Public Hearing

before

ASSEMBLY ENERGY AND HAZARDOUS WASTE COMMITTEE'S

TASK FORCE ON SITE REMEDIATION

"New Approaches to Landfill Regulation and Remediation"

LOCATION: Woodbridge Library
Woodbridge, New Jersey

DATE: April 30, 1993
1:00 p.m.

MEMBERS OF THE TASK FORCE PRESENT:

Assemblyman Ernest L. Oros, Chairman
Assemblyman Alan M. Augustine
Assemblyman Jeff Warsh
Assemblyman David W. Wolfe
Christopher J. Daggett
Professor Michael R. Greenberg, Ph.D.
Professor David S. Kosson, Ph.D.
Peter F. Kuniholm, P.E.
Thomas L. Moran
Susan Hoffman, Esq.

ALSO PRESENT:

Assemblyman Arthur R. Albohn
District 25

Kevil D. Duhon
Office of Legislative Services
Aide, Assembly Energy and Hazardous Waste
Committee's Task Force on Site Remediation

Hearing Recorded and Transcribed by
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New Jersey State Legislature

ASSEMBLY ENERGY AND HAZARDOUS WASTE COMMITTEE
LEGISLATIVE OFFICE BUILDING, CN-068
TRENTON, NEW JERSEY 08625-0068
(609) 292-7676

NOTICE OF PUBLIC HEARING

The Assembly Energy and Hazardous Waste Committee's Task Force on Site Remediation will hold a public hearing on the following topic:

New Approaches to Landfill Regulation and Remediation

The hearing will be held on Friday, April 30, 1993 at 1:00 PM in the Main Meeting Room of the Woodbridge Library, Woodbridge, New Jersey.

The public may address comments and questions to Kevil Duhon, Committee Aide, at (609) 292-7676. Anyone wishing to testify should contact Carol Hendryx, secretary, at (609) 292-7676. Those persons presenting written testimony should provide 15 copies to the committee on the day of the hearing.

Directions:

Directions to Woodbridge Main Library, George Frederick Plaza, Woodbridge, N.J. (201) 634-4450:

FROM ROUTE 1 SOUTHBOUND: Proceed south until you reach the exit for Route 35 South. On Route 35 South, proceed past the traffic light and over the railroad tracks. (The library is to your left.) Make the second left-hand turn past the railroad tracks and into the parking lot.

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(OVER)

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ASSEMBLYMAN ERNEST L. OROS (Chairman): Good afternoon, everyone. I'd like to call the meeting to order. If everyone will please take their seats, we'll start the meeting.

Good afternoon, and welcome to the hearing of the Assembly Task Force for the Review of Waste Site Remediation. I'm Assemblyman Ernie Oros, and I serve as the Vice Chairman of the Assembly Energy and Hazardous Waste Committee. The members of this Task Force are a distinguished group, and I'm happy that they've all agreed to serve. I'd like to introduce them to you.

Assemblyman Alan Augustine, a member of the Energy and Hazardous Waste Committee; Assemblyman David Wolfe, over here--

ASSEMBLYMAN WOLFE: Hi everybody, thanks for coming.

ASSEMBLYMAN OROS: --and Assemblyman Jeff Warsh and Assemblywoman Mary Webber are not here yet.

I am most especially pleased that we have been able to solicit a broad range of experienced members for the Task Force. We are fortunate to have Dr. David S. Kosson, of Rutgers University, Associate Professor in the Department of Chemical and Biochemical Engineering, and Chairman of the Environmental Scientific and Engineering Coordination Council; Peter F. Kuniholm, Vice President of Malcolm-Pirnie, Environmental Consulting Engineers; Thomas Moran, a member of the National Hazardous Waste Treatment Council; Susan Hoffman, environmental attorney from the firm of Cohen, Shapiro, Polisher, Shiekman, and Cohen; and Dr. Michael Greenberg, who is a Professor of Urban Studies and Community Health at Rutgers University, and is also Co-Director of the Graduate Program at the University of Medicine and Dentistry of New Jersey.

I would also like to point out that Congressman Bob Franks has sent his special assistant, Mr. Robert DiLozaro a representative to monitor this meeting.

Our purpose is to formulate a commonsense approach to the problem of landfill regulation and remediation. I would like to charge everyone here with approaching our meeting today with a spirit of cooperation and problem solving. Our goal is to achieve a method that will result in more cleanups in less time, at a reasonable overall cost.

The objectives are: to involve a cross-section of interested parties for input; to assure compatibility between Federal and State legislation; to review funding as to availability, long-term expectations, and responsibility for cleanup cost; to explore alternatives; and to formulate policy recommendations, and if necessary, legislation to implement them.

We will be dealing with ECRA only as it relates to the Spill Act.

We will first be hearing from a short list of witnesses who were invited to submit prior written testimony for any additional comments, and to answer questions from any Committee members. We will try to limit each of these to no more than 10 minutes, with the exception of a slightly longer period for the presentation of the DEPE. If time permits, we will then allow testimony from other interested parties.

I would ask if there are a number of persons from any one group or organization, that only one representative member speak, and the remarks be kept brief. Since this building closes for the day at 5:00 p.m., we will be adjourning at 4:45. However, we will continue to accept written comments until May 12.

All the testimony provided will be thoroughly analyzed by this Task Force. We will be reconvening on June 4 for a discussion, and will not take any testimony at that time. At that point we would like to be able to draw some conclusions and make some recommendations.

Once again, I thank you all for coming.

We will call as our first person testifying, Mr. Lance Miller of the Department of Environmental Protection and Energy. **ASSISTANT COMM. LANCE R. MILLER:** Good afternoon, Mr. Chairman, and members of the Task Force. My name is Lance Miller. I'm the Assistant Commissioner of the New Jersey Department of Environmental Protection and Energy, Site Remediation Program.

I'm pleased to be here today to discuss an issue of importance to the State of New Jersey and to the Department, landfill remediation. I would like to start by thanking Assemblyman Oros for his interest in this issue, and the time in coordinating this public hearing.

The issue of municipal liability is one that is on the front page of New Jersey issues, as well as national issues. Next Wednesday, I will be appearing before Chairman Swift's Committee discussing the same issues in regards to Superfund reauthorization.

However, the issue of municipal liability is the one that often gets top attention, but I think we have to look: Is that an issue in and of itself, or is it a symptom of a larger issue -- landfill remediation? That remains an outstanding policy question that I think needs to be addressed, because the way you look to solve the problem in the recommendations of this Task Force will have to address that matter head on, as to whether you just want to address municipal liability, or whether you want to address the overall issue of landfill remediation.

In recognition of the issues surrounding the remediation of landfills, the Department has released a discussion paper, which all the members of the Task Force have. We brought some extra copies for-- They're on the front table over there. The discussion paper is entitled: "Discussion Paper on Landfill Closure and Remediation Issues."

The purpose of this paper is to facilitate policy discussion and public debate on issues related to landfill closure and remediation. It does not contain Department recommendations or positions on this issue. Rather, it identifies and attempts to identify what the universe of the problem is, and what some of the issues are that need to be addressed. So we're trying to put this issue on the table and provide, possibly, a base for discussion from a common set of information.

I would like to briefly summarize the major points contained in the discussion paper. We spend a lot of time in the paper going over the universe of the landfills in the State, and we have a couple of charts to my left (indicating charts) that indicate this. We have identified 578 known or suspected landfills in the State of New Jersey. There may be other landfills about which the Department is not currently aware. Believe it or not, we still find landfills that were in operation many, many years ago, when all of a sudden somebody is doing some intrusive work into the ground for pipelines or developmental activities, and lo and behold, we find a new one that we didn't know about.

For the purpose of the discussion today, the universe of currently known and suspected landfills can be broken down in several ways: by operating status, which is the bottom chart, and by facility type. When we deal with operating status, there are 37 operating landfills in the State of New Jersey. Of those, 22 are what we call sole source landfills. What those landfills are, they are basically industrial landfills that are on an industrial site serving only that industrial site. So in reality, we have 15 landfills that are taking in municipal solid waste, and 12 of those are regional facilities.

UNIDENTIFIED SPEAKER FROM AUDIENCE: Thirteen.

MR. MILLER: Thirteen regional facilities, and just a couple single municipal landfills.

