Norm Nosenchuck of New York, Director of the Division of Solid and Hazardous Waste. Are you going to show the slides first?

Norman Nosenchuck:

Yes, if you don't mind, I brought some slides to show you. I will just stick to the Superfund Program. A lot of the regulations that Norm Miller talked about in the regulatory program are in place in New York but I don't think I will describe that. What I really wanted to talk about was the state Superfund program.

Clearly, hazardous waste is a major problem and what we are going to do about it is of major concern. I remember standing near Governor Lamm of Colorado not too many years ago in Washington, D.C. at a National Governors Conference when he showed this slide and he said that that picture was taken not too far from Denver and he was telling us that this was the preferred method of handling hazardous wastes in Colorado. It is unfortunate that these things happen but this is why we have some of the problems that we have today because of things like that.

Again, you have heard people talk about how Superfund is financed at the federal level. I will just go through this thing very rapidly. That is the sunset provision, the $1.6 billion program over five years. Again, as I said earlier - the word Superfund just disturbs me no end. Some people call it Super-joke. I don't think you should care about how it is financed. Let the Congress worry about that.

Here is what we have been talking about. The states must assure the future operation and maintenance of remediated sites. You must have RCRA-certified hazardous waste disposal sites. I have an editorial that I think I have mentioned before, from the Baton Rouge paper of April 29 where they were talking about some sites being cleaned up in Alabama. Texas said you can't ship the wastes to us and Louisiana said, by golly, we don't want it either and got a temporary restraining order, which they were supposed to argue out this week in court. Again, that is a major concern. In New York we are accepting hazardous waste from other states, New England states, in their cleanup operations and from other states. Much of the waste has to end up in a secure chemical landfill. Why? Because you have a great deal of dirt contaminated with small quantities of hazardous waste. You can't solve the problem by sending the contaminated dirt to a solvent recovery operation or to an incinerator because you just can't destroy it that way. What is really happening is that a lot of the contaminated soil is disposed of in secure chemical landfills. When you cleaned up the Chemical Control site in New Jersey, I know waste was shipped to Alabama, shipped to New York and maybe Ohio and South Carolina. I don't think any of it stayed in New Jersey.

Judy Borger:

I thought there was a case between Philadelphia and New Jersey and it was determined that it was unconstitutional for one state to not accept another state's waste.

Norman Nosenchuck:

Yes, that was the case in connection with the ban on importation of municipal waste in an operation where Philadelphia wanted to ship wastes to New Jersey and New Jersey wanted to prohibit this practice.

Stephen Wassersug:

Solid waste.

Norman Nosenchuck:

Solid waste. That was garbage. Right now, Texas has stopped, has refused to accept this contaminated, mostly rainwater and other wastes for disposal in an underground injection well in Texas. Why are they doing that? They are not supposed to. Apparently this underground injection well is RCRA certified. Alabama wanted then to ship the waste to an underground injection well in Louisiana and a Temporary Restraining Order was obtained by Louisiana. This is hazardous waste. That Philadelphia issue was solid waste. As part of the whole national operation under RCRA Subtitle C, every state, in effect, says that they will permit the importation of hazardous waste. You can't argue against the federal Constitution and yet, here you have two states; one state has already done it successfully and the other state is trying to do it. I mentioned this to Bill Hedeman earlier and I gave him a copy of the editorial; but it is of interest to me because where is the federal position on this? Where is it?

Stephen Wassersug:

What did Bill say?

Norman Nosenchuck:

He was going to check into it. If I hadn't been down in Baton Rouge, I wouldn't know about it either. It was very interesting.

Stephen Wassersug:

We took a position on the Philadelphia case.

Norman Nosenchuck:

I know. But, this is a real problem because right now we are talking about clean up of hazardous waste sites. You have one state already who has successfully stopped the importation of hazardous waste and is that state going to be penalized? That is what I asked Bill.

As this editorial very correctly pointed out - it was a very well balanced editorial -- said, in effect, that we might be cutting off our nose to spite our face, citizens of Louisiana, because we ship a fair amount of waste to a massive landfill in Alabama and what would happen if Alabama would stop the importation of hazardous waste from Louisiana? Good editorial. It is the situation that occurred that I was surprised about. I wasn't aware of it until I read about it.

Audience:

It would seem that by law, I mean by RCRA, and the language in there - it would seem that that would jeopardize Texas' ever being granted authority, total authority, for their program.

Norman Nosenchuck:

Well, that is exactly the point I was making to Mr. Skinner and Mr. Hedeman. They are going to let me know.

I think this was covered before by Steve, how you get certain sites. But again, I am not going to identify these sites, with one exception. These are pictures of various hazardous waste sites around the State of New York that we have picked up in our investigations. To date, we have identified 700 some-odd-plus sites in New York. We are updating our hazardous waste site inventory. The first one was published in June of 1979. We were mandated to update that inventory annually but we weren't able to because we had a lack of funds. Now, of course, we have the funds and we will update it on an annual basis.

Audience:

Where did you get the money prior to Superfund? Just operational funds?

Norman Nosenchuck:

No, before what we did is, the Legislature made line item appropriations to us and that is where we got the money. Line item appropriations to do our work. When we needed funds for remedial work we would identify what our need was and then we would put it into the executive budget process. It would go to the Assembly and Senate and they would give so much to this site, so much to this other site, and so on. Line item appropriations.

Stephen Wassersug:

Do you have line item appropriations for your staff also? To be able to hire Superfund staff or how do you do that? How do you hire those people to work on Superfund?

Norman Nosenchuck:

The way we hire the people to work on Superfund is like this. When we say line item it's not position by position. There is a whole lump sum, Steve. We identify out front as part of our budget process how many people we need and that is part of our entire process. So, we have a line item - x number of dollars, for this purpose. Before we can hire individual people, we have to obtain what is known in New York as a Certificate of Approval of Availability of Funds. We need this Certificate before we hire people and before we enter into any contracts because that is the assurance to us that the money has been made available for this specific purpose even though it has been in the budget document. The state budget is passed for the entire state fiscal year, but now you have to get the money from the Division of the Budget. You have to get this certificate that indicates the money for this item is available.

Stephen Wassersug:

In other words, it is cleanup and staff in one lump?

Norman Nosenchuck:

No, no. We have staff and cleanup in separate items. We have what is known as personnel services in one lump sum and then the cleanup activities in separate items - and we are able to identify those.

Again, these are pictures of different sites in the state just to show problems - these barrels here: you can see parts and they are in pretty sad shape. The contents have leaked out, leached out, it is in the ground, in the groundwater. Another place. These barrels have been there for a long time. The fellows had to knock the brush around but you can see the barrels are empty. They were full when they were put there. Another shot; another location as you can see. This is out of a landfill; popping out of a landfill. Down here there is an intermittent stream to the left. I've been to this particular site. I don't know if you can see any water there or not, it depends on rainfall. - Contamination - Different site. You can see what happens. How barrels start to corrode and wastes affect the groundwater and surface water. Another site in the woods. Another site - see how the brush has grown up around that one. It has been there for a long time. A lot of these wastes have busted out, and the waste has gone down into the ground.

This slide shows the infamous Love Canal. I just put that in there so you could see some of the work that was done. This picture was taken in 1979. You are looking north. The 99th Street School that you hear a lot about will be taken down soon. This is 97th Street. Here you can see where we were building the leachate treatment plant at that time. These are the houses - what we call Ring 1 and Ring 2. These are the 238 houses and a couple of lots that the State of New York bought. The southern part is down here and this is where we installed the barrier drain. What we did is we bought all these houses and then later on the federal government leaked a fairly poorly prepared document on chromosome damage, costing some 14,000 or 15,000 dollars,

as I recall, that had been prepared for litigation by the Department of Justice. That document was leaked and caused another uproar in the area and the federal government included another 400-some-odd homes in an emergency declaration area. There was a lot of agitation on that. Many people thought the document was deliberately leaked to insure that the Superfund law would pass in 1980. I don't know.

Let me just explain what our program is under state Superfund legislation. As I said, we have identified some 700 plus sites. When the State Legislature gave us the ability last July to go out and do the work that we were trying to do, we took the 700 plus sites and we broke them down initially to a list of 100 sites that we identified based on a state rating system that included the type of disposal site, the type and volume of waste known or suspected to have been dumped, identification of possible environmental problems that had been identified or that may develop and known contamination of the public water supply or private wells or the potential for such contamination. That was a selection process we went through. This process excluded those 26 sites in the federal Superfund program. Those 100 sites were the first group that we identified for initial Phase One investigation. Under Phase two investigation some of these sites receive detailed field investigation including the installation of monitoring wells where needed and the taking of various samples for analysis. The results of these field investigations will provide the basis for ranking these sites for remedial action. This list, as I said, did not include any sites that already are candidates for federal Superfund remediation. Nor does this list include any sites where the Department has successfully concluded negotiations that require those responsible for causing the contamination to undertake field investigations and appropriate remediation.

Our plan then is for a two phase investigation of these 100 sites. We identified five consulting firms that will be doing the work for us. One of the things that we have done in New York and the other states should do the same thing, is to prequalify consulting firms. We do this on an annual basis. We send out our request for qualifications nationally using the Engineering News Record. Then we review those qualifications using a panel. We assess and rank the firms and we develop a short list of consulting engineers that can do the work that we are interested in having them do for us. Once we establish that short list, then when we want to contract with an engineering firm, we just send out an RFP to 3 to 5 prequalified firms. With the RFP we move ahead rather rapidly and then receive proposals that are reviewed by a panel that we establish. We also draw on EPA Region II for assistance and on our Health Department occasionally.

These five consulting engineering firms that we have under contract initially will each prepare preliminary evaluations of the sites, including detailed work plans for subsequent field investigations for each site. As I said earlier, this Phase one work will cost about $3,000 per site. Then, to maximize the number of sites which will receive the more detailed field investigation, the owners of such sites will be asked to carry out the work plans. On April 4, 1983, I sent certified letters to the owners of these sites asking them to provide information and explain past site operational

practices. We wanted information on the testing, monitoring or remedial action undertaken or planned by the owner or owners and any other information that might help us or our consultants to evaluate the public health or environmental significance of the site. We told them in the event that you cannot fully comply with this request for information, you must describe your efforts to comply. We advised them that either we or our consultants will be contacting them to collect this information and we cited the appropriate section of the law concerning this matter. Then we said once the work plan for the site had been prepared, the next phase would require field investigation work. Since the law provides that the cost of sampling and analysis are recoverable and any action brought by the Department against the owner or party responsible for the site, you, the owner or responsible party, will be afforded an opportunity to perform these activities in a timely manner at your own expense in the first instance.

By sending out these letters and we ended up sending out letters to 200 reputed owners of sites, because we were able to take the money that we received - some $667,000 under RCRA section 3012 for the hazardous waste site inventory - and use that money toward this initial activity. We've been getting back some interesting responses. This is going to help us identify who the responsible owner or owners have been and move ahead and narrow all the sites down to those sites which really require either field investigation and/or litigation and/or remediation.

So we are moving ahead I'd say fairly well in this portion of our program. For anybody that's interested, I have a list of the first 100 sites for which we're doing Phase One investigations in New York State. We're happy to share how we do our program. We also learn from other states, like New Jersey. New Jersey has been out front in this area and we do have conversations with the people in New Jersey and we're happy to share our experiences with them and vice versa. They're happy to share theirs with us. But primarily, the state Superfund legislation has given us the ability, one, to hire additional staff to do the work. Two, hire the additional consulting engineers to do the field investigation work that we have to do. Three, provide the funds necessary to match the federal Superfund requirements.

The revenues anticipated have been less than expected. However, I've been assured by our Division of Budget that there will be no problem in providing the necessary state match for any federal Superfund projects that were undertaken prior to July 1 of this year. As Bob Ogg knows, we'll be sending down at least seven additonal applications for cooperative agreements and my real question to you Bob, is what are you going to do when we send additional ones after July 1? You don't have to answer me now, but seriously we will be sending additional ones after July 1 and I will want to know what commitment the federal government will make prior to September 30, 1983? I know your lag times and all that and how long that's going to take and I don't need an answer now, but that's a concern of ours.

Audience:

Norm, could you tell us where the money in your New York mini fund comes from?

Norman Nosenchuck:

Sure. The money comes basically from the waste end tax and I have a couple of copies with me of a guidance document in connection with the payment of assessments that we sent out to the regulated hazardous waste management community. Primarily, the money comes from a waste end tax. The amounts of assessments are as follows:

Amounts of Assessments

1. Generators of Hazardous Waste in New York State:

   a) $12.00 per ton of hazardous waste generated in New York State and disposed of in a landfill located within or outside New York State.

   b) $9.00 per ton of hazardous waste generated in New York State and treated or disposed of, exclusive of disposal in a landfill, in a facility located off the site of the generation of the waste within or outside of New York State.

   c) $2.00 per ton of hazardous waste generated in New York State and incinerated on the site where the waste is generated.

2. Persons holding Permits for Storage, Treatment or Disposal of Hazardous Waste in New York State: (under section 27-0913 of the Environmental Conservation Law)

   a) $12.00 per ton of hazardous waste generated outside New York State and disposed of in a landfill located in New York State.

   b) $9.00 per ton of hazardous waste generated outside New York State and treated or disposed of, exclusive of disposal in a landfill, in a facility located in New York State.

   No assessment shall be imposed upon hazardous waste which is treated or processed for materials recovery (does not include energy recovery).

This law became effective September 1 of last year. We've gone through two quarters. We are in our third quarter right now. The collection of these monies is handled by our State Department of Taxation and Finance. For those of you that are interested, I have some photocopies of the forms used by the Department of Taxation and Finance with their instruction sheet for completing the form. I also have some Q & A questions and answers that we prepared for the regulated community in connection with the payment of assessments.

Here was a question that was asked a lot, "Is the weight of the barrel or any other packaging equipment considered part of the taxable weight of the

hazardous waste?" No, it's only the weight of the actual waste materials taxable. The one exception is when hazardous wastes are land buried in containers and in such instances the containers, of course, are hazardous waste and considered part of the total reportable weight.

Question:

"Are all wastes generated from in-state cleanups exempt from the assessment?" No. Only those wastes which result specifically from the cleanup of inactive hazardous waste sites as defined in our law and any wastes resulting from spill cleanup or from sites that were active after April 25,1979 are subject to this assessment.

"Are wastes resulting from out-of-state remedial cleanups that are disposed of in New York State subject to assessment?" The statute only exempts wastes which result from the remediation of inactive hazardous waste sites as defined in our law. Out-of-state sites do not qualify under this definition and hazardous wastes generated as a result of such a cleanup are subject to the assessment if they are disposed of in New York State.

"Are generators required to file tax returns even if no assessment is due?" Yes. Similar to income tax returns, all persons in the identified class of taxpayers will be required to file. We use our manifest system to give us a handle on the amount of wastes that we figure should be reported. We've already found some slight discrepancies where people didn't record what we thought was enough based on their own manifests or said that they had no wastes at all. It's also of interest to note in a couple of cases they even reported more under this assessment than they reported under the manifest and we're looking into each case.