One-hundred-thirty-one landfills ceased prior to 1982. We don't just pick 1982 out of thin air. There is a very important reason we picked 1982, because there was a law passed in 1982 that required any landfill that was in operation after that time period to submit closure plans to fully close the landfill, and if it was going to operate past that time to develop escrow funds that would be available for those facilities. Groundwater monitoring was also required. So there are 131 facilities in that category.

Then there are 410 landfills and suspected disposal sites that ceased operation prior to 1982, which as the percentages indicate, are 71 percent of the universe.

Landfills can also be broken down by facility type: almost 200 -- 198 sole source landfills that I described; 194 municipal landfills; 67 regional landfills; and 119 unidentified landfills, those that we can get a little more information on before we can put them into one of the categories.

Now, when we deal with this and start putting this information together and boiling it down, the 37 active landfills should not be an environmental problem in terms of a financial burden to anyone other than those people who are currently running those landfills, because they are generating revenue today for their post closure cost; for their environmental monitoring costs in the future in compliance with the 1982 act.

We have 24 landfills on the national priorities list under Superfund, and those will be addressed using a mixture of Federal and public funds.

What we start coming down to is a number, and when we take off the sole source landfills, and assume that the industry that has that landfill on their site will be addressing that site, or that you would say that those would be remediated using the Spill Compensation and Control Act, we

start getting down to a number between 210 and 330 landfills that are going to have to be addressed, that do not have a funding source associated with them. Our estimates are that it's going to cost about $500 million to address all of those landfills.

ASSEMBLYMAN OROS: Is that billion or million?

MR. MILLER: Five-hundred million. What that is, the total cost, if I can just-- I sense a question, so-- We estimated the total cost of all the landfills to be about $1.1 billion, and then we estimate that the sole source landfills will require about $300 million to remediate, and there is currently $300 million available in the various escrow accounts that have been established. So subtracting that $600 million from the $1.1 billion gives you a rough estimate of $500 million.

Under the Spill Compensation and Control Act, any party which generated, transported, disposed, or accepted for disposal hazardous substances at a landfill, is liable strictly, jointly, and severally -- without regard to fault -- for all remediation costs of the landfill. If anybody doesn't understand those legal terms, and I am not an attorney-- What it means is, if you put one dropper full of anything of a hazardous substance into the landfill, theoretically, you could be liable for the entire cost. That's what it says, taken to its extreme.

The Department typically negotiates with owners or operators of landfills, and with those who generated or transported the hazardous substances to the landfill, to have them remediate the site. With the exception of landfill owners and operators, the EPA and the states have not generally pursued local governments for generation or transportation of incidental quantities of hazardous substances which may be present in normal discarded household refuse or solid waste -- or garbage, if we really want to call it what it is.

However, other traditional responsible parties have pursued local governmental entities and other businesses for contribution in the costs of remediating that landfill under third party lawsuits. This has typically resulted in increased transaction costs and delays in remediation, and rose to the level of the President, in his budgetary message, saying, "We have to stop having these Superfund dollars going to pay attorneys." So the issue of transactional costs is certainly one that everyone is aware of, and feels that it needs to be addressed.

Our approach is similar to the Federal Superfund Program, with a couple of notable exceptions: The Spill Act does not contain any legislative guidance for us to do cash outs, mixed funding, or de minimus settlements.

I should stress here that the issues of transactional costs, municipal liability, litigation, and timeliness are not typical -- not at all typical -- of the majority of the sites that we deal with under the State's Spill Compensation and Control Act and the Federal Superfund. On the contrary, at the vast majority of the sites -- and we are currently dealing with over 7000 sites every single day in my program -- there are a limited number of responsible parties, and they are being cleaned up under the existing laws by those responsible parties. Ninety-five-plus percent of the cases that we are dealing with are being cleaned up by responsible parties. I think that's a very important point to note when we talk about this issue.

New Jersey has a lot of experience dealing with the Superfund Program. We've received the most money of any state in remediating sites under Superfund. Senator Lautenberg was in Trenton a few weeks ago to kick off Superfund Reauthorization hearings. Commissioner Weiner testified at that hearing, and indicated that nearly 50 percent of our Superfund problem has been addressed.

Now, people say, "Now, wait a minute. There's no way that half of the Superfund sites have been cleaned up," and that's correct. It takes a long time to fully remediate a Superfund site. As a matter of fact, we'll be at some of them for decades.

But what we do is, we break a Superfund site into pieces that we call operable units. When we look at how we've done with those operable units, nearly half of those have either had construction completed and are in operation and maintenance, or are in a design phase, which will soon be going into construction.

Also, of all the dollars that we've received in Superfund, 80 percent of those dollars have gone to actual construction costs. The other 20 percent has not gone to lawyers; it has gone to the studies or the investigatory work, and the designs necessary to do the clean up.

However, as we move forward and spend those dollars, and then either have a responsible party agree to do the work, or we institute cost recovery action, that is when the transactional costs come into play because now that party is then suing everyone else, and now the transactional costs go through the roof. So what is causing the transactional costs is the actual expenditure of Superfund dollars for remediation. Superfund dollars do not go directly to the attorneys, but you could certainly say that the transactional costs are the result of the expenditure of Superfund dollars.

At the present time, the Department has only one option for remediating closed landfills that have not established sufficient funding to remediate the site, and that's the Spill Compensation and Control Act. Under the authority of the Spill Act, the landfill will be remediated. We can do that either by getting responsible parties to do the remediation, or by using the public funds that are available to the Department and paying for it ourselves, and then

instituting cost recovery action. I want to emphasize to the Task Force that the Spill Act is an acceptable way of achieving the environmental goals on remediating landfills.

However, because of the large number of responsible parties at landfills, there will be significant transactional costs. The Department will incur costs in identifying and negotiating with responsible parties, and then potentially responsible parties to incur costs defending their position under alleged liability; negotiating an appropriate allocation of responsibility with other responsible parties, and very probably, suing or being sued in private contribution suits.

The reason that the Department prepared the Discussion Paper was: I don't want to be called, or have the Department called in front of Assemblyman Oros' Committee, Assemblyman Rooney's Committee, or Senator McNamara's Committee, and say, "Department, why are you doing this and generating all of these transactional costs, and getting all 567 municipalities in the State of New Jersey mad at you?" So, before I move ahead with the implementation of the law that has been given to me to implement, I want to come back and raise issues to the Legislature, to say, "This is a problem. We recognize it. Right now my guidance is clear as to how I would deal with these landfills, but there may be alternative solutions, there may be some other ways you want us to deal with these, and that is why we developed the Discussion Paper."

So, the Discussion Paper is intended to highlight the many policy issues and other questions that we have to address in this area. For example: Should the Department address landfills as a separate category of cleanups? Should these sites be handled on a worse/first basis, along with a mix of other sites requiring remediation? Should the Legislature limit liability of certain parties in landfill cases? Is it in the public interest for government or private industry to litigate, and attempt to bring in the thousands of potentially

responsible parties in landfill cases? Or is it in the best interests to abandon cost recovery, and look for a more broad based solution?

The Department hopes that the Discussion Paper will serve as a focal point for discussion among all interested parties. We hope that this paper will focus discussion on the true issues and not the symptoms. We are also hopeful that our State Legislature and our Federal delegation will actively participate in the debate on this paper, and by today's Task Force, we certainly see that happening with our Legislature. This summit today is an excellent starting point for this debate, and I, again, commend Assemblyman Oros.

Thank you for the opportunity to be here today, and I will be happy to try to answer any of your questions.

ASSEMBLYMAN OROS: Thank you, Commissioner. I would like to first introduce Mr. Christopher Daggett, who has just joined us. You know, Christopher was the former New Jersey DEP Commissioner, and the former U.S. EPA Regional Administrator. Presently he is associated with William Simon & Sons, up in Morristown. How is that for an introduction?

Thanks for attending.

MR. DAGGETT: Thank you.

ASSISTANT COMMISSIONER MILLER: One of several Commissioners that I have had the pleasure to serve under.

ASSEMBLYMAN OROS: Wonderful.

ASSISTANT COMMISSIONER MILLER: As a matter of fact, I served under every one but the first one.