Question:

"Are wastes generated at federal, state and municipal facilities subject to the assessment?" Wastes generated by state or municipal facilities are subject to assessment. Wastes generated by federal facilities are exempt. The federal government says no matter if the federal government produces waste, it's exempt. As a matter of fact, one of the biggest problems at the federal level, I think, is how the Department of Defense has handled the whole question of their hazardous waste generation around the country. That's an area of significant concern and if I'm wrong, pipe right up, fellas.

Again, we depend on the Department of Tax and Finance for this collection activity and it's been working fairly well. The recession or depression, it depends on where you sit, has resulted in less production, and less waste generated. This is why, I think, that we have a smaller amount of waste being generated. We have found, based on our initial assessments, initial calculations that we're expecting much less hazardous waste in New York State than we had anticipated. However, that's going to fluctuate up or down depending upon the economy, I believe.

You might be interested to know how we handle this program from the staffing viewpoint. We have created two bureaus just to handle remedial activities and site investigations. We have a group called the Bureau of Hazardous Site Control who have the responsibility to do all of the preliminary investigation, the feasibility studies and take the work up through what is known as the step one process under the construction grants program, the completion of the feasibility study.

We have another group that we call the Bureau of Remedial Action. This bureau, through our procurement process, selects and contracts with the engineers to do the design work and prepare the contract documents. This bureau is involved in our public participation process. This bureau is also involved in the contracting process, securing proposals from contractors. They are also involved in overseeing the construction work with consulting engineers that work for us, and are also involved in the long-term monitoring for the completed work.

We also have a group of people that we have in one of those bureaus that provides technical expertise to our Attorney General's Office on some of the litigation going on in connection with some of those Hooker sites in western New York State. This would include the 102nd Street site, the Hyde Park landfill, the S area, in addition to the Love Canal. These activities require an enormous amount of time. I can tell you that Love Canal is still in the courts. In Federal Court, hundred and some odd -- almost 50 - 60 millions of dollars. In State Court, 600 some odd millions of dollars. That's going to go on for a period of years and in the meantime we are continuing to do the remedial work. We're doing additional work at the Canal to enhance the work that we did in 1979. We've knocked down the houses in Ring 1 and Ring 2 that were inside the fenced area. They were down by November of last year. The other site that has been in effect adjudicated in Federal Court is the Hyde Park landfill.

In connection with the Hyde Park landfill -- a settlement agreement was reached. It's under the control of the federal judge. We've named a state coordinator for our Hyde Park activities. It happens to be myself. We've named a federal coordinator from Region 2 for those activities and the work is actually being done by the company.

One of the things that concerned me earlier is that I was a little bit disturbed initially when we got that National Priority list that was published in December of '82 and I saw the Hooker Hyde Park site listed there even after it had been settled and was under the control of the judge and the work is going on. I really didn't understand why that site was unilaterally listed by EPA, but it's there and perhaps Mr. Ogg can answer that question.

Robert Ogg:

No, Norm. You raised that a few times and the answer that we've consistently given is that the list was to look for the 400 worst known sites. Hyde Park was known and was well documented and it was not as if we went out and did some feasibility study or remedial investigation to find the data to rank it. It was all well known because of the settlement.

Norman Nosenchuck:

Even though the work was going on.

Robert Ogg:

Even though it was settled and indeed the work had already started by the time it was proposed.

Norman Nosenchuck:

So it was put on there just to keep track of it? The 400 site list is not sacrosanct, I take it then? That might be 600, 700, or 1,000?

Robert Ogg:

As far as we read the statute, it says at least 400. It doesn't say any maximum.

Norman Nosenchuck:

Well, my real concern is that as we move ahead that with the next quarterly listing and the subsequent quarterly listings, that the federal government be prepared to execute either cooperative agreements or state Superfund contract with those states who are ready to go -- who are ready to go, which should be cranked into the formula. There are too many sites on the list that aren't ready to go. There are too many situations where money has been made available and nothing has happened.

Robert Ogg:

Yes, as you know, what we've done recently with you is tried to review all sites with you and your state and review all sites with your counterparts in the other states. Those sites that were ready to go were listed. I went down and we had them scheduled in Washington. If you have additional work coming, let me know and we'll schedule --

Norman Nosenchuck:

I'm not only talking for Region 2. I'm making a comment.

Robert Ogg:

I think that's a fairly standard procedure right now. We're working with an obligation strategy. I guess that's what you're talking about for each and every site where we feel the state is ready to proceed.

Norman Nosenchuck:

All right now, have you had instances where you've given the money to the state and an inordinate amount of time has elapsed between the money and the action by the state?

Robert Ogg:

We've had instances where it's taking, I think we would call it an inordinate amount of time.

Norman Nosenchuck:

And how do you intend to address that, at the national level?

Robert Ogg:

I'm not sure that there is an articulated national policy. There's been a lot of pressure on the states where it's happened and they are responding. Basically, if they can't proceed with what they have, there's a lot of pressure on them, why should we sign anything new?

Norman Nosenchuck:

It's a concern and my concern was not Region 2, was not Region 3. This is a problem that I know is a national concern. In connection with that there might be some workshops later on this year to share expertise among the states. The states that are moving ahead, like New York and New Jersey and Pennsylvania and Maryland where there are state Superfund contracts would share some of their procedures with the other states.

Procurement seems to be a big, big problem. We have very strict procurement laws in New York. We have prequalified our consulting engineers. We could not prequalify construction contractors. State laws would have to be changed for that. So that is handled, of course, during the normal construction bidding process. If the appropriate concerns and restrictions and financial requirements are included in your contract documents, you will get as bidders those types of contractors who have the experience and the financial capability that they should have to do the work. Again, that's a function of having the proper type of managerial control at the state level when the state takes the lead.

I believe it's in every state's best interest for the states to take the lead in the Superfund remedial program, primarily because of the whole issue of control of the site, control of the issue of "how clean is clean," even though I heard earlier that problem hasn't arisen. I agree with the philosophy and policy of getting the states to take the program over and I wish more of them would.

Judy Borger:

Okay. Thanks Norm. Last on the agenda is Representative Roger Madigan. Roger is from Pennsylvania and last session chaired a special toxic waste study committee. Roger.

Representative Roger Madigan:

Thank you, Judy. Following up on what was outlined, Pennsylvania is listed by EPA as the fourth largest hazardous waste generating state in the nation. Our Department of Environmental Resources estimates that 8 million tons of hazardous wastes are produced in Pennsylvania by about 2500 generators. This figure is double what we estimated in 1980 when we were developing our Hazardous Waste Act. At that point it was 4 million tons.

Major industries that produce hazardous waste are the primary metals, organic chemicals and electroplating industries. Pennsylvania has about 650 existing hazardous waste storage, treatment or disposal facilities that have received interim status. Of these, only 15 are commercial facilities. Remaining are captive facilities owned and operated to accept only one company's waste. The 15 commercial facilities cannot handle a wide range of wastes and there are no facilities available to handle organic waste or for waste that must be incinerated. This significant shortfall in capacity dramatizes the need to site and construct legitimate hazardous waste treatment and disposal facilities to deal with the waste generated.

Pennsylvania has also not been immunue to the problems created by improper and illegal disposal of hazardous waste. The total extent of the abandoned waste problem is not known. However, I can offer the following statistics. Pennsylvania has 748 sites on EPA's Emergency and Remedial Response Information System List (ERRIS). My understanding is that this list includes all the sites the state had on the original Eckart list, EPA's Potential Hazardous Waste Site List and the Superfund Notifiers List.

In addition to that, DER has approximately 1,000 municipal and industrial waste sites that were closed in the early 1970's. Some of these are already causing us problems. Pennsylvania has 30 sites on EPA's National Priority List of 418 sites. I'm sure you can appreciate the difficulty in estimating the cleanup costs before actual site investigation and feasibility studies are completed. But, the estimated cleanup costs of these thirty sites is over $88,000,000. Even if we assume that all 30 sites are funded through Superfund, Pennsylvania will still need to come up with 10 percent or over $8,000,000 for their state match, plus 100 percent of the operation and maintenance cost for the life of the sites funded by Superfund. The extent of the problems, the 748 sites on the ERRIS list and the 1,000 municipal and industrial sites that were closed, will not be known until some preliminary investigation is completed at these sites, which also costs money. If we estimate that only 10 percent of these sites will need cleanup and use an average of half a million dollars to clean up the site, the cost to attend these sites could easily exceed another $90,000,000.

Pennsylvania currently has three separate funds established in separate statutes which could be utilized to address public health and environmental problems posed by the hazardous waste disposal sites. The three funds are 1) the Solid Waste Abatement Fund provided for in Act 97; 2) the Clean Water Fund provided for in the Clean Streams Law and 3) the Clean Air Fund provided for in the Clean Air Act. The problem with these special funds are that they can

only be used for purposes specified by law and that there will be a lack of certainty as to the amount of money available in any of these funds, at any given time because of the lack of a predictable funding base. The source of these funds is mainly fines and penalties.

DER included $1,000,000 in their 1982-83 budget to be specifically used for a 10 percent Superfund match. This money has already been committed to two sites in Pennsylvania listed on EPA's original priority list. There is a serious question as to whether there will be sufficient money to cover a third site that the money was planned for. This money, of course, comes from our general fund. DER has proposed to increase this amount to $3,000,000 in the proposed 1983-84 budget which the legislature has not yet adopted.

I should point out some comments on our Act 97 in line with some of the discussions we've had within this conference. Our Act 97 or the Solid Waste Management Act, provides 1) strict joint and several liability; 2) it has a rebuttable presumption clause; 3) it addresses the statute of limitations problem by establishing that a civil or a criminal action can be started anytime within 20 years of discovery of the offense. DER is not only given the power to issue orders which can include immediate suspension of treatment or disposal activities but can also assess civil and criminal penalties. The Act also gives DER the ability to recover abatement funds and it does include municipal and residual sites as well as hazardous sites.

As mentioned previously, the state is using general fund money for their 10 percent Superfund match. To date, there has been no legislation introduced to initiate any new funding. Some consideration has been given to that and was part of the activities of our committee in the last session. In drafting a report to the General Assembly, we have come up with a concept that at this point is still a concept and needs to be developed into specific legislation. There are many unknowns that need to be determined before legislation can be written. For example, we need to determine 1) how much of the various kinds of wastes are produced in Pennsylvania; 2) disposed of in Pennsylvania; 3) specifically how they are disposed of; and 4) how much out-of-state waste is disposed of in Pennsylvania.

We are also looking for a funding mechanism that would incorporate a fee on all wastes disposed of in Pennsylvania, not just hazardous waste. The reason is that at least 6 of the 30 sites in Pennsylvania on the EPA's Priority List are primarily municipal waste sites. It is unfair to expect the hazardous waste industry to pay for all the cleanup that is needed in Pennsylvania.

Another concern we were trying to address is the closure, post-closure care as well as perpetual maintenance, if the responsibility of the site must be assumed by the state. There are two parts of this proposed funding mechanism.

Judy Borger:

Roger, why don't you briefly outline those?

Representative Roger Madigan:

Okay. Part 1 is to do away with the bonding of all facilities and instead require the owner/operator of each facility to contribute an amount of money each year into a state closure, post-closure fund which would be a new state fund. Basically, we would do away with the bonding and go to an assessment, possibly required before the issuance of a permit, as part of that permitting process, an estimate of the need of these funds and the estimated limit or number of years that a facility would be in operation. For example, if it were for a 10 year period, we would divide the needed amount of funds by 10 and that would be the amount the operator would pay into the fund. The amount of this fund would then be there for closure, post-closure care and perpetual maintenance. The amount that would be originally put in there, would stay there to close the site at the time the site is closed down. Any interest accrued on this money would be transferred to a State Solid Waste Abatement Fund to be used mainly for abandoned site cleanup and emergency response to hazardous waste conditions.

The second part of the funding mechanism would be a fee which would be a percentage of the yearly gross receipts at any disposal facility, be it hazardous or nonhazardous, to be paid by the owner/operator into a State Solid Waste Abatement Fund. This fee would not apply to any material that is incinerated, recycled, treated or processed for other use, or waste transferred into a waste exchange program unless the end result of any of these processes would need to be landfilled. The basis of this is to provide some weighting in an effort to eliminate landfilling and move to other types of disposal. As I said, this is really just a concept at this point. However, I think we are moving towards drafting legislation which would implement this. I'll not go into greater detail because of time at this point.

One other concept that we're looking at is that even if we should pass State Superfund legislation within this fiscal year, it would take some time for that to be implemented and funds be available. So we are looking at the possibility of bonding to provide additional funds for a state Superfund at that time.

One other thing I think I should mention as innovative. We have a special investigative surveillance and enforcement effort against illegal hazardous waste activities. The Toxic Waste Investigation and Prosecution Unit was established in August 1980 with $651,000 from the Federal Law Enforcement Assistance Administration and $73,000 in matching state funds. The State Department of Justice and DER agreed to staff TWIP with specialists from both departments, combining legal and scientific expertise. TWIP has five specialists from DER's Bureau of Solid Waste Management, two DER attorneys, an attorney in charge from the Office of Attorney General and four special agents from the Attorney General's Bureau of Criminal Investigation.

Under this program, approximately 140 investigations have been opened. Twelve cases involving 27 defendants have been filed, 9 of those against 24 defendants have been resolved and three are in the court system. An

additional four cases are anticipated to be filed in the near future. Recovery under this program to date includes approximately 1.3 million dollars in fines, imprisonment of two executives and sentence pending against four additional defendants.

The most serious problem today in solid and hazardous waste management is the lack of confidence of the public in the government's ability to protect their health and safety and the environment from damage due to inadequate disposal methods.

This results in a lack of public acceptance for desperately needed new waste management facilities. The only way this problem can be solved is by complete implementation of the new aspects of Act 97, by aggressive enforcement, by control and regulation of municipal and industrial waste, by incentives to municipalities to plan for adequate waste management, and by encouraging the development of recovery and conservation methods as alternatives to land disposal. To support these activities an additional $100,000 is being recommended to assist local governments in developing solid waste disposal programs. Act 97 states that each municipality shall be responsible for the collection, transportation, processing and disposal of municipal wastes generated within its boundaries and shall be responsible for developing and implementing a solid waste management plan. This $100,000 which is being proposed will be for grants to municipalities to pay 50 percent of their cost of preparing their plans.

Pennsylvania does have a Solid Waste Resource Recovery Development Act. This act establishes the Pennsylvania Solid Waste Resource Recovery Development Fund. The intent of the legislation is to promote the construction and the application of solid waste disposal processing and the resource recovery systems which preserve and enhance the quality of air, water and land resources. Two, to provide financial assistance to municipalities and development agencies in the planning and development of resource recovery and solid waste disposal and processing programs.

The legislation has gone through several amendment changes since its inception in 1974. Approximately $4,000,000 has been appropriated to the Department of Environmental Resources for the awarding of grants to municipalities for the promotion of innovative resource recovery facilities. There have been several on-going projects funded with these monies. The City of Bloomsburg in northcentral Pennsylvania has a resource recovery facility and the city itself has implemented an ordinance requiring the residents of the city to participate by separating their municipal waste for going to disposal and to the resource recovery facility. This is the only one in Pennsylvania that has gone that far at this point. The Department is limited in that the legislation specifies that the grants go to municipalities rather than to private individuals or corporations who might want to go into that area.

Act 97, the State Solid Waste Management Act does, as I mentioned before, provide for a Solid Waste Abatement Fund. All fines, penalties and bond forfeitures collected under Act 97 are paid into this special fund. The fund is administered by DER for abatement or elimination of present or potential

hazards to human health or to the environment from the improper treatment, transportation, storage, processing or disposal of solid waste and for the enforcement of the Act. There is currently about $800,000 in the fund and we do come up with two problems. One, it will never generate enough money to address all of Pennsylvania's needs and two, there is never any certainty as to the amount of money in the fund at any given time. That brings you up to date on Pennsylvania.

Judy Borger:

Thank you, Roger. Are there any questions for the panelists?

Kate Parker:

Norm, on the New Jersey Spill Compensation Fund. Is that a tax on the feed stock?

Norman Miller:

At the moment, it is a penny per barrel on the first transfer into the state of petroleum and petroleum products and a penny per barrel or four-tenths (.4) of one percent of the fair market value, whichever is greater, on the first transfer into the state of hazardous substances.

Kate Parker:

Whether they are waste or not?

Norman Miller:

Not waste. The transfer of hazardous substances. No, it is not a hazardous waste tax. Now we are thinking of generating more money by taxing both the generation and disposal - at both ends - in lieu of the fair market value portion of that because the fair market value from the material does not reflect the risk, does not reflect expense in handling, and the industry has been very upset about that as a basis for taxes. It doesn't reflect anything except the amount of money we need to do the job, frankly. So, we are looking at other things - a tax on generation, a tax on disposal sites, perhaps a tax on both with one being taken as a credit against the other. At the moment it is a fair market value tax on first import into the state of hazardous substances and for petroleum and petroleum products a per barrel tax.

Norman Nosenchuck:

Is this the one where the industry took you to court on the federal preemption?

Norman Miller:

Yes. Superfund almost preempted the whole thing but so far we are hanging in there. We won our first level of cases.

Norman Nosenchuck:

I am very pleased that you did that.

Norman Miller:

So am I.

Norman Nosenchuck:

Because it will make the people aware of what the issues are.

Norman Miller:

Yes, 114b of Superfund precludes the contributions into any State fund of anybody that has contributed to a federal fund for the compensation for damages attributable to hazardous substances, I guess. The Court ruled that that should be construed very narrowly, that you can't tax twice for the same site, not twice for the same general purpose and it could not have been the intent of Congress to disarm the states in helping to resolve the national problem. So, so far the New Jersey Tax Court has ruled in favor of the states and the industry has it on appeal at the moment. It may be of more than casual interest that they are doing the same thing to us with oil. There are now three bills in Congress to create a National Oil Pollution Compensation Liability Act which has exactly the same language, again precluding state funds and if that goes, then there goes the $7 million that we generate from the oil industry in the State of New Jersey for the Oil Spill Fund.

Representative Teresalee Bertinuson:

I would just like to interject something that came up in our panel along that same line. A question was raised on the proposal for the federal Superfund to tax waste or generators of waste in much the same way that most of the states have been relying on for our own mini funds. Where is that going to leave us? We couldn't take the other side and go back and tax the feed stocks because most of the states don't have that much. That is something that I think we will have to keep watching.

Norman Miller:

I think it is called the Spirit of New Federalism.

Representative Teresalee Bertinuson:

I think we better watch all that legislation that is being developed that we don't get caught in it because most of us rely very heavily on that for our own state funds.

Audience:

The Court case that you referred to, was that the U.S. Supreme Court?

Norman Miller:

No. It was the New Jersey Tax Court. It is on appeal and no doubt it will get a higher level of Court reading it which will have enormous implications, not only for that, but for the other half now because I guess Congressmen Biaggi, Studds and Young have each sponsored bills creating virtually identical Oil Pollution Liability Acts which do the same thing and create a Superfund for oil pollution and again preempt state funds. Why they keep doing this to us, I don't know. At any rate, you should be aware of those to the extent that you have an interest in generating your own funds and not getting a state fund preempted and for a number of states, anyway: Florida, Massachusetts, and us other states that do have substantial oil funds, that will be a disaster. Again, another disaster. We really do use up all the money to clean up hazardous spills, so it will impair not only the clean up of oil spills, so to speak, to the extent that they can be distinguished, but it will also impair hazardous cleanups as well and will be, as we say in our organization, off the air.

Judy Borger:

Okay, any other questions? Thank you, gentlemen.

CHAPTER VIII

Hazardous Waste Facility Siting in the Northeast: Progress or Standstill?

Massachusetts Progress Review

Presider:
JOAN N. GARDNER, Acting Director, Massachusetts Bureau of Solid Waste

Speakers:
DAVID SPACKMAN, Member, Massachusetts Site Safety Council

MARK KORZEC, Vice-Chairman, Local Assessment Committee, Town of Warren

DANA DUXBURY, Director, Natural Resources, League of Women Voters, Massachusetts

JOHN MCGLENNON, Clark & McGlennon

New Jersey Progress Review

Speakers:
FRANK DODD, Chairman, New Jersey Hazardous Waste Facilities Siting Commission

RICHARD J. GIMELLO, Executive Director, New Jersey Hazardous Waste Facilities Siting Commission

KATHERINE MONTAGUE, Environmental Research Foundation and Member, New Jersey Hazardous Waste Advisory Council

DR. THOMAS HELLMAN, Allied Chemical Company, and Member, New Jersey Hazardous Waste Advisory Council

- What is the status of your siting process?
- What are the key concepts in your siting law?
- Which stages in the entire process so far have been critical?
- Which provisions in your siting law, its development, or implementation, would you recommend to another state?
- Are there aspects in your siting law which have caused serious problems?
- Which aspects of implementation would you regard as mistakes? How would you do things differently now?

ROUNDTABLE DISCUSSION

- Status of Hazardous Waste Facility Siting in the ten Northeastern States

HAZARDOUS WASTE FACILITY SITING IN THE NORTHEAST: PROGRESS OR STANDSTILL?

Massachusetts Progress Review

Representative Teresalee Bertinuson:

Good morning. Welcome to the last day of our conference. I'm pleased to see so many people still here. This morning we'll be looking at two case studies or state experiences in facility sitings. For the first hour, we'll be looking at what's happened in Massachusetts. Then we'll look at New Jersey and lastly, spend the final hour in a roundtable discussion where all of us can share our successes with the other states! Presiding over the Massachusetts presentation is Joan Gardner, Acting Director of the Massachusetts Bureau of Solid Waste.

Joan N. Gardner:

Thank you and I'm glad to see all of you here this morning and and welcome our panel. We've been asked to take a look at six questions on the siting law:

- What is the status of the siting process in Massachusetts?
- What are the key concepts in the siting law?
- Which stages in the entire process so far have been critical?
- Which provisions in the siting law, its development or implementation would you recommend to other states?
- Are there aspects of your siting law which have caused serious problems?
- Which aspects of implementation would you regard as mistakes?
- How would you do things differently now?

David Spackman, who represents the Boston Board of Health and Hospitals is also a member of the Hazardous Waste Site Safety Council in Massachusetts. Mark Korzec, Planning Board member in the town of Warren, sits on the Warren Local Assessment Committee. As some of you know, Warren is a town in Massachusetts which has been chosen by IT Corporation as a possible site for a plant that they are trying to develop in Massachusetts. Next to Mark is Dana Duxbury. I asked her if I could introduce her as the Grandmother of Waste in Massachusetts.' She said that by the time we're through she'll probably be the great grandmother! Dana has been active in the Massachusetts League of Women Voters and is the national League of Women Voters Hazardous Waste Specialist and so we're pleased to have her here this morning. Next to Dana is John McGlennon. John is president of Clark-McGlennon Associates and former director of the Region 1 EPA. So I think we have a very strong panel this morning and I'd like to briefly tell you about the Massachusetts law and then turn it over to David Spackman.

The Massachusetts siting law was passed in 1980. There are four aspects of the law, four segments. First is notification. That's when the developer notifies the state and a community that they want to build a facility in Massachusetts. The second is study, that's the development of the

Socio-Economic Appendix and the environmental impact report. The third phase is negotiations, negotiations between the developer and the local community. The fourth phase is licensing, both at the state and local level.

We've had four proposals in Massachusetts. One did reach the second phase of study. It's no longer in the process and I think that experience will come out in the panel discussion. Two others are still in the notification stage and the third, which is active, is also in the first stage. So I think we've had some experience. I'm not sure we've had a success yet and I'd like to turn it over to David Spackman now, who will address the key concepts in the siting law.

David Spackman:

Thank you, Joan. I'll make it very brief because I think clearly you would like to get to the point where panelists will differ and that's probably where you'll learn the most. But I want to just pinpoint very quickly the five key concepts in the law. How successful they are, of course, depends upon the implementation and not what is in the statute, but it may make it easier for you to understand the different perspectives you'll hear as we go on into the actual panel discussion. I think the most key concept in the law is the fact that the bulk of the responsibility, or perhaps more appropriately stated the work, is given to the town through its local assessment committee: a group of town members, and the developer. This is not a statute where the state selects sites, the state dictates the terms of those sites, etc. The bulk of the work, the real nitty gritty, is done by the developer and by the town and that's probably the most critical part of this law.

The town's participation in this process is assisted by some, I think, very innovative types of things. First of all, the state through the Hazardous Waste Site Safety Council, gives technical assistance grants to the local assessment committee. Clearly, becoming educated and participating in a negotiation process of this sort requires an enormous amount of time and development of expertise on the part of the town and a clear part of the law was the town should not have to do this at the expense of local property taxpayer dollars. So the law does permit compensation, excuse me, technical assistance grant funds to come to the local assessment committee so they can hire experts, consultants and run their affairs. Another key concept is what is referred to as a Socio-economic Impact Report. Most of you are familiar with the concept because most of you, I believe, have seen environmental impact reports. The concept of a socio-economic part of that report, is I think, somewhat unique and it indicates very clearly that there are more than just physical impacts on the environment, that there are also social impacts and economic impacts of any hazardous waste facility.

I think a third critical aspect is if the local assessment committee representing the town and a developer cannot reach an accord on the terms and conditions under which a facility will be sited, there are provisions for arbitration where the issues at impasse can be arbitrated. That is what I would refer it to as the objective standard so that a no or a yes must be reviewable by a third party. In areas of disagreement it is not the state

deciding the answer, nor the town deciding the answer, nor the developer deciding the answer, it is a third party arbitrator.

I think the fourth key concept is the idea of a siting agreement: a contract including terms agreed upon and terms arbitrated. It will operate as a binding contract entered into between the town and the developer and stating the terms and conditions under which the facility would be sited and would operate. The fifth concept is that the developer selects the site. This is not a siting statute where the state determines where the site will be. The developer selects that site and the law has provisions to allow the town to exact or negotiate compensation from the developer for the actual or potential risks which may be associated with the siting of a hazardous waste facility. How important compensation may be often depends on how big the project is in comparison to the town. Clearly, compensation to the City of Boston for instance would mean very little. Compensation to the town of Warren where IT presently is may mean something.

Joan N. Gardner:

Thank you, David. IT has had a proposal in Massachusetts for approximately two years now and the Warren Local Assessment Committee has been operating for 20 months and they have done an outstanding job and Mark Korzec is their Vice Chairman and Chairman of Public Relations Committee, so Mark....

Mark Korzec:

Well, unfortunately, I'm not going to be brief. I in fact started off with a 30 minute dissertation and then cut it down to about 10 or 11 and I'll even try to cut that down because I think that there are a number of things we should discuss from a community standpoint. The Town of Warren is a very small community. It's approximately 3,800 people and it's located in central Massachusetts. On September 14 of 1981, the IT Corporation of Wilmington, California submitted a notice of intent to construct a one hundred million dollar hazardous waste treatment plan in Warren. This plan, as the NOI indicated, would have many types of hazardous waste technology incorporated into it, much of it being centered around rotary kiln incineration.

Now, considering the fact that the notice of intent has been in existence for over 20 months, one would suspect that the Town of Warren is pretty far down into the siting process, but in fact, our actual involvement in the siting process has just begun. The key factor that initiates the process into motion is not a notice of intent but rather a project notification form which gives specifics with regards to the project. As of yet, we have no indication from the developer that a project notification form will be submitted. The extended life of that notice of intent was not anticipated. As a matter of fact, efforts to get the developer to file the project notification forms so as to begin the siting process have been attempted by the state with little success. But this apparent loophole in the siting process has enabled us to study and plan for as many possible scenarios as could occur in this whole process. It is for this reason that the Town of Warren not only is ready to

deal effectively with the siting process, we feel we're very qualified to do so.

There are certain concepts in the Massachusetts siting law which deserve to be mentioned from a community standpoint, especially if you're going to be writing new laws or rewriting existing laws and I want to touch on five concepts which I think are important. The first is formation of a local assessment committee. The second is the determination that a proposal is feasible and deserving of state assistance. The third is Technical Assistance Grants: the fourth, the scoping process and the fifth is the timing allowed for various steps within that process.

The formation of the local assessment committee begins with a great deal of skepticism. No doubt the selections that are going to be made are political in nature and they may or may not be based on whether the selectee is for the proposal or against it.

It does take a great deal of time, as in our case, for 13 committee members to establish a working rapport that will eventually become productive. In fact, in the early stages of the formation of the local assessment committee you'll find that the LAC is very vulnerable. An important point must be made about the formation of a local assessment committee. It is important that the committee have a balance of those in favor, a balance of those against and some members that are neutral on the proposal. Without this balance, the real objective of the local assessment committee cannot be realized. An imbalance of committee members in favor of the proposal may compromise health and safety issues, while an imbalance against the facility might put the committee into a mode of trying to undermine the intent of the law. It's important that the committee as an entity, resolve itself of being neither for the proposal nor against it, but truly obligated to carry out the law as dictated.

The second concept I want to discuss is the determination of a proposal to be feasible and deserving of state assistance, and I'd better be very careful on how I approach this one because in Warren I could get hung for anything that I say on this subject. It's one of the most important decisions that a state is going to make. It's important that the Siting Council, who makes that decision, be thorough regarding the information it considers when making that decision. Now as I understand the law, part of the criteria used for determining a project to be feasible and deserving of state assistance is that the proposed facility is not clearly prohibited by federal or state statutes or regulations. I think that the criteria should be expanded to strike a balance between legitimate local interests protected by the Home Rule Amendment and the state's interest in siting a hazardous waste facility. I'm referring to local regulations which were implemented prior to passage of a Siting law and prior to submission of a notice of intent.

The third concept is technical assistance grants. Since a community such as Warren with thirty-eight hundred people and a 2.2 million dollar operating budget does not have the financial ability to deal with hazardous waste issues, especially the size of IT's proposal, it's important that finances be made available so that adequate study and investigation can be performed.

Warren's local assessment committee, and for that matter any assessment committee that may be formed, is generally comprised of volunteers. It's a part time job. It'll conflict with people's free time. It's going to conflict with their own work. There will be vacation days used. It's losing work time without pay, weekends involved. It's really a chore for a community to attempt this.