ASSEMBLYMAN OROS: I would also be remiss if I didn't introduce Kevil Duhon, from OLS, who has been very helpful; Barbara Wyatt, from my office; Channel 35, Lee Beckerman, who is taping this for us; and Bonnie and Harry from down here (indicating tape recording machine) are going to have our transcripts, hopefully, ready.

Now, who has questions? Who would like to start the questioning?

I have two just very brief ones. In reading much of this material, I came across-- The first question I have for you is the memorandum that was put out. Did you read that? The date on that was-- It came from myself and Kevil, here.

ASSISTANT COMMISSIONER MILLER: I do not believe I received that.

ASSEMBLYMAN OROS: Okay. I wonder if you would read that? If you don't have a copy, we'll get you a copy.

The other question I have -- as I say, we're trying to keep this quite brief -- on page 24, the 1992 Site Remediation Report, "is the returning the accelerator provision to the Spill Fund tax that was deleted in 1986," what was that? That was before my time.

ASSISTANT COMMISSIONER MILLER: There had been a provision in the Spill Act that there was an accelerator provision that could kick in if certain conditions were met. I have to go back to what was actually in the statute and pull that out at that time. If we were spending more money than was available in the Spill Fund, the accelerator could kick in to get more money. That was taken out as a part of legislation and budgetary considerations which had $50 million a year from the windfall profits tax -- going back to the tax changes of '86, the Windfall Corporate Business Tax, I believe it was -- being dedicated as a capital fund to the Department to remediate contaminated sites. With that money coming in, it was determined that the accelerator provision could be eliminated.

ASSEMBLYMAN OROS: I see, okay. That's the only question that I have at this time. Would anyone on this side like to--

MR. DAGGETT: I do have some questions. I will only take a moment, if I may, to get a little better organized here. I do have some questions, though.

ASSEMBLYMAN OROS: Oh, okay.

ASSEMBLYMAN WOLFE: I have a question, but, I, too, will wait.

ASSEMBLYMAN OROS: Okay.

DR. GREENBERG: I'll at least ask a cost related question: You gave figures of roughly $500 million to address somewhere between 210 and about 300 landfills. I was just wondering, how did you make those estimates? I've seen various estimates from various organizations, and I was just wondering what are the bases for those calculations?

ASSISTANT COMMISSIONER MILLER: We went through an analysis in our document to deal with landfills and different types of closure methods. A lot of this depends on how thick a cap you put on a landfill. We made some assumptions regarding which type of landfills were going to need a limited cap; which ones were going to need a more extensive cap; and then, which ones were going to need a complete hazardous waste type of cap. We then developed a cost for each of those on a per acre basis, and then grouped our sites into small landfills, medium sized landfills, and large landfills, and then applied the cost and developed the numbers based upon that. So at this point, it's a little more than a back of the envelope calculation.

DR. GREENBERG: This assumes already existing technologies, and not necessarily any introduction of some new technology?

ASSISTANT COMMISSIONER MILLER: That's correct. For these landfills it basically includes capping them and not having to deal-- If we get into very extensive groundwater problems at these landfills, that $500 million cost will probably be low.

ASSEMBLYMAN OROS: David?

ASSEMBLYMAN WOLFE: Yes.

Mr. Miller, thank you for your testimony. It's very easy to understand, and it does make sense.

ASSISTANT COMMISSIONER MILLER: Thank you.

ASSEMBLYMAN WOLFE: I want to be right up-front though. I'm not a member of the Assembly Energy and Hazardous Waste Committee. I'm on the Education and Senior Citizens Committee. I represent Ocean and Monmouth Counties, from Toms River to Belmar. I also was a member of the Brick Township Town Council in 1981 when the landfill had some problems. Just very briefly, for the Committee, also, I'd like to recollect the people who are not familiar with it.

In the late 1970s, the municipality purchased a private landfill. After purchasing the landfill, they attempted to restrict its use only to Township residents, but we were required by the State to continue receiving sludge soil from industrial, commercial, and medical facilities.

In 1980-'81, a school was going to be built near the landfill about a mile away, and during one test boring, a substance was found in the boring that indicated there may be a problem. I might add, that substance was never found again.

As a consequence to that, the landfill was closed. I was the Council President in 1981. Upon the advice of the attorney, and the Senator and Assemblyman from our State and also our district, we attempted to be placed on the Federal Superfund list, because we were advised if we got on that list we would receive assistance in closing and cleaning up the landfill.

However, that was the bane of the existence, because being designated as a Superfund Site meant that we would not get off the Superfund Site list. As a consequence, we received no form of assistance. At present, Brick Township has the meter running on a $10 million landfill closure plan which they must pay the piper for, literally.

So, I'm here, really, as a representative of that District, but also representing communities that I feel do have a similar problem. I find out that you have some 587 landfills that you're responsible for, and my concern is not to go off on

a tangent, but to see that the communities that have a financial burden are treated fairly and are offered some form of assistance if that is available, either from the State or the Federal government.

So, I appreciate your openness in your testimony. I just want to be up-front. That's why I'm here, gang, and that's why--

ASSISTANT COMMISSIONER MILLER: Assemblyman, the Brick Township landfill, I think, presents a situation that we're going to find more and more frequently as we go through and deal with these other landfills.

Obviously, other people disposed of material at that landfill -- many other municipalities -- and obviously, I would assume, given the length of operations of that landfill, that industrial materials went into that, as well. The problem that we have is, we don't have those records. There has been a discussion between the Department and Brick Township as to whether that information was submitted. After an exhaustive search, we were not able to find any of that information, and Brick Township has not been able to recreate it.

If they had, then we're in a situation where other parties could be brought in, and you have the transactional cost issue, and back to where we were. What we have now in Brick Township is, we have nobody else that they can go after because we don't have information -- they don't have information as to who the other responsible parties are, and as you said, they're facing a $10 million bill. Being on the Superfund Site doesn't help them a bit, because Superfund and the Spill Act are going to have you go back after and try to recoup those costs.

And that's what we're going to have in a lot of these other municipalities that have been in existence for a long time, that closed a long time ago, that aren't going to have records, and we're going to be able to figure out who the owner

is, and that might be about it. And then be in the position to say, "Yeah, it's under strict joint and several liability. That entire cost is yours."

I think that's an issue that we're certainly concerned about in the Department. Is that the way the Legislature wants us cleaning up these sites?

ASSEMBLYMAN OROS: I might add that we have Assemblyman Jeff Warsh from the 18th District who has just joined us. Welcome, Jeff.

David, do you have a question?

ASSEMBLYMAN WOLFE: No.

ASSEMBLYMAN OROS: Tom?

MR. MORAN: Yes. Again, thank you for your testimony. In your statement you mentioned the dissimilarity between the Federal Superfund and the Spill Act in regard to the ability to do cash outs, or to perform cash outs and de minimus settlements. Do you have the administrative opportunity to do that, and if not, do you need enabling legislation to do so?

ASSISTANT COMMISSIONER MILLER: I probably have that administrative discretion. I am not a great one for applying administrative discretion in those areas. That is a major policy issue, as to how a Department would run a program. The Spill Act amendments to SARA, that put those in, occurred back in 1986. That's seven years ago. Our Legislature has had the opportunity if they wanted to give us those powers, or to have a hearing and say, "Department, we think you have those powers. Why aren't you using them?" That hasn't occurred. The Legislature is, obviously, very busy, and may not have focused on it.

But without some additional guidance, because any time you do cash outs and de minimus and mixed funding type of things, what you're setting up is a situation where public funds would have to be applied to make up that difference. So,

what those types of remedies come down to -- what those alternatives come down to -- is the situation where public funds are going to be applied, and you're going to start to deviate from the strict joint and several liability. And the Spill Act is very clear on that: apply strict joint and several liability, get the sites cleaned up, recover the costs.

So I would like to have additional legislative guidance before embarking on that type of approach.

MR. MORAN: Not only guidance, but the opportunity to do so more clearly?

ASSISTANT COMMISSIONER MILLER: Yes.

ASSEMBLYMAN ALBOHN: Ernie?

ASSEMBLYMAN OROS: Yes, Arthur. Assemblyman Albohn?

ASSEMBLYMAN ALBOHN: I won't bother with that; I'll speak louder. (referring to microphone)

ASSEMBLYMAN OROS: Okay.

ASSEMBLYMAN ALBOHN: You indicated, Lance, that the total cost to remediate all of the presently known landfills would be about $500 million. Did I get that right?