The committee will be made up of people who have in some cases no previous experience in negotiating contracts, let alone experience with hazardous waste issues - and this is why I think funding is very necessary - professional help is needed on a legal, health, engineering and financial basis and these professionals must be held accountable to the community. The goal is to bring local communities and local people up to a level of knowledge where they will be capable of dealing with the complex siting law and regulations that the state has written without depending on outside sources such as state and federal agencies for input. It is important since a community will live with this for generations, yet in the course of even a few years governmental bodies and even the laws themselves can change a number of times. Constancy is a very important thing from a community standpoint. And technical assistance grants must be provided with a great deal of mutual trust between the granting agency and the community. There's a lot of up front work that has to be performed, negotiating strategies have to be developed, issues have to be discussed long before they come about. I really can't stress how important it is to have good funding, an adequate amount of funding.

Another concept, and I'll go over these real quickly, is the scoping process. This process gives the community a chance to evaluate all aspects of a proposed facility and to pose questions on aspects that require more study and if that's properly approached and effectively explained a scoping document can be used for many purposes. A community can use it to develop negotiating strategies. In the Massachusetts Siting Law it is the limiting factor in negotiations. All licenses and permits can be developed from it and of course the scope becomes a table of contents for the social and economic appendices for the environmental impact report. The only dangerous part of the scope is that the final say of what the developer must answer rests in the hands of the MEPA unit, which is the Massachusetts Environmental Policy Act. To convince the MEPA people that each scoping issue is pertinent and vital to the community may require a great deal of give and take on both sides' part. The burden of proof lies with the community and how convincing they can be in selling the importance of the issue or how convincing the developer can be in discounting it. We at Warren have developed a 200-page scoping document. I would imagine that that will be quite a chore to sit through and go over each item to make sure that every issue is pertinent to the process.

The final concept, and this will be real brief too, is the timing which the siting process allows for certain milestones. For instance, there is no time limit to filing the notice of intent, the form that starts the whole thing off. And there is no time limit to filing a project notification form. There are 30 days to issue a proposed scope. (It took us nearly 14 to 15 months to do that.) Sixty days to negotigate and by the time we reach negotiations I would imagine that IT will claim they have spent every dollar they own. And

45 days for arbitration. This set-up makes a community a reactive group. It puts constraints mostly on a volunteer part-time committee. In some cases more time is necessary. In others, too much time can be very damaging by wearing out a community. Some consideration in the siting law should be given to the individual case so that the community, when properly prepared, can have a say in whether it should advance further into the siting process.

If you are dealing with siting laws, there are five questions that I think should be answered by anyone who proposes similar legislation. The first one is: Can your state through its siting law find a community that will objectively look at a hazardous waste facility? Secondly, will a siting law have proper funding so as to assist the communities involved in dealing with the issues? Third, will a siting law have flexible but fair time limits so as not to hurt anyone's position? And fourth, does the siting law give the community enough power to deal on an equal basis with others concerned? And the final question, is the siting law flexible enough to consider the unique aspects of small communities? I really feel the key to a successful siting law lies in the hands of the community. Thank you.

Joan N. Gardner:

Thank you Mark. I think Mark has had a unique experience in dealing with the Massachusetts Siting Law and his remarks are well taken. Now I would like to turn the panel over to Dana Duxbury who will talk about some of the questions that I outlined at the beginning of the program. Dana.

Dana Duxbury:

It is a pleasure for me to be here this morning and to continue on in the siting saga. It becomes more interesting as each week goes on and as I learn more I begin to worry more. We are at a moment in time where prevailing conditions are causing this issue to be a very sensitive and a very difficult one for all of us. The prevailing conditions that I speak to are, first of all, a fear of hazardous waste. None of us has been able to pick up a newspaper for months without being made of aware of problems across the country with the past practices of hazardous waste disposal. There has been a legitimate reason for citizens' fear in many of these cases but some people make no distinction about types of hazardous waste or extent of the problem. They are traumatized, and when you talk about siting something new, this fear that they have of dealing with the sins of the past just gets carried over to a new proposal.

There is a certain fear of technology. There is a great fear of government. I am pleased to see that the Senate is progressing very quickly with the confirmation of Mr. Ruckelshaus so that the EPA can again begin to don a white hat. You and I need an EPA with a white hat and the citizens need one. And I am delighted that we are moving in this direction very quickly because without that valuable arm for all of us in this business we are all handicapped.

There are two other prevailing conditions that I find most intriguing at this moment. One is the issue of where should facilities be? Should each state

build a facility to handle the waste that is generated within that state; or is it sufficient to have a facility in a neighboring state which will mean that your transportation costs are reasonable and that by placing facilities here and there at a reasonable transportation distance you may be able to build facilities to a size that would be economically viable. There has been in siting laws a great emphasis on trying to deal with the waste within each state. I'm not sure whether that is really reasonable. We see with the low-level radioactive waste issue the concept of compacts, doing it regionally. But somehow, either regionally or singly, assuming the responsibility. We haven't gotten to that level of sophistication yet in hazardous waste but it is something that the legislatures in these ten northern states are still going to have to grapple with. Should we dispose of our waste internally? Should we have regional mechanisms? Does it matter?

The third condition is the will of industry at the moment. There is among members of the disposal treatment industry a definite will to prevail. We see that in the state of New Hampshire. We see that in the state of Michigan where a company has said that a community does not have the right to block us if we have a defensible proposal. Other companies say we only want to go where we are loved. They are not going very far very fast. There are very great differences in the response of the treatment and disposal industry to the reaction of communities. Also, there has been some emphasis on the part of existing major treatment/disposal companies to buy permits by buying facilities that have existing permits rather than going through that very sensitive, difficult siting process.

With that as a backdrop of prevailing conditions I would quickly like to say that I have some very great concerns about the Massachusetts Siting Law. The speakers you have heard thus far have concentrated on the specific elements in the law. But I would recommend that you, particularly those of you in states that do not have complex siting laws, at the moment take a careful look at what Massachusetts has. I think it has a law that attempts to legislate rationality. Many of you may have attempted that in other issues or even in this issue in your own state and realized that it's a noble pursuit and a noble goal. I am not sure whether they made it, in this case, in Massachusetts. The authors of this law believed that citizens could be compensated through negotiation. That was the premise upon which they started when they wrote this law. They believed that if you forced a community to look at and to review a proposal that over time the community would become educated enough that it would lose its fear and become enticed by the compensation that might be provided with the proposal. I think that the experience in Massachusetts has shown that communities take a very long time, if ever, to get to the point where they can look at proposals rationally. I am not sure that this law will be able to legislate rationality.

I think that this siting law, also, is truly not a new form of a siting law. I believe it is truly a pre-emptive law with a new twist. That new twist may be good; that it says to a community when a developer comes in - you cannot say no. "NIMBY" is not allowed in Massachusetts - "not in my backyard" - that is a prevailing disease whenever someone suggests a new proposal. It forces a community to go through the extensive process that you have heard Mark talk

about and it forces them then to say "aye" or "nay" on very limited grounds. As I said, this was the desire of the authors of the law.

There are a couple other things that are interesting as a historical note to the law. It was designed not to follow the Massachusetts experience with solid waste laws. The siting of resource recovery facilities in Massachusetts has been attempted and has been done - in fact we are about to have 22 communities do something simultaneously which is a miracle in itself. In the solid waste resource recovery area we have a situation where the state provides technical assistance to communities; where the communities go out to bid; they have an RFP; the bidders are qualified and the state plays a very strong role in helping the communities evaluate proposals. There is a strong state role. In our hazardous waste law we do not have those important state roles. I am not sure that this is a good thing. I realize that the state can be perceived to be misguided and misdirected just as well as a developer can be, but in my experience in dealing with both types of law, it certainly gives me, a representative of a public interest group, a much stronger footing to know there was a) a state plan, b) that bidders were qualified, c) that developers went through an RFP process and that they were evaluated and that the best proposal for the best site was chosen. This is something for you all to consider.

In terms of problems with the law - there is no state hazardous waste master plan that is mandated by our law. So, a developer can come in with anything anywhere. There is also no definition of what the specific need is in advance and I believe that has been a very great problem here in Massachusetts. I know how difficult it is to define need and I know it is very important to many citizens in our community to see that source reduction is factored into the need.

The second thing is that we do not have a situation where the law mandated siting criteria. We haven't qualified bidders in the law. The technical assistance that Mark has spoken about has sometimes been perceived by communities to be inadequate, particularly where it comes in small doses. Local referendum have been used in a variety of communities thus far to gain the will of the people by those against proposals. Every time there has been a local referendum they have turned out to be very strongly against the proposal.

The last area is that the law assumes that health risks can be compensated and I am not sure that the public is at a point where they believe that. You have heard many of the implementation problems. We have had a grave problem in this state. This law was begun before the rules and regulations for our regulatory agency, for the Siting Council and for the State Management Agency (that was to facilitate the implementation of the laws), were in place. This has really harmed this state. I beg of you, never, never do that. It has been traumatic.

Anyway, my time has been flashed, but hopefully, if I leave you now we can come back later and I may provoke some questions.

Joan N. Gardner:

Thank you, Dana. Now I would like to introduce John McGlennon, who has had a unique experience with the Massachusetts Siting Law and has a perspective which he will share with us now.

John McGlennon:

Thank you, Joan. In order to put my remarks into perspective, my company has been involved in a variety of siting efforts, working with other states and, in fact, a couple of provinces in Canada in designing and implementing siting processes. As a result, I come to view the Massachusetts process from a perspective of working in other states and other areas.

Second, my company was the Project Manager for the first project to enter the Massachusetts Siting Process - the SRS project - which proposed to site a solvent reprocessing facility in Haverhill, Massachusetts. The company spent about $500,000 in the Massachusetts Siting Process preparing data and information and complying with the requirements of the law including the drafting of an environmental impact statement and a socio-economic impact report. Subsequently the company withdrew its proposal because of the severe opposition of the community and what I viewed to be a highly politicized process or environment in which siting decisions were being made.

So, I think if I show any bias, it will be to show concern for the interest of the developer. This has to be a balanced process. You have to balance the interest of the community and the interest of the state with the interest of the developer. My observation is that in some instances states have ignored the interest of the developer to a point where they have designed a process that is unworkable. It is possible that states may have done this deliberately to assure that no siting proposals will be made.

When I looked at the questions that we should address, there seemed to be three fundamental questions about the Massachusetts process - Is it working? If not, why not? And what to do about it? My perception is that it is not working. You have had four or five proposals of companies to site a new facility in Massachusetts over the past three years. At this juncture, there is one active project in the Massachusetts Siting Process - the IT proposal and, in my opinion, that one is a little precarious at the present time.

That says something. Many states are looking back at laws passed two or three years ago and asking, is it working? What have we accomplished? Well, if you look back in Massachusetts, I don't think we have accomplished very much if we have only one project that hasn't even reached the point of drafting an environmental impact assessment or deciding what the scope of that is going to be.

Second, why not? I would contend that there are several reasons, some of which were touched on by Dana. One important question is the question of risk to the developer. We may have designed a process that has such great inherent risk in it to the developer that, in fact, the developer or the Board of

Directors of that corporation can't afford to take the corporate risk to enter the process. I am talking about the time that it takes to go through the process. I am talking about the up-front cost that your process may require him to make before he even knows whether he has a chance of success, before he is issued a permit or before he is given initial approval to proceed. The third issue is the uncertainty of the outcome and the fourth is the political environment in which the licensing agency operates. To the extent that the siting decision-making process becomes politicized, one tends to discourage potential developers.

What to do about it? I had believed that perhaps some minor changes in the Massachusetts law might, in fact, make it more workable. I sensed this, in fact, might be the policy now of the Commonwealth - sort of pull the wagons in a circle and see if we can make some minor changes and see if that will result in a more workable process.

One of the proposals that has been made for minor amendments in our process, for instance, is to reduce the size of the Siting Board. We have a 21 member Siting Board. I think that 13 of the members are public officials. That does not make any sense to me at all. Many of those public officials have to rule on the project or have some influence about the licensing of the project. It might be that a smaller Siting Board made up of citizen-types would be more useful or more expeditious.

Second, establish more reasonable criteria entering the process - the so called feasible and deserving determination. There should be some criteria up front that the developer can evaluate and say, yes, I can meet those criteria and I am willing to take that risk or, no, the criteria is so stringent and I will not apply. We have had situations where the criteria have been changed during the siting process.

Third, we have a procedure for revocation, revoking the initial approval for entering the process. The risk attendant to having your initial approval revoked by a vote of the Siting Board which may be politically influenced is enormously high, one that is so high that many developers, in my opinion, won't take that risk.

Last, develop a clearer definition of the type and size of facilities that we need in the Commonwealth. This is a needs assessment. We need to know what we need and the developers need to know what we think we need. I am not sure that we have made that determination.

In looking at the Massachusetts process, there are two principles that make sense. One is the assistance grants to local governments. If I were a state considering a new siting law, or considering changing an existing siting law, I would provide financial assistance grants to local governments to evaluate proposals. Second, I would include a provision for a negotiated siting agreement. No matter how you decide where to site the facility, the final step in that process should be the community and the developer negotiating a siting agreement establishing a formal relationship between the two of them.

I have been supportive of these changes here in Massachusetts. But, I am beginning to think that more radical surgery may be necessary based on the work that I have done in other areas. I have looked at other states' siting procedures and I have concluded that, in fact, a totally different approach might be more useful. I don't mean to shill for the State of New Jersey, but I do notice that they are coming next on the program and the principles that I propose for an ideal siting process may appear to you remarkably similar to what is going on in the State of New Jersey. I think that they have a good siting law.

I would advocate a strong state presence which we don't have in the Commonwealth of Massachusetts. I would suggest that we have a state-managed site selection process where the state establishes criteria, with public participation, for the selection of sites. The state manages a site screening exercise or criteria screening exercise to identify one or more sites that are above an acceptable environmental threshhold.

Nobody should be able to say that there is a better site. This is a defensible site selection process that results in the identification of the best possible site or group of sites that exists in that state.

I also believe that there ought to be a state-managed contractor selecting process, as Dana suggested. We should be able to defend the statement that this is the best contractor to provide this service that we can find. The state should go out with an RFP and select the best contractor for that job.

I believe that the state ought to have an override of local zoning ordinances that may prohibit the siting of a facility in a community. Hazardous waste management is a legitimate state purpose - no less than the need for a penitentiary or a mental health institution or any other kind of state-needed facility and no community ought to have the right to prohibit the siting of this kind of facility.

Last, states might consider an alternative to a State Siting Board or Commission including the establishment of an independent authority for managing the siting process with the authority to raise revenue or float bonds for the construction of the waste management facility.

I would say, in conclusion, that there are two basic principles a legislator ought to think about in designing a siting process. One is that the process has to be defensible - you have to be able to defend the site; you have to be able to defend the need and you have to be able to defend the contractor who is going to run the facility. Second, you must have a balanced siting process, one that considers the needs of the state, the needs of the community <u>and</u> the needs of the developer. Thank you.

Joan N. Gardner:

Thank you, John. I think you can see that the Massachusetts experience has generated some very strong feelings, not only about the Massachusetts law, but about how hazardous wastes should be treated and managed. Because of our time

constraints, I would like to ask if there are any questions in the audience. Apparently it is not necessary for you to go to a microphone, but if you could identify yourself, I think that would be helpful. Yes, sir.