ASSISTANT COMMISSIONER MILLER: The whole 578 would cost about $1.1 billion.

ASSEMBLYMAN ALBOHN: Oh, $1.1 billion for the whole 578.

ASSISTANT COMMISSIONER MILLER: Yes, sir.

ASSEMBLYMAN ALBOHN: And what was the $500 million for?

ASSISTANT COMMISSIONER MILLER: The $500 million would be for those landfills that would not be remediated by industries -- the sole source landfills, or those that would not have sufficient money available to them in their escrow funds that are established under the 1982 Act.

ASSEMBLYMAN ALBOHN: Okay. Then that is still the figure I was talking about then, I guess, because the other $0.6 billion would be covered by responsible parties.

ASSISTANT COMMISSIONER MILLER: Right.

ASSEMBLYMAN ALBOHN: And it's the $500 million needed to remediate those for which responsible parties cannot be identified.

ASSISTANT COMMISSIONER MILLER: Or that they could be identified, they could--

ASSEMBLYMAN ALBOHN: At the risk of extensive litigation?

ASSISTANT COMMISSIONER MILLER: Yes, sir.

ASSEMBLYMAN ALBOHN: Because no one is going to accept any one of those things, and if you were to tell Lower Sidewash Township that they were responsible for this particular landfill, they probably would all commit hara-kiri, because they wouldn't be able to afford it.

ASSISTANT COMMISSIONER MILLER: Well, we could ask Assemblyman Wolfe how the people in Brick Township feel right now about their situation.

ASSEMBLYMAN ALBOHN: Yes, exactly.

And then there is always the question as to how accurate your data are that actually point to that particular municipality, because the sources in most landfills cover a great many different areas, and in many instances are from out-of-state, as well as from the State of New Jersey.

ASSISTANT COMMISSIONER MILLER: Absolutely. If you go up a little farther north of here and go into the Hackensack Meadowlands, a large portion of that solid waste in those landfills comes from New York City. And if you go down into the southern part of the State to the Kinsley landfill, and some of those other landfills, a tremendous quantity of that solid waste came from the City of Philadelphia.

ASSEMBLYMAN ALBOHN: And what do you think is the likelihood of our obtaining any funding for correcting those landfills from those out-of-state sources, or their states?

ASSISTANT COMMISSIONER MILLER: Well, that would be a litigation activity. Obviously, given the budgetary situations

in those cities, they are going to fight rather than pay, especially if you're asking them for a substantial amount of money. As any large governmental agency has, they have attorneys on staff, and it's just a matter of which cases they work on. I would see a major litigation effort to try to recover from those large, out-of-state cities.

ASSEMBLYMAN ALBOHN: And, of course, a major litigation cost to the State of New Jersey, as well.

ASSISTANT COMMISSIONER MILLER: If we were the ones doing--

ASSEMBLYMAN ALBOHN: Or the municipalities or whatever.

ASSISTANT COMMISSIONER MILLER: Right. Whoever cleaned up the site would then, under a strict joint and several liability scheme, proceed against those other responsible parties, and there's where the transactional costs come from.

ASSEMBLYMAN ALBOHN: And then, of course, let's assume that we got Pennsylvania into a court position where they had to contribute to New Jersey landfill cleanups. What happens to New Jersey when Pennsylvania decides to clean up its landfills?

ASSISTANT COMMISSIONER MILLER: Well, I think you would see something occuring that would indicate that they would come after us as well. Hopefully, we are sending our solid waste, today-- Maybe we're in a little better situation because the landfills that are in operation today are much better operated than those that were operated a decade ago, and going back, two decades, three decades, four decades ago.

But, yes, your point is well taken that there is a definite possibility that litigation would come around to New Jersey municipalities and possibly, to the State of New Jersey.

ASSEMBLYMAN ALBOHN: Well, then, what are we talking about -- just shifting gears for a moment -- what are we talking about, time wise, for the expenditure of this $500 million to remediate those situations in New Jersey?

ASSISTANT COMMISSIONER MILLER: Well, I certainly wouldn't ask for it in one year. This is where major policy needs to be set by the Legislature. If we were going to continue under the Spill Act, then that $500 million will just get addressed throughout the course of remediating all of the landfills with all of the other sites that we have to deal with in the State of New Jersey. That $500 million gets added on to many other billions of dollars in ultimate cleanup that we will have to get for all of our contaminated sites. How many of those get cleaned up with responsible parties versus public funds becomes the main issue, and then how successful we are in recovering money dictates all that. That becomes very, very complicated for us to project out.

We've had $300 million available to the Department in the form of bond funds since 1981, and then the 1986 amendments that gave us the additional $200 million. We have only sold the bonds for $100 million at this point in authorized projects against that. We're in the process of asking you to authorize another $150 million out of the $200 million, because we have projects now ready to authorize against that money.

So if we're going under the Spill Act, the expenditure of the $500 million would occur over decades, would be my guesstimate at this point in time, because they would be getting put in with all of the other contaminated sites in the State.

If we wanted to deal with landfills, one of the options that's being considered-- If we want to deal with landfills separately as a class and address them separately under a public works program -- that's where my statement comes from-- I wouldn't want $500 million in one year. I couldn't spend that much money.

That becomes a legislative call. You now have an idea of the universe. It's between 200 and 300 sites; it's $500 million. How long would you want the Department to take to

remediate that? I've told you I couldn't do it all in one year. I probably couldn't do it all in five years. But if we started getting out beyond that period of time, would you want us to do them all in 10? Would you want us to do them all in 20? That then gives you an indication of the amount of money that you need on an annual basis to move the projects through, and we're trying to put that information to the Legislature so that you have information to make those important policy calls.

ASSEMBLYMAN ALBOHN: What I'm leading up to is that it seems to me that if we go the court route, we're going to be spending tremendous amounts of taxpayers' money, both money that the taxpayers have and money that the taxpayers pay to the State. We're going to be spending tremendous amounts of money on litigation, which serves no useful purpose whatever. It just seems to me that in view of the fact that we're not going to get any assistance from the New York or Pennsylvania in all likelihood, or they'd be expecting assistance in kind, it seems to me this is a problem and a project that New Jersey is going to have to take up on its own.

And it seems to me, also, that rather than use the Spill Act as the funding -- which again ends up being a discriminatory type of taxation -- you're asking one group of taxpayers to pay for the whole bundle of problems that have been caused by all of us. It would seem to me, and it doesn't sound to me like it would be an extraordinary burden, if you indicate that that $500 million to remediate those that would be the responsibility of the public, let's say, over a period of 10 years, you're talking about $50 million a year. Frankly, if we added something in the way of a solid waste cleanup tax to our present solid waste rate structure, it seems to me that would be a minimal amount, and that we could remediate these things at the rate of $50 million a year. I don't know, I'm guessing that the income-- Let's see, we generate what, seven million tons of waste a year, I guess, don't we?

ASSISTANT COMMISSIONER MILLER: A little bit more.

ASSEMBLYMAN ALBOHN: A little bit more, okay.

ASSISTANT COMMISSIONER MILLER: I turn to my representative from the Division of Solid Waste Management.

ASSEMBLYMAN ALBOHN: More or less, depending on how well we recycle, I suppose.

But seven million tons a year would amount to, if we had a-- What do we need? If we need $50 million a year--

UNIDENTIFIED SPEAKER FROM AUDIENCE: Seven dollars a ton.

ASSEMBLYMAN ALBOHN: Yes, $7 to $10 a ton. A tax on that. So it seems to me that this is not an extraordinary burden for anyone to bear, and if we want to look for a source of funding that is as widely spread as possible and hits everyone equally, because everyone, certainly, has an interest in remediating these things. And certainly, you can prioritize them so we don't have to do the whole $500 million worth in one massive one-year effort or something like that. It's probably impossible anyway.

It seems to me that this would be the logical solution. Rather than to use the Spill Act moneys, which have their own purpose and have no relationship, whatever, to landfill sites, and rather than to spend infinite amounts of time and expenditures on trying to search out the culprits through the courts, it seems to me it's bound to become a public obligation in the long run, and we might as well face that fact and proceed on that basis.

I don't know how many here would agree with me, but it seems to me that is the only practical solution.

ASSEMBLYMAN AUGUSTINE: Mr. Chairman?