Lester Sutton:

I am Les Sutton with EPA here. I thought the presentations were generally excellent. One aspect of it brings a question to my mind. The question of somebody determining your needs bothers me. I assume you mean the state doing a survey. How could they actually determine an industrial waste need, first of all, and I would comment that my experience has been that the state or federal government is not very good at that and secondly, is it really necessary to do these surveys. Obviously a company is making a risk assessment to come in and build the facility. I assume they are not going to do it unless there is a need and if they do it and there is no need, they take the risk and they lose. Why do you think it is necessary for a government agency to determine the need?

David Spackman:

Let me try to respond. The issue of knowing what the needs are is critical, though not in terms of the technical answer. I agree that the extent to which a developer makes a decision that an economic base exists for its operation is probably the best indicator in an objective world that there is a need. So, a determination of need may not be essential to address technical concerns. I think, however, it is a necessary response to political concerns. What you are essentially doing here in Massachusetts is requiring community participation, and you need to be able to convince people that they are being required to participate for a reason. While I may be willing to accept that a developer has made a valid decision that there is a need I am not so sure that we would ever be able to adequately convince communities that the developer's decision is a good indication that there is a need and they are going through this pain and anguish for some purpose.

Dana Duxbury:

I have been asked as a public interest leader in this state to buy into the notion that there is a need. That gets me to the front door, Les. I can't step over the threshhold with that. When a specific developer with a specific proposal comes in, if I have not bought into a consensus about need, I can't be supportive of a particular proposal. David spoke about the community. The community says you are thrusting something on us. Is there really a need for us to have this thrust on us? They need to know that there is a need. We do have a valuable tool in your manifests that give us some indication of the quantity of waste out there among those firms that are currently manifesting waste, so that there are some ways to get a handle on the quantity being generated.

Not only do I need to know how much waste there is out there, but I need to know the types of the waste. There is quite a bit of discussion that certain wastes should not be landfilled, so, is there a preferential type of

technology. Then, I can be speaking to the public interest in protecting the environment.

The other thing is - say a developer makes a mistake. He is going to go out of business, but before he goes out of business, he may not be operating that facility up to snuff because he does not have the wherewithall to do that, which may mean that public health is impacted. And, if he has made a mistake and he goes belly-up, then we have another problem in that I am paying the tab.

Representative Maurice Arnold:

I'd like John's reaction to this idea. It strikes me that one of the reasons why our health costs are so high is that we have a third party pay system. The same I think is true in waste, that we have essentially third parties who are paying in many respects for wastes so that the first and second parties can get away with generating waste. In any kind of siting system we may legislate, we ought to pay attention to the principle that the generator ought to be responsible for helping find a place for the waste that the generator makes. What do you think of that thought and how would you put that into effect, gentlemen?

John McGlennon:

I think it is a good idea. I think it is very hard to implement. Generators tend to stay in the closet when there is a siting proposal around. On the one hand, there are lots of incentives for generators not to generate waste. They are implementing waste reduction programs and they are building on-site waste management facilities rather than ship to waste disposers. So, in that regard, I think that they are doing their job.

As far as supporting siting proposals, they don't tend to do it. They don't like it to be known that they generate waste. They feel that it is the responsibility of the developer, the waste manager to get through the siting process. I don't think that legislators should attempt to mandate a role for generators that would say that you have to go to hearings and say that you are a generator. I think that they have to do it of their own volition. In New England, we have seen the New England Council come out pretty strongly. Industries will speak through their association rather than as individuals. The exception to that has been, for instance, the Polaroid Corporation, here in Massachusetts. They are a big waste generator and they acknowledge it. But many other corporations don't and I am not sure that as a legislator you can insist that they be part of this siting process, although it would be desirable if they were.

Representative Maurice Arnold:

You could have them pay for it in some way.

John McGlennon:

They do pay for it.

Representative Maurice Arnold:

Pay more for it, perhaps.

John McGlennon:

They would pay more for it if we put surcharges on waste disposal, a tax levy that went to the state.

David Leff:

My name is David Leff and I am Connecticut legislative staff and I have a question for Mr. McGlennon. In development of the Connecticut siting process a couple of years ago, we looked very carefully at the siting process your firm put out and we had Peter Clark down to speak to us about the local negotiation process which was hailed as being the centerpiece of the whole system. Given your current feelings about the Massachusetts law and the way it has turned out, what do you see as the local role now?

John McGlennon:

I see the local role as one where they participate in the negotiation of a siting agreement once the determination is made to site the facility in that community and it is a very important role. They obviously have other roles during the process. They can comment on the scope of the environmental impact report, socioeconomic impact report, comment on the draft impact reports, whatever the rights are for participation in a permitting or siting process.

But where a community is designated for a facility, their principal role will be the negotiation of a siting agreement. This process might be overviewed by the state, but it's basically a two party negotiation. My theory is the theory of inevitability: when a site becomes inevitable the community begins to negotiate and it will not negotiate until it becomes inevitable that the facility is going into that town.

Joel S. Hirschhorn:

I'm Joel Hirschorn of the Congressional Office of Technology Assessment and I really want to make a comment coming at this from a national perspective and also just using information and facts rather than emotion. I think that it's irrational to expect the public to accept new sites. On the question of needs, I could present an unequivocal case that no one in the private sector today can establish a really valid and certain need for a facility. It cannot be done. For example, source reduction is now such a dynamic and uncertain factor, that nobody in the private sector really knows how much waste is going to be produced five years from now or ten years from now. Plus, you have uncertain market conditions in the economy. If you think it's possible for the private sector to know what the needs are and what the business situation is, you're wrong. In fact, around the country today, overwhelmingly, waste

facilities, treatment facilities have tremendous amounts of unused capacity. Obviously, they already made a number of incorrect projections about the needs for those facilities. So, I think the need for facilities is really an incredibly difficult question. Changing policy, unstable government policy, is yet another factor that makes needs assessment almost impossible to do, so that all the information available suggest that it is very difficult to establish the need for a particular facility. I would also suggest that all the information that we have uncovered in our recent study of hazardous waste suggests that no thoughtful, rational human being would accept the siting of a hazardous waste facility. I was sitting here making a list of all reasons why a rational person would not accept a waste facility and I don't know how you can get around this. Regulations are not designed properly. They are not administered properly. They are not enforced. The non-compliance rates all over the country are staggering. There's no proven track record for many technologies. You don't have adequate data in most areas and you have unstable policies across the board both at the state and federal levels. How could you expect rational people to accept the sites. If anybody could answer that I'd love to hear it.

Joan N. Gardner:

I think Pat down from New Jersey is willing to take a crack at that.

Frank (Pat) Dodd:

I don't know about answering that specific question, but to make a statement like that, it sounds good, but the part lacking is what is the alternative?

Joel S. Hirschhorn:

Exactly.

Frank Dodd:

You bring up a point that people will grasp, will say, hey, I agree with that. Let's not have these things. But, where is the reality? Now if industry source reduction tomorrow morning didn't generate one ounce of hazardous waste from tomorrow on, what do we do with the tens of billions of tons, not gallons or pounds, but tons that are in the ground in Superfund sites that everybody wants taken out of their towns. Where do you put that stuff?

Joan N. Gardner:

I think I would like to conclude on that note and I think it's a nice lead-in to the next panel. I would like to thank our panelists this morning for the Massachussets case. There will be a five minute break and then the New Jersey panel will take over.

HAZARDOUS WASTE FACILITY SITING IN THE NORTHEAST: PROGRESS OR STANDSTILL? NEW JERSEY PROGRESS REVIEW

Richard J. Gimello:

Good morning. I am Rick Gimello, Executive Director of New Jersey's Hazardous Waste Facilities Siting Commission. I hope John McGlennon comes back into the room because I just wanted him to know that those little pats on the back are not going to get him any more New Jersey business. I don't care what he says. It is a workable siting law until the consultants come in and then all of a sudden it gets to be a problem.

In September 10, 1981 the Hazardous Waste Facility Siting Act in New Jersey was signed into law. We refer to it as S.1300. It was created following a study done by the Delaware River Basin Commission that attempted to define the need and come up with institutional mechanisms for how new facilities would be sited. The Delaware River Basin Commission back in 1979 published a map that illustrated the best clay formations in the state of New Jersey and there was a comment that these clay formations were appropriate areas for a site search, especially for land emplacement facilities. Needless to say, all the communities in that clay belt, that green go-ahead strip in New Jersey began to ask questions like what are the criteria that are going to be used and how do citizens impact that decision and what are the rules of the game. That led then Governor Byrne to direct the Department of Environmental Protection and the legislature to come up with institutional mechanisms and a plan to promote the siting of hazardous waste in New Jersey.

With me on the panel today is the sponsor of the original bill, Senator Pat Dodd who is now the Chairman of the Hazardous Waste Siting Commission in New Jersey. Next to Pat is Katherine Montague. Katherine serves on our Advisory Council and I'll explain just how that fits into the picture in just a second. Katherine represents the environmental community on our Advisory Council and was one of the original task force members that literally wrote the act during a hot summer in the basement of our State House. Sitting next to Katherine is another member of our Advisory Council, Dr. Thomas Hellman. Dr. Hellman is with Allied Chemical Corporation and he serves on the Advisory Council, which is responsible for developing siting criteria. Also with us is another Commissioner with the Hazardous Waste Siting Commission, Mr. Thomas Lean, Public Agency Representative from Jersey City.

The Act is specific in its direction and its time frames. We have a nine member Hazardous Waste Siting Commission. Their responsibility goes to the site aspects and the site review aspects of the law. It also sets up a 13 member Advisory Council which advises the Commission and the Department on various aspects related to hazardous waste and hazardous waste siting. The Department of Environmental Protection designated the Advisory Council last January to come up with siting criteria and they spent the entire year of '82 laboring to come up with a set of siting criteria and I'm happy to report that

two more meetings from now, the end of May, we should have that task completed and the Advisory Council will submit to the Department siting criteria to be used then by the Commission in the evaluation of sites.

Our process is two-tiered: site evaluation process followed by the technical assessment. That process is reversed in any other state. A number of states do a technical assessment first and certify the technology or the facility operator to go forward with the site search. That seems to have backfired in a number of states. I would caution those you who are looking at developing your own siting laws to think that out a little bit more. It seems that once the stamp of the technical approval is on a particular proposal, the credibility and the belief on the part of the public that it's being viewed in a fair and impartial way as it moves to the rest of the hoops comes into question, so I caution you there.

I'd like to run through the questions because I think they're excellent.

The status of our siting process: we are presently developing the Hazardous Waste Management Plan in New Jersey. That's the responsibility of the Commission and its staff. We hope to have a draft plan on the street early fall. That plan will tell us the numbers and types of facilities that we'll need to deal with New Jersey's waste and we are quickly learning some of the things that you've heard here. It's very difficult to define need but we will talk about that a little bit later on.

The Management Plan will be taken primarily from our manifest forms and also from an independent study being done by an industry research council that is doing a current survey. They will tie the waste development to specific technologies on a county-wide basis that will help us hone in further on the particular areas for site search.

The key concepts of the law - I will run through that very briefly and then I will move on to an evaluation of the procedure to date. I would like to begin by saying John McGlennon's description of intent comparing Massachusetts and New Jersey might be a good starting point. I think New Jersey started from a different premise than the Massachusetts Siting Board and the Massachusetts State Agency. We accept the fact that no rational process is ever going to get a community to welcome a hazardous waste facility and we believe that it is important to negotiate a settlement with the locals once we had a particular site in mind, but we felt that a state-directed approach was necessary because of the political climate and the reality that a citizen's group or mayor or county freeholder is not going to be able to say, "Commission and members of industry, please come to my town and set up a hazardous waste facility." So, I think that compensation and rational debate process that Massachusetts incorporates in their Siting Act is in our Siting Act but we just have a bit more of a stick to force - not force, but to encourage a community to participate in good faith in the Act.

We have a couple of things that John McGlennon did mention in our Act. We have a 5% gross receipts tax. Once a community is targeted and a facility is finally sited there, that community gets 5% of the gross receipts to be used

to compensate that community for costs incurred as a result of the Siting Act. It is paid by facilities currently in existence and most of the hazardous waste facilities have negotiated settlements with their communities and the atmosphere is a little more friendly now. It is interesting to see in communities like Logan Township where we have Rollins Services - the atmosphere, the hostility is starting to drift because the money is there to help the community deal with the problems as opposed to having to just scream at the regulatory agencies. We have an elaborate public participation process that includes grants to local municipalities for a site suitability study and also for the review of the environmental health and impact statement which is required.

We also built into the law adjudicatory hearings along the way in anticipation of conflict. Once a site suitability study is prepared by the local municipality we can assume that it will be at odds with the siting study done by the developer and we take that immediately to an adjudicatory hearing and the Judge will make recommendations to the Commission and then we can continue the process. There are two such hearings at both review stages in our Act and they are critical. We don't anticipate that that is going to stop civil suits but at least it will direct and keep us on time schedules that are also very specific in our Act.

I brought with me the Citizens Guide to S.1300 - a number of you have taken them. I will leave them up here with copies of our siting criteria. We have a time-frame that we haven't been able to adhere to. The time-frame in our Act, which is a critical part of it, started with the signing of the Act and our Commission did not come into place until six months later, so all our time-frames are off by six months. When you look at the outline you should keep that in mind.

The public participation process includes an elaborate requirement for public educational programs on a state-wide basis. The Commission has a hefty budget for that process and we will be beginning that shortly.

One of the reasons that John McGlennon feels good about the siting process in New Jersey is that we have had two years up front with the writing of the Act which went through elaborate public hearings and also with the writing of the criteria so that the citizens of New Jersey are aware of what is going on. I would encourage you if you are looking for tuning up your own siting act or the creation of new siting acts, keep in mind that it takes a couple of years on a state level for the debate to get to all the citizens and you may find yourself with a pretty supportive community in a generic sense if you take the time up-front and don't rush into it. That is certainly one of the problems that Massachusetts has had and they are back-pedaling now and we don't think they are going to be able to back-pedal quickly enough to catch up with themselves.

I think that is enough about the specific elements of the Act. Perhaps now it is a good time to talk about the status of our siting process and the stages that we are presently going through and I would like Katherine Montague to lay that out for us. Katherine.

Katherine Montague:

Well, I think I am going to address the stages in the entire process so far that have been critical as opposed to explaining the status of the siting process. I think one of the most important things in the New Jersey process was that from the very beginning we involved a variety of interest groups. Rick mentioned that the law itself was written by a task force and that task force was made up of equal representation from four interest groups - municipal and county officials, environmentalists and public interest groups, the generating chemical and manufacturing industry and hazardous waste management industry. Representatives were put forth by the interest groups and over months of discussion and debate we came up with recommendations for the legislation which legislative services drafted. I think one of the most important things that we brought to that process was that no siting would occur unless a process was developed that was open, where everyone understood what the ground rules were, and there was no question of political deals made in a back room between officials and payoffs or anything like that, so that observable criteria had to be developed that proposals would be measured against. I think one of the most important things in developing a siting law for people who don't have one right now is the involvement of the interest groups in that development. Instead of having somebody in a legislative office write up a law and then have public comments, have the interested parties involved in the actual development and you are most likely to address the concerns and interests of those various groups.