ASSEMBLYMAN OROS: Thank you.

Yes, Assemblyman Augustine.

ASSEMBLYMAN AUGUSTINE: Thank you.

I appreciate your very educational comments here today. Back on January 14, the Assembly Committee on Energy and Hazardous Waste heard testimony about this A-539, the Spill Fund Exemption Act. It seems to me impossible to discuss this issue today without, at some point in time, relating to that proposed legislation. It pops up all the time.

I've referred to some of my notes that I took at that particular hearing. At that time, the testimony was made that the typical New Jersey landfill is 90 percent to 95 percent the cause of some of the contamination of the landfill.

Also there was testimony there from a representative from DuPont, who said that if we enacted that particular legislation, DuPont would be discouraged from further New Jersey investment.

I also serve as a member -- or as an alternate -- on the Joint Commission on Economic Recovery. In the pursuit of truth and remedial action here, it seems to me that we have to adopt the position of fundamental fairness of all the aspects of the entire universe of people who are going to be affected by this.

So, with the matter in mind of economic recovery and jobs creation and all that, we have to be conscious of what a negative effect it would be if we continue to cause business and industry not only to not come into New Jersey, but to want to leave New Jersey by excessive regulation means.

As far as what Assemblyman Albohn mentioned, if we should, so to speak, not proceed with litigation against Pennsylvania or New York, we do not have anything in place that I know of, that would prevent them from proceeding action against New Jersey. Would there be any feasibility of having some kind of hold harmless agreement between the State of New York and the State of Pennsylvania as far as the State of New Jersey was concerned, so we wouldn't be giving up -- letting

them off the hook, so to speak -- on the other hand, not having any assurance that they wouldn't pursue action against New Jersey?

ASSISTANT COMMISSIONER MILLER: I think that would be very difficult to achieve, given that my knowledge of the out-of-state landfills where we are disposing of our waste are private facilities. That's actually a benefit for us, because those private facilities should be establishing the funding necessary to do proper post closure care.

Now, there are Federal requirements coming into place under Federal law later this year, very similar to our 1982 amendments. It seems like New Jersey leads the nation in a lot of these initiatives to deal with these problems a little bit before we get to them around the country, but the Federal legislation that's coming on board will require people to establish escrow funds so that there is money there for post closure activity.

So the design is, in all of the existing regulations that are governing operating solid waste facilities today, they are designed so that they will not be a future problem. That's very important, and it's a very important assumption to make, I think, in this debate; that we're going to say everything that's operating -- or can afford to -- that has the money to close in their escrow funds, we're going to use those moneys. What we're really dealing with here is a past problem. And if we focus on that, then I think it starts to address the question that you are raising, in that those people who are currently operating that landfill today are the people who should be responsible for its environmental safeguards in the future.

ASSEMBLYMAN AUGUSTINE: Well, I would agree with you. It seems to me, and I would tend to agree with Assemblyman Albohn and his approach, because I don't see how you're really going to get down to fundamental fairness with some of the

proposals that have been put forward thus far. You just can't write off the fact that much of this contamination has been derived from municipal usage, and I just question, from the standpoint of how we attract business and industry into this State by putting an unfair burden on them when, in their viewpoint, they don't think that's fair.

ASSISTANT COMMISSIONER MILLER: As I testified at that hearing -- the hearing that you refer to -- not only the issues that you raise, but if we deal with legislation at the State level that addresses this liability concern, it does absolutely nothing with the Federal liability. So what you would do then is just shift the matters out of State court and, actually, into Federal court. But industry would still be able to go after municipalities in Federal court for cost of contribution. You still have the transactional costs that are an issue here. Assemblyman Albohn is correct, the transactional costs are very high, and his approach eliminates the transactional costs.

ASSEMBLYMAN AUGUSTINE: In your opinion, do you view that approach as a "fair" approach to the issue?

ASSISTANT COMMISSIONER MILLER: My job is to implement the laws of the State of New Jersey to the best of my ability. I cannot have an opinion on fairness as a representative of the Department. We get criticized for being unfair all the time. We obviously strive to be fair. It makes our job much, much easier to have a fair piece of legislation enacted. Assemblyman Oros indicated at the beginning of his talk that we were going to stay away from ECRA, and I went, "Whew." Assemblyman Albohn knows I've been involved, either directly supervising the ECRA Program, or now, indirectly having it under my responsibility since 1986, and there is just some inherent unfairness built into the ECRA statute. It has made it very, very difficult for the Department to implement that. It has cleaned up one heck of a lot of sites. It's also caused

some tremendous problems in, I think, perception of how industry views New Jersey. The type of approach that Assemblyman Albohn indicated eliminates that type of view by having it spread out uniformly across the public sector, if you will, and there can certainly be benefits of that type of approach.

ASSEMBLYMAN AUGUSTINE: Well, it seems to me in that same testimony, those who are concerned about passage of that particular legislation continually refer to the issue of joint and several liability. Could you just -- and realizing that you're not an attorney, but maybe for the benefit of those lay people -- define the application of joint and several liability in this issue?

ASSISTANT COMMISSIONER MILLER: What it defines is that strict joint and several liability -- you have to use all three terms together -- means that any single party that is responsible under the Spill Act for the discharge of hazardous substances can be held 100 percent responsible for the remediation of the problem, regardless of other contributions. So if somebody put in 1 percent of the waste into a landfill, and that waste then causes a groundwater problem and needs to have the landfill capped, that person can be held responsible for 100 percent of the cleanup costs associated with that landfill. That, obviously, raises an issue of fairness.

ASSEMBLYMAN AUGUSTINE: We're back to that, again, aren't we?

ASSISTANT COMMISSIONER MILLER: Yes.

ASSEMBLYMAN OROS: Assemblyman, we're going to have to move along a little bit.

ASSEMBLYMAN AUGUSTINE: Okay. I'm sorry.

ASSEMBLYMAN OROS: No problem. We'll go across the table to Mr. Daggett.

MR. DAGGETT: Thank you, Mr. Chairman.

Mr. Miller.

ASSISTANT COMMISSIONER MILLER: Former Commissioner.

MR. DAGGETT: I want to focus on a couple of points. One is that, with respect to the costs that you've estimated, I think we ought to -- and correct me if I'm wrong on this -- but, underscore the fact that this is a guess. One point one billion is a very soft number, potentially. It could be less; it could be double. It is something that is done based on a limited amount of information about each site, and not taking into account, in particular, the post closure costs associated with groundwater monitoring and other operations and maintenance. You were clear in your document that it did not include those costs.

So my first question is: Do you have even a guesstimate as to what, on a percentage basis, maybe, you could anticipate O&M costs to be on the long haul? I mean, is it 5 percent; is it 25 percent?

ASSISTANT COMMISSIONER MILLER: At this point I'd rather not venture a guess. The costs are certainly rough at this point. One of the things we're focusing on to try to keep the costs down is the use of presumptive remedies for these type of landfills. We don't have to go in and do exhaustive investigations -- exhaustive evaluations of different alternatives for these landfill situations. We pretty much know that we're going to cap them, we're going to deal with groundwater if it's a concern.

What we're hopeful for is that-- A lot of the landfills have been out there for a while. We may find some residual groundwater contamination, but the main landfills that we think are big groundwater type of problems, we already have them on a national priorities list, and are being generated under Superfund. And when you deal with those you're dealing with an average remedial cost of $30 million a year, and operation and maintenance costs that can easily run $1 million

a year while looking at 30, 40, or 50 years of operation. That number scares the dickens out of me if I have to deal with those type of numbers at 200 or 300 sites.

So, we are looking at situations where we can bring those costs down, where we can avoid, unless it is necessary to protect human health or the environment, the pumping of groundwater in these other situations. So, we're going to try to keep costs down as much as we can. But you're absolutely correct, and I was remiss in my testimony not to highlight that area -- that issue -- that there will be operation and maintenance costs associated with these landfills once they are closed. That should be another issue that the Task Force addresses as to whether that continues to be done -- if you went with Assemblyman Albohn's approach -- by the State of New Jersey, or if that would be something that would then be turned back to the municipalities to deal with. Basically what you're doing is maintaining the grass that would be put on top of the landfill to prevent any erosion, and to monitor and maintain the monitoring wells and the gas venting system if it's in place.