Typically, when a law is drafted by a legislative service organization and then goes to public hearing, very little change occurs in that proposal after public comment in any direction, whether it is in a direction designed by industry, the public or whatever. I think you really have a head start having a group of people representing a variety of interests get together with the perspective of we need facilities, we need to find a solution to our hazardous waste management problem, how can we better do that and protect the interests of all of the different groups. You then are setting the stage for future discussion and future work. The Governor appoints the Commission, which has three representatives from County and Municipal Government, three representatives from industry and three representatives from environmental public interest people. By having the law address the concerns of these different groups, it set the stage for a working relationship between those interest groups. The Council went even further. The Council has 13 members and they are appointed by the Governor based on nominations made from the groups they represent and there is a broad range of interest groups represented. We have generators. We have hazardous waste management people. We have a representative of the hauling industry. We have environmental groups. We have a fire fighter. All of these people are working together in a non-confrontational setting, which I think really goes back to the way the law was created, bringing these interest groups together with the positive goal and task of solving the problem using all of our creative abilities.

I think another important thing that happened in New Jersey is about seven months after the Advisory Council started discussing the siting criteria we went to a public meeting on the siting criteria. We held seven meetings

around the state and prior to those meetings we distributed copies of our draft criteria. They were not formal hearings where the public was to come and offer testimony. We presented the criteria and requested that the public discuss each of the criteria as we went along. We would describe a particular criteria, describe how we came up with that criteria and then stop for public comment and discussion. It wasn't a debate exactly, but it was an informal discussion and in a number of meetings we had several hundred people. Again, it was giving the people the perception that they were part of the process and that they had a role and that we were listening. At the meetings, obviously the majority of the comments related to the siting criteria but many of the comments that the public wanted to make related to enforcement questions - to the record of the Department of Environmental Protection. Even if we had the best possible site, even if we had the best possible company, when you look at the history of enforcement, how can we be sure that we will be protected. I would have to say that one of the most crucial issues is an adequate enforcement program, which frequently means more money and better comprehensive hazardous waste regulations.

The Advisory Council, after these public meetings, looked at the comments of the public very seriously and since July, has been revising the siting criteria. Again, as I mentioned before, the public is used to presenting testimony about a particular proposal and seeing very little change in that proposal. Having siting criteria which really have had some major modifications based very directly on public comment shows the public that they are part of the process, that they can be involved and encourages future involvement as the process goes along.

Richard Gimello:

I think it is important to stop for a minute and look very quickly at some of the elements of our siting criteria because I believe it is a lynch-pin because of the education that has followed us throughout the state. Dr. Thomas Hellman will summarize for us some of the elements in the siting criteria and the process that was used.

Thomas Hellman:

Katherine did a good job in describing the process. To me it was an interesting and informative period. My background has been with industry in a technical/management type job. It was the first opportunity that I had to work with this type of a group - a mixed group - which includes representatives of the environmental community, as Katherine pointed out, local and county lawmakers, firemen, and representatives of the local university as well.

The process itself was very positive. This is one of the areas that we should encourage people who are developing siting laws to incorporate. We came in with an objective built into the law. I would like to read to you the objective of the law. It is basically two-fold; one, is to protect the public health and environment by establishing sites for the proper disposal and storage of hazardous waste; and the second is to maintain a proper balance

between competing state and local interests. I think when you analyze that and look at what New Jersey did structuring on those basic objectives, you find the basis for a reasonable siting law.

When we came together we were a little disjointed. We had industrial people; we had environmental people; we had local politicians and university professors. It took us awhile, maybe a month, to really meld together and after awhile what happened was that we thought of ourselves as a group as opposed to people who represented independent non-conforming interests. We did have an interest that was common throughout the group and our interest was to develop defensible and balanced criteria. You heard those words earlier. Defensible in the sense that we wanted to be sure that the interests of the public and industry, all factors, were considered in the development of these criteria; balanced in the sense that we felt that it was important that proper waste disposal take place in New Jersey. New Jersey is a little different than Massachusetts in the sense that New Jersey has a history of chemical manufacturing. New Jersey was at one time the largest chemical manufacturing state in the country. That industry has moved now toward the Gulf states but New Jersey still is No. 2. It has an old chemical industry. When you look at hazardous waste problems you are really looking at an historic problem. What the chemical industry did 50 years ago in terms of waste management is part of the basis for the problems we have today.

In any case, we came at it from a different perspective. Our perspective was, we wanted proper disposal of hazardous wastes in New Jersey. So, our efforts were focused on trying to develop criteria which are consistent with that objective. You know, I suspect some of you will take a look at our criteria list and say, gee, after 12 months of work, that doesn't seem like a great job: we could have knocked that off in a couple of hours! In many cases, each word in these criteria was discussed, looked over, analyzed from different perspectives, almost to the point of frustration, but it was important to do it. The one thing that I learned was that because professionally I spend much of my time doing this kind of thing and I am familiar with the jargon, the terminology, I may be impatient dealing with those who aren't. But, in fact, to make this whole process work it is people who don't understand the jargon, who don't understand the technology that we have to convince, and that we have to bring to support our positions.

I think anyone who says that this is not a politicized process is missing a great aspect of it. We can go through this effort, which we did, and develop the criteria and go through the public hearing process and generate defensible criteria. We can map the state using these criteria. But in the final analysis, a site will be designated. Once that happens, I think the process will politicize very rapidly. It is going to be a political activity from then on. What we have tried to do is address the basic issues in the criteria, such as protection of the public and environment. One of the biggest problems that we had was how to define a population density criteria. You think about that for a minute and say, gee, that seems easy. Let's have it that we won't site a facility where you have 100 people per square mile or within a mile of a house or certain other types of considerations. But, you know, you argue back and forth on this and pretty soon, depending on the

nature of your geographical preference, you can argue to put it out in the suburbs in the country or you can argue that you ought to put it in the city and you end up in cross-purposes. We finally ended up dealing with a "distance from the site" type of population density criteria.

We have criteria that protect the environment and groundwater. We have criteria that address critical habitats. We have structural criteria that address what is underneath the potential site area to assure that we are not putting our site on cavernous limestone. Air pollution was addressed as well, which was a difficult one.

We took a year of our time and we developed these criteria. We went to the public with them and we are going to go public one more time when we have completed the process. One of the most important aspects of our siting law is that it allowed us to develop the criteria before the politicized process started. The application of these criteria, of course, opens up the politicized process but at least we developed the criteria prior to that and I think from what I understand, based on what was said earlier today, Massachusetts does it differently. They pick a site and generate criteria, but by the time they have picked the site the opposition has gotten very strong and I think that it's probably possible - I am not sure that this is completely true - but it is probably possible to think of 50 reasons why you can't have a hazardous waste facility in a location for every one that there is that you should. That is where we are today in the development of the criteria.

Richard Gimello:

In terms of the critical stages, right after the public hearings on the siting criteria, the legislative leaders in the most populous counties in New Jersey looked at our siting criteria and said, you seem to have missed the point: the prime criteria here is the protection of people, Ladies and gentlemen, that translated into, you can't put it in a populated area and we want to define what that density is. Perhaps Pat will take a minute and explain what happened in the legislature as we got on the street with the siting criteria.

Frank Dodd:

As Rick said, as the criteria neared completion, there were hints in the industry that they were looking at this area and they were looking at a proposal in Newark and all of a sudden there was a proliferation of exclusionary legislation and they picked out figures of 100,000 which effectively excluded certain towns. Another legislator then wanted an amendment to bring it down to 50,000 so his towns would be included. Finally I had to do a little shilling in the legislature: I had one bill introduced to eliminate all the towns in New Jersey. That was our saving grace because it highlighted the fact that nobody wants it. I would have been deathly afraid if there was just one bill, but the fact was that there ended up being a dozen bills effectively excluding the entire state and we did a little editorial work with some of the local press and they dramatically pointed that out.

Working with the political process and understanding it is critical. Where a legislator fully expects to have an opposition group in a town, a host town, once it is designated, there will be opposition groups as there would be for siting a prison, mental institution, methadone clinic - you name it, the people are against it. That is part of the process. A lot of people spin their wheels and time and effort trying to make believe that it won't happen if you do it this way or that way. It is going to happen, so that is right up front.

Now, how do you build the process to adjust to that? We have a carrot and a stick approach in New Jersey, but we have the power of eminent domain built into our law. That is condemnation. After all is said and done, opposition, public participation, education - we have the final say. One-stop shopping. There is nobody else to go to. Hopefully, condemnation would never be used in an adversarial proceeding but it certainly gets the folks' attention when we come to town. They pay attention.

As to the gentleman's remarks earlier this morning - part of our master plan identifies the waste streams in New Jersey - that information comes from our manifest system. It is identifiable. There is a political problem of how much out-of- state waste do we have to bring in to justify the economics of that particular plant and then is it desirable from a provincial point of view. Do we want Pennsylvania's waste? Do we want New York's waste? Or, do we get clever enough and say, okay, Pennsylvania, we will make a deal. We will put in this type of facility if you will put in that type which does make economic sense whether it be chemical treatment, incineration, or at-sea disposal. We can work together. It is extremely difficult and we are working now in the shadow of the Superfund to clean up the existing sites. The siting process is yet to come into its own. We are planning for our children and our grandchildren's future. People can't look or don't look, because that is the way folks are, past the immediate problem of getting rid of that old dump in my town first. Nobody ever asked, where are you going to put it? This is where we come in. Now, do we just move it from one land emplacement in my hometown to Katherine's emplacement in her hometown, that we know eventually will leak, will fail, no matter how much clay, no matter what kind of linings - they will eventually fail. They will contaminate someone in the future. That is a guarantee. Or, do we bite the bullet and go for the most difficult decision of coming into your town and saying, we are going to put a treatment facility here. Now, how do you want to do it?

Richard Gimello:

As Pat said, the absurdity of each one of those bills built to such a point where we were able to say, if you don't let an independent Commission that has gone through the two years of studying this problem, make the decision for you, you will have no decision at all. It has become critical. We have tied our wagon, so to speak, to the clean-up forces in New Jersey and that is driving the public perception in a different direction at this point. New Jersey is currently under contract with EPA for 65 Superfund clean-ups. I don't know if there was somebody here from New Jersey yesterday - I believe .

there was. Forty percent of the money that has been appropriated so far from Superfund is being spent or will be spent in the State of New Jersey. So, almost everywhere we are going to go there is going to be a sore in that landscape somewhere that needs cleaning up and I think helping people understand that clean-up and siting efforts are actually linked will go a long way in driving the rationality that the Massachusetts law seems to envision in its original creation.

"Are there aspects of your siting law which have caused serious problems?" We have talked a little bit about the politics. The other problem was, when we wrote the law - and I had an opportunity to serve on the task force that did put the law together - we didn't quite understand all the different aspects, mapping, site designation. Our law says the Commission shall designate sites and notify the municipality. Well, in our naivete, we thought that ought to be pretty easy to do. If John McGlennon's group can do it, the state ought to be able to map it. It's turned out that mapping in scale and which scale you map at and how much money you need and when you start taking on the political fights is not as simplistic a question as we originally envisioned and we may have to refine that a little bit, either through policy or through amendments to the Act.

Another area is the definition of a major hazardous waste facility. Our law deals only with major hazardous waste facilities. Currently, they're defined as facilities that store more than 250,000 gallons of a hazardous waste. What we found is that we may have caused a situation where we are driving people and industry to come in with proposals for 249,000 gallons of waste and just miss the law and therefore miss the intent of a well-planned management scheme for New Jersey so we may have to make some amendments...most other states don't make a distinction and we're looking at the possibility of amending that definition.

The question of facility driven versus the state directed approach. Our bill allows for both options. An industrial requester may come to the Commission and say I have a site that I think meets your siting criteria. Will you review it and approve it? The question of whether or not the industrial requester has to fit into the plan and meet the needs that are described in the plan is something that we are looking into now. Some industry representatives are saying the plan, the criteria and need are only one approach to siting. Industrial requesters don't have to be part of that. They can come in independent. They have a site and they can do some business from out of state. So, we're fine tuning the Act as I think every state is. I can say with a lot of pride I don't think there are glaring holes in New Jersey's Act. I may come back to you next year and have to eat those words. I hope not.

"Which aspects of implementation would you regard as mistakes?" I don't think we've made too many yet. I'll know in about six months.

Frank Dodd:

Not having a psychiatrist on the panel!

Richard Gimello:

To sum up, in the next six months, New Jersey will really face the acid test. Our plan and our criteria will be in place and we'll see how well we've done the job of educating the citizens of New Jersey to the need for facilities and how rational the approach is going to be statewide to support us. What we're hoping for in the simplistic is that when we designate a particular tract of land or community or county for a continued site search, that the rest of the state's going to go "Whew" and support us and that the particulars of the Siting Act will only have to deal with a small community in terms of education and negotiations. I'll just leave it to the panel if there's something you think I've missed. Any comments? Tom?

Thomas Hellman:

I've got one comment. It's not something you've missed but something that came to me as we proceeded in this. Industry likes to use the concept of risk benefit and I think it can be applied in a way that gives us a better understanding of the process we're embarking on. What we're really talking about here is a benefit to society, that is, by providing good sound hazardous waste management facilities the society benefits - better products, safer products, less midnight dumping or indiscriminate disposing of waste. The risk, on the other hand, is more localized. It's in the local community that has to manage that particular facility. So, when you think about risk benefit here, the benefit is societal, the risk is local and I think whenever you have that kind of a condition, you're going to have a politicized situation which is going to involve local folks taking whatever steps they can to not have that risk brought upon them for the benefit of society.

Frank Dodd:

I just thought of an example. We all like to have clear lines, good guys, bad guys and we'd all like to say that if we close up Allied Chemical, that's the end of our problem and if we close up Dow that's the end of our problem. Two years ago, I was at an editorial board meeting in one of New Jersey's largest newspapers trying to get support for the bill and one of the editors said well why don't we close up those generators of hazardous waste. Of course, I did a little homework before the meeting and I said well, "What do you do with yours?" And they said, "What do you mean, we're a newspaper!" And I said, "You have X amount of acids that you use with your presses and this and that." They were shocked. But then they understood. It's an educational process. In New Jersey we've identified on our manifest system 1,500 generators. There are more not on the lists out of our computers, every hospital in the state, every college, every high school that has a laboratory, every print shop, gas station, service station. All businesses. So, if you can make that known to the public that we're all part of this, it's not closing up Allied that solves our problem. Generally the larger companies are your better people in taking care of a site.

Richard Gimello:

We will be glad to answer any questions you have. If we haven't been specific enough in an area, we'll be happy to clear it up.

Representative Maurice Arnold:

I'm Representative Maurice Arnold from Vermont. Who pays for this?

Richard Gimello:

Well, industry, the facility operator bears the chief burden. As an example, the Commission has $100,000 from which it can make grants for site suitability but once we have an applicant for the use of that site, then the applicant is the bearer of the expense. Not only for the preparation of all the studies but also for the challenges on the municipal level and also that 5% gross receipts. That was a provision, by the way, that industry supported. We found no difficulty on the part of these industrial participants in saying, we will sweeten the pot: we'll put the money there to ease the fears of the citizens, just guarantee us that there's going to be an end to that process someplace, which is why local override and eminent domain are in our bill.

Katherine Montague:

An important thing with that 5% gross receipts tax which is paid to the host community is that we very specifically did not want to make it a bribe, where a poor community would welcome an industry in because they needed the money to build whatever, to do whatever in their community. The money has to be used in ways related to having that facility in their community. It can be for independent monitoring, it can be for increased emergency personnel, fire personnel, police, for equipment. But it can't be for a swimming pool or park, something like that.

(Question inaudible).

Representative Joseph Lashinger:

To some extent, Katherine just answered part of the question. I represent a portion of Montgomery County, which is located in Southeastern Pennsylvania. There is a small municipality where there is a significant site that has become a very hot issue. We're doing some things in the legislature right now: I've introduced some legislation that will be giving direct benefits to the particular property owners that are affected by the site. Along that same theory, as a result of public input that you've received, has there been any analysis as to any type of, and I don't like to use the word, but it comes back to what you just said, about bribing the community, but are there any tax benefits given to the people, or thought given to allow them some type of compensation for the diminution of the value of their property and for other items like the stigma that goes with it, the fear, the hysteria?

Richard Gimello:

Let me touch on it for a minute. It's interesting. Norm Nosenchuck from New York and I sat with the National Governors Association to come up with a national policy on siting. Compensation techniques were a very critical part of that discussion and I can remember using words like I'm not in favor of that because it looks like a bribe. Massachusetts took a different approach, compensation was fair game and anything is fair game in that approach. When I looked into that, I can't find a study any place that says that industial siting like hazardous waste facilities causes a direct downturn in property values. As a matter of fact, the only study I'm aware of is just the opposite. It happened in California and what happened was that the particular siting drew additional industry which spurred industrial development which increased property values. So, I would, as an industry - I try to put on that hat every now and then - before I'd be willing to open my checkbook, I'm going to need some proof that I am doing that kind of damage to you. I'm not sure that a community can make that claim, which is why the generic 5% gross receipts tax seemed to be the way we would go. We've seen that many communties have said, look, let's negotiate. They've gone to Allied, and Logan Township has gone to Rollins Environmental Services and cut an agreement that in essence says, for five years, we're going to give you this much money. We're not going to contest its use.

Richard Gimello:

Well, there's one part of the Act that's sort of a bribe and that is if you get $60,000 for one year out of your 5% gross receipts tax, the interest that accrues through your investments can go to your general treasury, we're not going to split hairs about it. That's the only free giveaway, so to speak.

Audience:

It seems that you already have a lot of facilities in New Jersey, treatment and disposal facilities. Does your law apply to existing facilities?

Richard Gimello:

It applies to the following. There are 14 major and 14 minor facilities. Most of them are solvent or oil reclaiming and recycling facilities but because of their storage capacity, they are considered major. We really have two commercial hazardous waste disposal facilities as people think of them generally. We have Rollins which is incineration, we have SCA in Newark which is a neutralization and treatment facility.

The criteria would apply once your registration expires and you come back to the Department of Environmental Protection for a renewal of your registration. They're going to compare your site to the criteria and while we can't hold you to everything here, certainly, engineering design requirements to meet these criteria will be appropriate. Finally, if an existing facility expands greater than 50% of its present capacity, that application goes through the S. 1300 process. Norm?

Norman Nosenchuck:

Norman Nosenchuck, Director, New York State Division of Solid and Hazardous Waste. Yes, just an observation and a question, Rick. In connection with some documents EPA has put out - a couple good documents that are apparently not too well known. One is called "Using Compensation and Incentives When Siting Hazardous Waste Management Facilities" which I think is an excellent document that was put out in July of last year. The other one that I think is excellent is "Using Mediation When Siting Hazardous Waste Management Facilites." There's also another study which could be distributed by this group. I happened to have participated in this one with the Keystone Center this past August in connection with the Gulf Coast Waste Disposal Authority. They've been having a lot of trouble down in the Galveston Bay area in Texas and they came up with a new approach which I think would be of great interest to everybody in these 10 states and a copy of this really should be made available.

My question is this: how difficult was it to place in your law in New Jersey the local override through eminent domain, the ability to override local zoning. How much difficulty did you have in putting that into the law? The reason I ask this - it just so happens I testified this Thursday before one of our State Senate Committees just on this issue and even State Senator John Daly acknowledged that if we would try to put this override in the New York State law, this just would not have happened. We are a very strong home-rule state. Now, how difficult was it for New Jersey?

Frank Dodd:

It is funny - you closed your statement with, "We are a very strong home-rule state." But every state is a strong home-rule state. That is a good catch phrase that we like to use in politics and we use it when it is convenient, when we don't want something, but we are not that fussy about home-rule when the money is coming from the state treasury. So, that is kind of a given.

Again, two years ago, working for passage of the law, I was in Atlantic City at the League of Municipalities Convention for New Jersey and I was addressing the Conference of Mayors. There were about 200 of them in the audience and after explaining the law and the process, I said, "Well, how many agree with the concept that this must be done or something very similiar must be done?" Virtually every one of the 200 mayors raised their hands. Then I said, "Now let me ask another question, how many would volunteer their towns for a host site?" Of course not one mayor raised his hand and I looked and I said, that is my problem and that is why we need the eminent domain. If our highway departments in our respective states didn't have eminent domain and a local town could stop highway construction, could you imagine what the highway systems would look like in all of our cities?

I see siting, not just this, this is probably the most critical area that we can address at this moment, but I see this coming for solid waste landfills, prison sitings, and all unpopular things that folks don't want in their town. It seems human nature is entrenching more and more and the last one in really

wants to slam that door closed and they don't want anything else and that is part of human nature. That is why I was half joking about having a psychoanalyst on our Board because it is understanding... How do you then go and convince the town other than with the hammer and you don't do that but you get their attention and you just logic them to death. You try to educate.

Richard Gimello:

Norm, I think one of the things that - I think the knee-jerk reaction you are getting out of the New York Legislature is important to focus on for just a second because we found that the League of Municipalities and the County organizations actually wanted eminent domain because it gets them off the hook. I mean to say that we don't want eminent domain because we don't want somebody coming here and taking away our power misses the point. It gets them off the hook. For them to be able to turn around and go after our Commission and say, look, they can vote against it. They can come out against it and they can fight and they can rally the troops and finally they are at end point and we force them to do a local review which becomes a recommendation that is made to the Commission. We really found that when the various constituents looked into it they wanted it as a protection as a way of getting them off the political hook so they aren't hanging out there.

Frank Dodd:

What Mayor or Councilman could withstand a local community that really got organized against this facility? How could they withstand that political pressure? Katherine?

Katherine Montague:

Another point - the environmental community - during the drafting of this bill there was a group of between 17 and 25 environmentalists that met weekly for almost a year outside of the legislative process to work through our recommendations to the task force and we really spent a lot of time talking about eminent domain. It is a very frightening thing, I think, to the average citizen. Our approach was - if somebody were to propose our community and to say to us, your community has been chosen as the best place to put up a facility, what process would we want them to have gone through to arrive at that conclusion? Once we developed a process we were able to say: if, after all of the examination, all of the public participation, the siting criteria, the review, the adjudicatory hearings, if at the very end of that process there is a site, there is a company, then we really have to buy into that. At that point if there is an individual in a community who says, not on my land, not here - there has to be a mechanism to go beyond that and I think that from the public's point of view, that was the important thing - that the process was fair, and open. Then at the very end you do need the eminent domain provision.

Norman Nosenchuck:

Again, if I might comment further. In the law that established our procedure in New York State, we have developed siting criteria and we do have a Board when an application comes in - but the ability to override local zoning boards was not given to that Board. One of the things I did suggest on Thursday is the possibility of considering binding arbitration.

You are ahead of us in a couple of areas. You have a Hazardous Waste Management Plan statewide. We have yet to finalize our document. I do believe, in the final analysis, at least in our case, the best thing would be to develop a needs assessment and I believe that the state government is probably the best able to do that, using the manifests, the waste streams and where the waste is being generated, what waste is coming in, the risk assessment on it. The location of hazardous waste management regional sites should be a regional decision. Have local groups and identify the 4, 5 or 6 pockets of manufacturing activity, which is also hazardous waste generation, and then say, all right, you have an opportunity to put a site in that is needed or work with the other regions yourself. Now, if you can't do this within a fixed period of time, then this site location will be given to binding arbitration. That is something we talked about the other day. Again, I admire your ability to have the capability to override local zoning in your law. That is, of course, what makes it work.

Frank Dodd:

Some of the legislators that voted on the law when I was still there are scratching their heads and saying, how the hell did he get that in there.

Norman Nosenchuck:

But that is what is going to make you very successful.

Frank Dodd:

It ends the process, which is probably the most important thing.

Representative Teresalee Bertinuson:

I would like to comment, if I could. In Connecticut we think we are the strongest home-rule state in the country too.

Richard Gimello:

Isn't it live free or die?

Representative Teresalee Bertinuson:

No, that is New Hampshire! We think we are right about at that level. Our bill was passed over a two year period. The original bill was passed with the override written in, with no comment about it even then. We fleshed the bill

out the following year after some studies were done. When we debated the bill on the floor that issue was never raised.

The issue that was debated was population density because we had an active interest being expressed by Browning Ferris in one of our towns which was going on during the whole time we were writing the legislation which gave a certain flavor to the whole process. The only really serious debate we had in finally getting that bill through and the way that we had agreed on was to keep specific population density figures out of the law and the town where the proposal was made was the next town from me and I was defending the law and it was difficult. There was a great deal of pressure to put in figures that in effect would have said that Browning and Ferris could not move into Enfield. I fought to the end and succeeded because I think the people as a whole had accepted it - that if we had a law that did that, it would not be a law that would hold up very long in court, if BFI could go into court and say, look, this law is clearly written to keep us out of Enfield. It is very difficult to put any population density figures in there or distances without ruling out a good share of the state and if it were one of the few places that was technologically or hydrogeologically safe, you could clearly put yourself in a pocket that you could never get out of by population density. Although we do have some in our criteria, they are flexible and they are dependent upon the kind of site - they are different for an incinerator than they would be for a landfill.

Judy Borger:

You mentioned before that you had taken a look at the Delaware River Basin Commission study. They also developed siting criteria. Can you comment in general terms if your siting criteria are developing along the lines of or different from the criteria the DRBC came up with?

Richard Gimello:

DRBC started with a premise that we didn't begin with and that was they were looking to site a land emplacement facility. So, their whole criteria and mapping was driven by this need to identify areas for land emplacement and they were using the old containment scenario. We incorporated a lot of what they did - some of what they did was excellent and on the face of it, made a lot of sense, looking at wetlands, etc. They got hung up though when they got into the clay belt regions. They didn't know how to treat aquacludes, and how to deal with recharge and discharge. So we fine-tuned the Delaware River Basin criteria and we have totally moved away from a containment scenario approach regarding land emplacement facilities. We now accept the fact that land emplacement facilities are going to leak, so instead of trying to pretend we can contain it with clays and liners, we have gone to a mitigation criterion which acknowledges a little bit of leakage and then designed systems and examines hydrology in terms of recouping the leachate as opposed to preventing it because we found that it couldn't be done. It was a good data base for us.

Alan Boright:

I was wondering - I would like a little more explanation as to why you rejected the bribe to the local community. It seems to me that if normally two parties are entering a contract you have a willing buyer and a willing seller and my question is, how much do you have to sweeten the pie to have me accept the facility in my community and maybe the mental anguish that I suffer would be equalized by having a swimming pool.

Frank Dodd:

Let me try it first. The 5% gross receipts tax is mandated now. That is in addition to full property tax. Now, we as a Commission, the 9 members, will in effect be the arbitrator between an industry and the host municipality. I don't think we are going to object at all if the host municipality will wangle anything they can over and above full property taxes, the 5% gross receipts taxes, get jobs, if they can get a new playground, if they can get anything they want and the industry agrees with it, we are the in-between people. We have no objection on that. So, it will be a negotiated type of thing, but to get their attention first of all is the most difficult.

Katherine Montague:

I was going to say, I think the concern was that instead of choosing a town because it really met the siting criteria and really offered protection from that point of view, that a town might be chosen because they were poor and could use the money and so they would then accept the facility when they really shouldn't.

Alan Boright:

So you think poor people have a greater attraction to money than wealthy people.

Katherine Montague:

I don't think poor people - I think sometimes poor people's officials do because we see that in New Jersey right now where there are some local officials who, right now, given the federal cutbacks, etc. are in a very tight place and they are looking favorably on sites that the people of their community do not want. So I think that is just something that is an added element that increases the political nature of the decision and avoids having it be a rational decision.

Richard Gimello:

It is also catering to misconception. I would like Tom to follow up on this. I don't want to speak for industry, but I have a whole lot of problems with treating hazardous waste facilities differently than treating chemical refinery plants. I think with up-front payments, that becomes the focus as opposed to environmental standards and design standards that should be

required or negotiated. I have a whole lot of trouble saying to a hazardous waste industry that is not doing anything more riskful than a chemical refining plant saying look, just open a checkbook and these people will stop screaming at you. I have a problem with that on a philosophical level. Tom, how would an industry deal with that? I mean, how far do you go?

Thomas Hellman:

I was going to point out that really the New Jersey law precludes the concern because we have siting criteria and that provides the protection against going into a poor community merely because they are willing to accept the "bribe," if you are going to use those types of words. It seems to me that, again, when we look at this risk benefit, the societal benefit, the local risk, you have got to do something to bolster the local risk so that they can see a benefit along with the societal benefit. I think that the 5% gross receipts tax was an effort to not only recognize the fact that there may be more municipal services: fire protection, police protection, training, roads, maintenance of roads, required if you put in a facility, than you might have if you don't have the facility. In addition, if a community is designated and sees that they meet the criteria and that, in fact, a site has a good probability of being placed in the community, then I think they get the option to negotiate - not a bribe, but to negotiate, to get a little more of that benefit on their side, not just the societal benefit. You can call it a bribe, you can call it what you want. I call it good negotiations, myself.

Frank Dodd:

If I could just add on. You know we have made hazardous wastes the bogeyman and we are doing it right today and we will go on doing it. The more we do this sort of thing the more people will become afraid of it. It started not that long ago. This is modern history. This is five years ago for Love Canal. About six years ago, there was no word such as hazardous wastes or toxic wastes. This is relatively new. Five years. Fifteen years ago you did not have the word environmentalist. You know we are dealing with 50-60 years of industrialized problems in the last decade and now we have made a hazardous waste treatment facility more fearful than the LNG tank that they put in your town. An LNG company could come in and negotiate with the Mayor and Council and get approval to build it. I don't have to dramatize how dangerous it is. Or, a raw chemical facility that has the combustibles and the chance for explosion and contamination, but the raw chemicals are not waste yet. So we have made the hazardous waste the problem that it is, and it is a problem, but when you put it in relative terms of risk in today's society, that we live in towns next to these plants, and these types of facilities and nuclear facilities. We probably could build nuclear plants easier than we can site a hazardous waste facility - maybe.