MR. DAGGETT: But if you back off the sole source landfills at some $300 million, and the escrow accounts at some $300-plus million, is where you get your $500 million. And that number could be anywhere from $500 million to whatever, although you probably can get an upper boundary to some degree, as long as you don't have runaway plumes of contamination of the landfills, because you have enough experience with the landfills I assume, to date, to give you the kind of analysis that you use to get to the numbers that you have in here.

It strikes me -- and I have some question on some of the numbers of the other funds, but I think that's because I'm not sure all these numbers add up when you put them all together -- but on the amount of moneys available, if you can skip for the moment and go to the point that Assemblyman Albohn

was raising-- It strikes me that if you do go and approach like you're suggesting, you'd want to do a couple of things with that. One is that you would want to only raise that amount of money each year that the Department can realistically handle. So you would not be taxing based on $500 million or $1 billion, but you'd be basing it more on what can be spent each year, realistically, to handle this problem.

ASSEMBLYMAN ALBOHN: A declining balance kind of a thing?

MR. DAGGETT: Pardon me?

ASSEMBLYMAN ALBOHN: A declining balance amount.

MR. DAGGETT: Exactly.

And if I may, with all due respect to the legislators present, I would also put a lock and key on that -- or a lock on that money -- and not allow it to be raided by various issues that arise. And give the key to someone, maybe, in another state.

But the point is that there needs to be some way to assure ourselves that once created, that fund isn't going to be raided by someone else for some other purpose, because that has been an issue that began to plague the Department when I was there, and from everything I see, it has not abated any since I left. In fact, if anything, it may have picked up a bit.

But I think in the end, a proposal like you have put forward is probably both the fairest and the one that gives you the least amount of transaction costs associated with cleaning up these sites.

ASSEMBLYMAN OROS: Thank you, Chris.

Peter Kuniholm, from Malcolm-Pirnie.

MR. KUNIHOLM: Yes.

Mr. Miller, just a technical question, and then perhaps a secondary question on your comment that you made initially about addressing the larger issues. The first question has to do with the technical basis for establishing

the various remedial alternatives and the large differences in costs between those. Is that formulated at this point? Would you do it on a risk basis, or are the costs per acre relatively undefined at this point?

ASSISTANT COMMISSIONER MILLER: How we developed it is, the risk would be the same regardless of the scenarios, because we're eliminating exposure to the landfill itself through a capping mechanism. What we're doing is, we're dealing with different types of caps.

The cheapest cap is basically just a 24-inch soil cap, seeding and landscaping. And then, going into the more expensive cap includes 12 inches of clay, and a geotextile liner as well. Before you do that, as you know, you're going to put your subbase down and then your clay and more soil, and you end up with four-feet of fill material going onto this facility to decrease the permeability of water that can hit the landfill and continue to leach contaminates out.

And then when we go to what we call a hazardous waste type of cap, now we're going to increase our clay layer from 12 inches up to 24, so we're going to go to a five-foot thick layer. And when you're dealing with a landfill of any size, the costs start to increase dramatically because of the amount of material you have to bring in. That's really the basis for the cost differential.

MR. KUNIHOLM: Are you fairly comfortable at this point with the relative numbers?

ASSISTANT COMMISSIONER MILLER: That's what it's costing us today, based upon our experience cleaning up or capping landfills across the State.

MR. KUNIHOLM: And the relationship between those costs and the concept, for example, of current use of risk assessment for the more extensive caps, that's a little more complicated issue, but, for example, we're talking about $460,000 an acre for the most expensive. That's almost an

order of magnitude more than the cheaper alternatives for what might be strictly municipal waste. The question arises, just in absolute cost terms per acre, it's a lot of money. The basis for doing that, is that pretty firmly established in your mind?

ASSISTANT COMMISSIONER MILLER: Sure.

MR. KUNIHOLM: Or is there an opportunity for that to go down?

ASSISTANT COMMISSIONER MILLER: The reason you would put that type of cap on is that there would be indications that there is a large quantity of hazardous materials deposited in the landfill that would continue to leach out if you continue to put a lesser cap on, and continue to pollute the groundwater. And then you're going to have to have a much more sophisticated, expensive, larger groundwater capture system to deal with the resulting groundwater remediation that would come from the leaching of those chemicals. So you trade off, if you will, putting a more sophisticated cap on to stop water from penetrating into the landfill so you have less contaminated water to deal with, and less time over the course of the cleanup to deal with, and when you deal with your total costs, actually, they are reduced by putting that cap on.

Again, in response to Mr. Daggett's question, we want to-- We're hopeful that we'll be able to put just straight soil caps on these landfills, because there has been so much leaching already that the groundwater may have some minimal contamination with it, but it's been flushed so many times already that we aren't in a situation where we have a tremendous groundwater problem to deal with, except hopefully, at the point where the Superfund sites that we have where we know we have those problems.

But even at Brick, when we examined Brick, the $10 million cost at Brick is just associated with capping. We have selected a no action, just a monitoring remedy for the groundwater aspect of that case.

ASSEMBLYMAN OROS: Thank you, Peter.

Susan?

MS. HOFFMAN: Yes.

Mr. Miller, the transactional costs are largely thought to have been derived from, or to be driven by, the joint strict and several liability provisions, which really increases the transactional costs. If those could be reduced or eliminated, do you have a sense that there would be a sufficient buffer there, or a sufficient amount of transactional costs that could play a substantial role in addressing the cleanups that you have mentioned today? In other words, would there be enough saved if the transactional costs could be minimized; would there be sufficient funding there to help, or make a substantial dent toward actual cleanup?

ASSISTANT COMMISSIONER MILLER: Transactional costs are a very difficult-- How much people are paying for transactional costs is very difficult for governmental entities to get a hold of. The only report -- and I don't remember any of the numbers -- was the Rand study that was done that started to get into that issue of costs and took that information in, I'm sure, on a confidential basis, because, as you know, clients are not going to want to divulge how much they're paying in litigation costs. But it certainly, by all reports, is a significant number.

I think, to me, that is one of the key issues in front of your Task Force here: Are those costs that have to be borne by industry, by municipalities, by society as a whole, so high that you want to go to a different method -- Assemblyman Albohn's suggestion, or a Senator Lautenberg or Congressman Torricelli type of approach -- that would look to eliminate the transactional costs by more clearly defining liability. Those are the things, I think, that need to be wrestled with, and maybe some of the other panelists that will follow me will be able to better articulate how much these transactional costs actually are.

MR. MORAN: In fact, I'm glad you mentioned how crucial those transactional costs are, because it's been a prolific term today. And I would ask, if you would, can you -- other than litigatory costs -- delineate what you presume to be transactional costs? What goes into those costs?

ASSISTANT COMMISSIONER MILLER: From the Department's perspective, what goes into our transactional costs under this approach are going back and doing exhaustive searches of information to find out who is responsible. That can be very, very labor intensive when you start going back to a landfill that operated in the mid 1940s through the 1960s, and then going back trying to find those records, if you're lucky enough to find them in the basement or the attic of some municipal building. And then, literally, poring over these records page by page, that are ready to crumble at the slightest touch-- Your cost-- And then, of course, you want to preserve anything as evidence that you would need. Your cost of doing that, and the amount of staff time that has to be spent doing that, is very, very significant.

And then on top of that, once we start sending out that information to people saying, "We think you dumped--" You know, "We have evidence to indicate that you dumped in this landfill during these periods of time, and therefore you're liable." Now that company that receives that notice or directive then has to go back and check its records, and pull out all of its archival information, if it still has it, and says, "Did we do that?" Now they're duplicating what was done by government, and they go out and they go to the government and, "Well, you haven't brought all of the parties in here. You haven't brought the municipalities back in." And they are going to go sue the municipalities. The municipalities have to hire their attorneys, and we have to go through it all again.

All of a sudden this thing just-- It's like a big pyramid. It just keeps building on each other as each

successive litigation occurs, to bring in more and more parties, and have more and more transactional costs.

MR. MORAN: Thank you.

ASSEMBLYMAN OROS: Dr. Kosson?

DR. KOSSON: In your cost estimates there are two concerns that I have: 1) did you include any consideration for removal of hot spots from landfills where they have been identified; and 2), could you please comment on the design life of the capping techniques that you're proposing, or that are being employed, and their efficacy?

ASSISTANT COMMISSIONER MILLER: The first question on hot spot removal: No, our estimates did not include hot spot removal. That is an ongoing debate within the agency as to how much we should be doing to find hot spots, and if so, what should we be doing about them. I have not been convinced that is an appropriate expenditure of funds as to what we actually get for doing the investigatory work, the amount of contamination that gets released when we start opening up these landfills, and on balance, is that something we really should be doing.

The life of the caps, I'll turn to my-- Twenty years.

UNIDENTIFIED SPEAKER FROM AUDIENCE: We really don't have any hard evidence. Industry suggests 20 to 30 years can be reasonably expected, but will require maintenance.

ASSISTANT COMMISSIONER MILLER: That's the key. If you properly design a landfill, and properly slope it and maintain it, it should last a significant period of time.

DR. KOSSON: If we're looking at a 20- to 30-year design life, which was just suggested, what will we be facing 30 years from now?

ASSISTANT COMMISSIONER MILLER: Well, I'm not an engineer. John Casper, from the Division of Solid Waste Management-- It's kind of like sewage treatment plants, and my experience is, they're designed for a 20-year life, too, but

they continue to operate much longer after 20 years. When we go into New York City, and they go into the sewer system and there is no longer a pipe there, but it's still a conduit for the sewage to flow, because although the pipe may have deteriorated, there is still a hole in the ground, and that's where the sewage now flows through.

So, I don't think, if I understand your question, in 20 to 30 years all of a sudden we're going to be having an enormous cost again, to come back in and recap all these landfills.

If you're properly maintaining them, you might start to get some slope failure, some erosion that's going to have to be dealt with, but that-- And if you're maintaining the facility, if you're inspecting it periodically, you're going to start to see that happen, and preventative maintenance is always the best situation. You're going to come in and do your patchwork on the landfill and make sure that that area does not, all of a sudden grow, and then you have a major slope failure or something like that, which now all of a sudden is going to have your costs go up significantly.

So properly maintained, I think you're just dealing with a maintenance cost that isn't going to be insignificant, but isn't going to be astronomical either.

DR. KOSSON: Then in this consideration, if we're looking at publicly funding it by a waste tax, as has been suggested, or the like, we should be including the costs of perpetual care for these facilities as well, so that it's not a one time expense, but there's an initial expense and, basically, a perpetual expense for these facilities, as well.

ASSISTANT COMMISSIONER MILLER: That is an excellent point.

ASSEMBLYMAN OROS: Are there any further questions? Assemblyman Warsh?

ASSEMBLYMAN WARSH: No, thank you.

MR. DAGGETT: If I can, just a point of clarification, if I may, on the discussion earlier about Pennsylvania. I believe Pennsylvania is not the only state at issue.

ASSEMBLYMAN OROS: No, Indiana--

MR. MORAN: Ohio and Indiana.

MR. DAGGETT: So we're not just looking at making arrangements with New York State, we're talking about several states, at least, and it gets very complicated very quickly.

ASSEMBLYMAN OROS: I would like to point out, also, that Assistant Commissioner Miller made quite a study that is available to everyone. I think you brought extra copies.

MR. DUHON: (Committee Aide) There are a few left there.

ASSEMBLYMAN OROS: It looks like this. (holds up copy of study) If anyone doesn't have one, I think they're over on the table.

MR. DUHON: There are Xerox copies that are white.

ASSEMBLYMAN OROS: I think you'll find it very, very informative.

At this time I'd like to thank Assistant Commissioner Miller for his usual great input.

ASSISTANT COMMISSIONER MILLER: You're certainly welcome. If I may, I'll respond in writing to your memo that was handed to me?

ASSEMBLYMAN OROS: Yes, I would appreciate that. Yes.

ASSISTANT COMMISSIONER MILLER: Sure.

ASSEMBLYMAN OROS: Thank you very much.

ASSISTANT COMMISSIONER MILLER: You're certainly welcome.

ASSEMBLYMAN OROS: Okay, at this time I'd like to call Mr. Bernie Reilly, DuPont Company, and Chemical Industry Council of New Jersey.

B E R N A R D J. R E I L L Y, ESQ.: Thank you, sir. I brought along just a two pager that's a summary of what I'm going to say, and I'll pass that out.

ASSEMBLYMAN OROS: Identify yourself, Mr. Reilly, for the record.

MR. REILLY: Thank you, Mr. Chairman and panel, for inviting the Chemical Industry Council and DuPont to be here today. My name is Bernard Reilly. I'm an attorney for the DuPont Company. I'm speaking on behalf of DuPont and the Chemical Industry Council of New Jersey.

We appreciate this opportunity to provide our input on the very important issue of accelerating the remediation of the older mixed waste landfills in New Jersey. We are certain this matter can be solved with good will, and a willingness by all the parties to be part of the solution.

We agree that progress has been slow and contentious. We believe a few common sense changes to the Spill Act, or at least some common sense changes to the enforcement policies of the DEPE, could dramatically improve this situation.

Let me just ad-lib here, just for a minute at this point, and say that industry does not enjoy in the least suing municipalities. I hope you appreciate that. It's expensive, and so far it really hasn't gotten us any money, either. It occurs for reasons that I'll get into, and maybe you already understand, but ideally we could find a way that that simply is not necessary.

Let me also add at this point, that I think we saved a lot of money by involving industry in cleaning up these landfills, because when you have industry in the driver's seat, you get a much more efficient contracting process. Sort of one of the favorite comparisons I use is -- and I don't think, by the way, that Lance Miller will disagree with me on this -- one of the favorite numbers I use is at GEMS. When the State sent out its bid to put the cap on, the lowest bid the State got was $52 million. When industry stepped up to the plate and accepted the responsibility for cleaning the site, we think we

brought the cap phase in for cleaning the site for $32 million. I can give you more examples if you want to get into that.

We just saw the DEPE report on the 578 landfills. Frankly, we're not surprised at the number. I think every town has got its dump. Probably, if you added in the old abandoned chemical plants and storage areas, you'd regrettably wind up with a larger number, and those all have to be dealt with, too.

Also, regrettably, companies like mine are, who are financially viable or able and willing to step up to the plate-- We know that in a lot of cases, the parties are no longer there.

Let me just make a comment on the numbers that are in the report introduced by Lance Miller. I believe that his most extensive capping scenario, for a 60-acre landfill, was $21.7 million. Well, I've got some recent experiences that seem to be grossly in excess of that. The last estimate I saw on Global, about a 60-acre site, was $180 million. Now, that included long-term O&M, but just the capping phase -- just the construction phase, capping and slurry wall -- was $114 million. So these numbers can be larger.

Jack Lynch, who I hope has a chance to speak today, is Common Counsel at GEMS. He's very familiar with the numbers at GEMS, and they're significantly above Lance's.

Also, departing a bit from my testimony, I'd like to say that with some commonsense, we can reduce these numbers drastically. GEMS didn't need two feet of clay to protect it from rainfall. Probably a single layer of geotextile could have prevented the normal amount of rainfall that would get into GEMS that you want to cut out. And adding a few extra buckets of rain, and then collecting them through a leachate collection system, it's just not worth $10 million or $20 million extra to do that. So I completely agree with Peter

when he says that if you look at some of these landfills on a risk based approach, you don't need to have numbers as large as the ones we're seeing at Global and at GEMS.

The only other point I'd like to make is, I think that we can accelerate the cleanup of these landfills, which is in all of our interest, if we can just deal with the public piece of this. In a lot of these bigger landfills the public piece is 95 percent to 98 percent. We've reconstructed GEMS until we're blue in the face. You talk about going through old documents, we've done that at GEMS.

Of all the waste that we can account for at GEMS, 98 percent of it is municipal, and of course, our good old friend Philadelphia, right across the river, is a major share of that. If we could deal with a way to get the municipal share paid for, I think you'd see cleanup accelerate, and I think you'd cut cleanup costs dramatically.

We appreciate the fact that a lot of cities and towns simply don't have the dollars to do that. I completely agree with Assemblyman Albohn's approach. If there was a public kitty that we could draw on to pay for that municipal share, I believe that industry would remain willing to manage the contractors and pay its share, and I think we'd see these landfills get cleaned up much more rapidly.