Kate Parker:

I'm Kate Parker with the Council of State Governments' Eastern Office. In Massachusetts, several proposals came to the state before they had their regulations in place, which is apparently why they had so much difficulty with

4 of the 5 which you spoke of. Have any companies come to you and have you deliberately not yet considered their proposals?

Richard Gimello:

We have two proposals that are in the newspapers and frankly it caused us a lot of problems. Right in the middle of our siting criteria public hearings, after the meetings and through public hearings, we had a company submit a letter of intent to the community saying we want to go to Perth Amboy, New Jersey. Well, when we got up to the northeast corridor of New Jersey we were no longer talking about the criteria in general; we were talking about PCR. So, we sent them a letter saying you are a little premature - thanks for the headaches - you know, come back as the process dictates. That caused a lot of problems and I really do think that to some extent it caused a problem in Sterling in New York and definitely in Massachusetts. I don't think they will recover from it.

Kate Parker:

So, you are not considering any proposals until you are ready?

Richard Gimello:

We are not considering any. The plan, the criteria must be in place first.

Representative Teresalee Bertinuson:

The very first law in Connecticut in 1980 was in effect a moratorium that there would be no permits issued until the law and the regulations were in place.

Frank Dodd:

Two years ago it was very tempting to get right into the siting process - forget the criteria - we can deal with that later. We can forget the master plan; we can get to that as we go along. We put all of our effort into the up-front side of this process so that as an industry now comes in in early Fall they will be able to come in and pick up a set of criteria that is written and for relatively small expense be able to go out and look. Simultaneously we will be dictating sites that are suitable and then that is defensible as opposed to going around chasing your tail for years with no criteria.

Kate Parker:

Senator Dodd, the way you spoke about landfills, I got the feeling that you won't even be considering landfills in New Jersey. It that correct?

Frank Dodd:

That is the least desirable and in an extreme case we will do that. You know you talk about landfills and the gentleman before from the federal agency was talking about the things that I don't like to hear. When all the states start identifying their Superfund sites and the ones that are contaminating the aquifers and reservoirs, streams, and we start moving tens of millions of tons of hazardous material from one state to another - Niagara Falls - how much shelf life do they have left? The big site in Alabama. I spoke with the State Senator in Chicago about their landfills down there. Now when all 50 states start moving this stuff, how much landfill space will there be and how quickly will other states then start to put in legislation, whether it is legal or not, to exclude out of state waste and have protectionism. So a landfill is not desirable.

Richard Gimello:

We're going to limit what can go in a landfill.

Kate Parker:

The reason I'm wondering is that Joel Hirschhorn, who was here earlier, and was the project director for the Congressional Office of Technology Assessment's 3-year study on the nation's hazardous waste program, seems to feel that there is technology out there to handle waste in ways other than landfilling. From what I'm reading and from talking with people, there does seem to be a strong movement in this country against landfilling.

So, I'm wondering, if New Jersey feels confident enough that there are other technologies and that you will get proposals for those technologies, why is it that other states and the federal government don't have this same confidence?

Richard Gimello:

I think you will see the feds moving quickly toward waste segregation and waste technology direction type regulations. In Chicago we had a speaker from EPA saying that they were scoping out that approach. We have looked at the California approach. Presently in New Jersey you cannot put liquids in the ground at all under any condition. You can't do deep-well injecting. Our bill talks about above ground facilities or partially in ground facilities, but I think clearly, there are going to be some residues that are going to have to be land-filled because the cost of other treatments is just prohibitive.

When you look at the nature of chemical processing there are certain processes, particularly which generate organic chemicals, where incineration is possible or recycle and reuse. There are others that involve inorganic materials where, in fact, the process is going to generate a waste and there are no solutions eliminating that waste. Those are our residuals. The other residuals that will require landfilling in the future are the residues that are generated by incineration and we are going to continue using incineration

as a waste disposal technique and there will be residues that require some sort of treatment and land emplacement. I think we have to recognize that regardless of our efforts to minimize and reduce wastes there will always be a certain residual amount of hazardous waste material that will require land emplacement - I hate to use the word landfill because you think of the local dump, but some sort of secured land emplacement.

Representative Teresalee Bertinuson:

There is a new acronym now, "TWABAR": there will always be a residue. We can open it up now. We won't limit it to New Jersey. If anybody has any suggestions, comments or questions, let's have a general roundtable discussion.

Alan Boright:

I wish Mr. Hirschhorn were still here. He made the point at our first meeting that there was no waste that didn't have a technological fix.

Katherine Montague:

I think that may be true if you don't care how much money you spend. I think that is part of the answer, because even if you dig up tons and tons of soil, there is a technology for cleaning it up. At this point there is no money to do that.

Alan Boright:

Would you agree with that? That if there is enough money, there is a fix?
Thomas Hellman:

I would say if what Katherine means by a fix is that a hazardous waste can be treated in some manner to render it non-hazardous, I would not want to say that you could do it for all waste. You could probably do it for most waste that I can think of, at a very high cost.

Let me just address that cost issue for a minute. It was asked earlier and the question was, who pays? I think it is a very important question - who pays for this process? I think sometimes people fall into a trap. When they look at Allied Chemical, for example, and say, let's make Allied Chemical pay. But if you examine that statement for a minute - who is Allied Chemical and what do we do? Allied Chemical is made up of people like myself who are paid salaries to work; there are stockholders who profit or don't profit based on the performance of our company; there are products, goods and services that we sell to people, to the public; and any costs that Allied Chemical incurs, is filtered through and is ultimately paid for by the public. So, when you look at cost questions, please look behind the first answer because it ultimately is the consumer who pays for whatever Allied Chemical, or Dow or Dupont does. It is certainly going to put some companies out of business but you still pay because when they go out of business, they are then not capable of paying for the mess that they generated and somehow the public becomes involved, as through Superfund, where general revenue funds pays 12-1/2% and

industry pays 87-1/2%, but remember when the industry pays, you pay, so however you look at it it really involves a consideration of the payment of the public.

Kate Parker:

I have a response to that. I think that is misleading. I think that this country has a history of indirect costs being borne as environmental problems. The public is now bearing the costs generally regardless of whether or not they individually benefited. The people who lived in Love Canal - those people were victims. They were victimized regardless of whether or not they used the materials which caused the waste that Hooker Chemical dumped there. They themselves were victimized. They are paying and many many people in this country are paying, not because they ever benefitted from the materials or processes or however the wastes were generated. My feeling is that, in fact, people who benefit from the process and materials should pay. I want the environmental costs to be directly borne.

Thomas Hellman:

You can't have it both ways. The way society works, I think, is that abuses are recognized - child labor, interstate commerce where foods weren't properly processed - laws are then put in place to correct those abuses. The environmental area was seen in a similar manner and abuses were corrected. Now, I think it is simplistic to say that the group who benefitted from industrial waste generation at a less than proper cost was the particular industry involved. That is a very simplistic view. The persons who benefitted as well as the industry were the people who used the goods and services at a disproportionate price to society. Now to pick and say, well, I live in Fitchburg, Massachusetts and I do - I was born and brought up in Fitchburg, Massachusetts - there are paper mills there but I didn't use the paper that was developed and made in those mills. It polluted the river in Fitchburg, Massachusetts. Why should I pay the price of the polluted river. Well, that argument gets you nowhere. The answer is that the river is polluted. It has to be cleaned. Where does the money come from? The answer is that the money ultimately comes from society because society has to pay the additional costs for the goods and services that were less costly 25 years ago when neither society nor industry understood the dangers associated with how they treated their wastes.

Frank Dodd:

Just to refine that a little bit more - if you take New Jersey's manifest - 1,500 generators including that classic newspaper and 4,000 generate under a ton a month. Now, that is just New Jersey. New York probably has 10,000. Massachusetts probably has 5,000, and so on and so on and so on. It is so easy and so tempting to go after Allied - it is almost fun to kick them around but it does not solve the problem.

Representative Maurice Arnold:

Yes, first of all I am going to have to leave soon so I should say that this has been a very valuable conference since I am a novice at this game. It was I who raised the question about who pays. My field is economics and I should comment that in legislating, and I am a legislator, that my reaction is that we do tend to be very superficial in the analysis of the incidence of cost, which is why I asked the question. I think that Kate has a very good point which she made as does Dr. Hellman and the points that he made. But still, we need to analyze this because I think we need to bear in mind that there is always an incidence of cost and those costs are going to be there regardless of how you do it. The big question is - how do you get at the final result? The final result is, I think, in the case of waste, is to try to eliminate it, in the first place, if you can. You can't always do that. If you don't analyze the incidence of cost adequately, there is a real good chance that you are not going to do it in the long run.

Alan Boright:

Also, if you are talking about society bearing the cost, it is a question of whether it's the user of your product or whether it's society as a whole, and fine, if it costs you more to create a product with no waste, then let the users of your product, however dispersed they are, bear that cost rather than dumping it off on another. It's your fault.

Thomas Hellman:

I understand and I am not being defensive in this answer, but what Pat is telling you is that if you take each producer and the population who buys their product and you add it all the way across - what you end up with is that society pays because if you buy a suit - now that suit is normally made out of some sort of chemical. Well, you say, I am only going to pay for the waste generated by the chemicals used in making my suit - I am not going to pay for wastes that were generated in making plastic spoons because I don't use plastic spoons. Well, you can imagine that that is not going to work. I mean for administrative ease you have got to do something that allows you to spread the cost.

Alan Boright:

Maybe a suit made with less toxic waste would cost less and therefore would be the one that I would buy.

Frank Dodd:

That will come into its own by mere economics because now the costs of disposing of this waste is out of the closet. So we are talking about past sins as opposed to where we go from 1983 on - a ten-year phaseout - is that realistic for all industries to shoot for - a phaseout of generation of hazardous wastes, but it can't be done tomorrow. It won't be done and it is unfair and impossible for the public to perceive the scope of this problem.

It is people like us that meet in these rooms around various states that have to logic this problem out. People who grab at the easy answer for one bad guy - that is unfortunate. If you look at voting records that is what they do.

Katherine Montague:

As more treatment options are offered to industry for hazardous wastes and they are forced to pay for treatment as opposed to being able to get away sometimes with dumping it on an empty lot or down a sewer, they are going to internalize the costs of production and I am very much in favor of making my choices based on real costs of producing a product.

Lester Sutton:

This whole dialogue was very interesting. The question of cost is very important and I would like to make a couple of comments. The concept of having the person using the final products pay for the costs of hazardous waste is rational, and is a sensible approach. The manufacturing company has to charge more for its products, and these higher costs should be paid by the people using them. It all balances out. But we can't ignore the question of what these costs should be and how safe is safe. How much treatment should be required in each case? You cannot have an absolutely riskless society, but that is what much of the public and the media are calling for. I even hear some of that attitude from this group of very informed people - well, why have any landfills at all; why don't we go for the ultimate and treat everything to 100%; and let's not consider what it costs. Those are not the exact words used, but in effect some of those attitudes are being conveyed here today. That would be a very irrational approach to a major problem. We must remember that ultimately the costs will be passed on to the consumers. Somebody has to make the decision that although something is perhaps not entirely riskless, it may be so low a risk that it would be irresponsible to spend billions more for an insignifcant improvement. The public has to be better informed on these issues.

The other point I want to make is that we seem to assume that everything is isolated within the United States - that is, you buy a plastic spoon or a suit, and it costs more, then we will just pay more for it to American companies meeting all our high standards. Unfortunately this is not true. We will find those spoons and suits being made in Korea, Saigon and Singapore where hazardous waste standards are not as rigid, and you know we will just be left here with no manufacturing of those items in the United States. We all want high standards, but again we must face the question of how safe is safe? We are not isolated from the world here and we have to make decisions - some rational decisions on what to do with a full awareness of all probable consequences.

Norman Nosenchuck:

Let me just endorse what Les said because emotionally we mentally classify all hazardous wastes as a toxic carcinogen and it is really not. The degree of risk is something that we have to come to grips with as a nation and that is

one of the things that we would like to see the federal government come to grips with. Clearly we accept certain risks every day - the cigarette you're smoking - I can bring in here instrumentation and probably pick up levels of dioxin in the parts per trillion range and there are no national dioxin emission standards - and dioxin they say is most toxic - but again it is a risk that we live with. What is the risk - one in a million, one in two million, our chance of getting cancer from the cigarette smoke in this room? I have seen a draft federal study that has been developed by what is called the Carcinogenic Assessment Group. This study which I saw in draft form a couple of years ago pointed out, as I recall, 1 out of every 4 Americans living would get cancer due to environmental factors - 25 out of 100. So we accept the risk of driving and have about 50,000 deaths a year on the highways and we can spend many of billions of dollars more to make the highways a little bit safer and maybe bring these deaths down to 35,000. You can do that but you will never bring it down to zero. So we have to be realistic. I think on-going public education concerning hazardous waste management is absolutely critical and essential. We have to continually educate everybody in this area.

The question I have is in connection with at-sea incineration. I have an article that came out very recently in a magazine, American-Europe Shipping, talking about the two ships that the United States Maritime Commission is providing some $65 million of funds for. One of these ships, the Appollo I is scheduled to hit the water sometime this year. There is a site off the New Jersey coast, the Atlantic Ocean Incinerator site, about 140 miles east of Cape May, New Jersey that is being considered for at-sea incineration. I know there has been talk of land-based port facilities in the Newark, New Jersey area. What is the status of that?

Richard Gimello:

They have to wait. At-sea incineration must wait until the management plan and the siting criteria are in place before they can approach us. The big problem that we are faced with at sea is where they fit into New Jersey needs and how we deal with their ability to pull from market areas as far away as Chicago and what are the implications on the local level, so their application will have to wait like everyone else's application until we are ready.

Frank Dodd:

Citizens groups have sprung up in the towns that have been mentioned already. We had an open Commission meeting in one of these towns - Perth Amboy - and that was an experience. They had every single policeman. They called them in off vacation, off-duty people, they had guards standing on our cars. But, it was a good experience for us to know what we are looking for in the future. The saying is that when you are being run out of town, try and get in front of the mob and make it look like a parade.

Norman Nosenchuck:

Again, this only points up that education is important. Waste comes from the manufacturing process. A lot of the waste that we have problems with in New York State came about as a result of World War II manufacturing processes. The manufacturing process was worthwhile. We won the War! But we got a lot of waste deposited in the western part of New York State from the Manhattan project and other projects like that. So, again, it is a balancing act and we have to be rational and not hysterical in this area. However, we must be able to effectively manage hazardous wastes so that we do not adversely impact the environment or the public health.

Richard Gimello:

Just to finish up, I have two copies left. If you want to leave your card and you want copies sent to you, just give them to me and I will send it to you.

Representative Teresalee Bertinuson:

Okay, thank you very much, the survivors that are still here. I will tell the people that are still here that we will be publishing proceedings on this conference and you will be getting an order form for them. If anyone has picked up a brown expanding file which is not theirs, Norm Miller has lost one and it contains everything he knows about New Jersey and hazardous waste.

Frank Dodd:

We would like to thank the Council of State Governments for sponsoring us.

Representative Terasalee Bertinuson:

Yes, thank you very much for everyone's contribution. Everyone played an important role.