The only other point I make in the testimony gets to the fact that you would probably need some sort of a scheme to come up with the allocation, because surely the allocation bedevils us today. Industry fights with each other. We sue the towns. We sue each other. If there could be a process in the law -- and we're asking for the same change in the national Superfund right now -- a process in the law where you could have a neutral that most of the parties have some faith in come up with an allocation scheme, I think you'd cut transaction costs dramatically, and focus the energies on cleaning up the site.

Thank you very much.

ASSEMBLYMAN OROS: Thank you, Mr. Reilly. I'm sure there will be a few questions.

But in reading some of your previous testimony here, you have made a statement about, "various active, vacant, and abandoned industrial sites in New Jersey, in the nation, were used and contaminated over the last century for productive activity, not amenable to a quick fix, but nor, with rare exception, are they presenting realistic health threats." Just a--

MR. REILLY: Yes, sir. I think the buzzword on the national scene on that is "brown fields issue." And it gets to the fact that you've got good segments to older urban areas-- And certainly this is no stranger to downtown Jersey City. I recall, recently, testimony from the Mayor of Trenton saying that he declines to take tax foreclosures because he's afraid of being a responsible party.

Well, the same thing happens to other people who are considering investing in the urban areas. You're afraid to touch this land because of Spill Act liability, or Superfund liability if you didn't have a Spill Act. There doesn't seem to be any solution to that dilemma under the current laws.

So we see the Spill Act and the Superfund as discouraging urban development. Obviously, it's not the only thing discouraging urban development, but it is a key deterrent. And I will say this for my company, we're once burnt, twice shy when it comes to adopting contaminated sites. As soon as DuPont shows up on the scene, no cleanup is sufficient, and so you wind up spending tens of millions of dollars for a site that might have cost a total of $1 million. So we just don't buy contaminated land anymore.

Anyway, the phenomena I was referring to, sir, was just the fact that inner urban areas that had been contaminated by previous use have become largely untouchable.

ASSEMBLYMAN OROS: There was another statement that you had made that I thought was very interesting: your statement regarding lenders feeling the pain. Just expand on that just a little bit?

MR. REILLY: The lenders also are once burnt, twice shy. Lenders did not appreciate the fact that merely lending on a piece of property, or foreclosing on a piece of property, could make them Superfund liable. Indeed, they were wrong. There is a famous national case called, Fleet Factors, that brought that point home to the lenders. Now there is a national rule designed to deal with that, but the lenders are still very wary of it, and I think I'm up on my Fleet Factors' developments, but even after the national rule that was designed to get the lenders, basically, out of the liability loop, there were enough facts against Fleet Factors, you know, they came in a normal loan workout. There were enough facts against Fleet Factors that they were again found liable for cleaning up the site. And so the lenders aren't going to get entangled in contaminated sites either.

So not only are your new investors scared away, but if you had a foolish new investor who wanted to buy anyway, that investor could probably not get a lender to lend him the money.

ASSEMBLYMAN OROS: Questions from this side. We'll start over here.

MR. KUNIHOLM: I'd like to wait a second to organize my thoughts.

ASSEMBLYMAN OROS: Oh, okay. We can come back.

David?

DR. KOSSON: Yes, you suggested that an allocation might be made for the municipalities' share of the landfill cleanup cost. How would you base that allocation, or how do you recommend that?

MR. REILLY: Sir, I've got my testimony here from the hearing in January, and there's, regrettably, an infinite number of ways you can do this.

DR. KOSSON: What is your recommendation?

MR. REILLY: The simplest way. Let's just count up the amount of hazardous substances from each entity. And then, if I sent in one-million pounds, and a town sent in one-million pounds, we'd split 50/50. But whatever the number comes out to be, we know for instance, at GEMS -- I won't say, "know," you don't really know anything with certainty -- we estimate at GEMS there are 10-million tons of material at GEMS Landfill in Gloucester Township. If you took the normal rule-of-thumb calculation for how much hazardous substances came from a municipality, you'd come up with the number of 100-million pounds of hazardous substances at GEMS are solely from the municipalities. So at GEMS, you'd do your best, that would be the base for your municipalities. If you did your calculation for industry, and that was twice that much, you'd have a one-third/two-thirds split.

But I don't think you could ever say that there should be, say, a national number, like the 4 percent. I mean, 4 percent is really a dishonest number. If you want to get bored with the math sometime, I'll tell you how it's calculated.

DR. KOSSON: What number are you referring to there, in the 4 percent?

MR. REILLY: Four percent was a draft EPA resolution of this issue, about a year-and-a-half ago. They were pressed to come up with a way to allocate sites. We're getting right to your question: How do you calculate the municipal share?

EPA came up with closure costs. They based it on, all right, how much does gas collection cost, how much does the cap cost, and things like that. They did it for a municipal landfill where there was only municipal waste on one side, then they had an industrial landfill on the other side, and unitized the costs. They said, "Okay, an acre--" and this is also in my testimony, by the way, the old testimony. I have copy if

you want it. You take a look at the unit cost and you get, basically, a ratio, it's 96 to 4, so the municipal share would be 4 percent.

What EPA did not do was to then adjust those numbers based on the volume in the landfills. So if you had it exactly a 50/50 ratio, industrial to municipal, maybe the number really would be 4 percent for the municipality. But when you get into one of these landfills where it's 90 percent, 95 percent, 98 percent municipality, you're going to get a significantly larger number. And again, where we disagreed with EPA, and now we disagree with Senator Lautenberg, is that in all circumstances you would still lock that number in at 4 percent for the municipality.

ASSEMBLYMAN OROS: Mr. Moran?

MR. MORAN: Your comment on brown fields is interesting. How would you propose to deal with brown fields without the problems of deferred liability to those people who are involved with them?

MR. REILLY: The State of Pennsylvania came out with a legislative package. In fact, I think it was their Senate Environment Committee. I'm not sure what the precise title of that is, but it was April 6, 1993. They came up with a package. Apparently they had been looking at this for several years, and they think that a lot of the brown fields problems will be dealt with if you'll just factor into the remedy selection step the likely use of the land. And so, if the land is going to be used for industrial purposes, you don't try to drive that land back to residential purposes.

It is very often that drive to bring the land back to residential purposes that causes the just incredible costs, or a drive to make the drinking water drinkable, even though everybody is on public drinking water. If you could just get away from the notion that every parcel of land in the nation has to have a residence on it, I think you'll start unlocking the puzzle.

But again, they'd say, "Let's assume it's going to have an industrial tenet. Okay, so there's lead two feet down in the ground." Well, if it's not going anywhere, leave it there.

MR. MORAN: You're talking about a combination of risk assessment and institutional control?

MR. REILLY: Yes, sir.

MR. DAGGETT: A couple of questions: Just as a point of information, I don't have your January testimony. I'd like to get it.

MR. REILLY: I've got an extra copy here.

MR. DAGGETT: I have October's. You testified in October?

MR. REILLY: There was a lender one--

MR. DAGGETT: But if I could have a copy of your January testimony, I'd like to get it.

It strikes me, too, that for the purposes of this discussion you might want to just distinguish between Superfund sites and the municipal facilities that are on the Superfund list, and that universe of other sites that I thought we were addressing, primarily, here. Because I think if we make some determination -- or try to make some determination -- Federal law is going to supersede the State law on this issue, and we're really going to have to wait to hear what the Federal government says with respect to Superfund sites. Maybe what we ought to do here is focus solely on those landfills in the category that ended up with the $500 million estimate of cleanup that the DEPE--

MR. REILLY: And keep them off the Superfund, even if they might otherwise be inclined to. I think early on, everybody thought it was a great solution to get them on the Superfund list, and now we've determined that's not the case.

MR. DAGGETT: And if we can keep them off Superfund, maybe we ought to explore that. Putting that aside, too, for a moment, because there may be some compelling reasons to put it

in the Superfund program, and I want to leave that question open for the moment -- but assuming they don't rise to the level of the HRS score of 20 to 25 to include them on the Superfund list, that we for the purposes of this discussion stick to those and make a distinction here, because I think we're going to get ourselves all bollixed up very quickly.

MR. REILLY: Let me just say, sort of an odd thing about Superfund, though, is it can reach way beyond the national priority list. You never really know when Superfund is going to sting you. Not the least of which, I think the whole brown fields problem is generated by a liability scheme in Superfund, and yet, perhaps, nearly -- or very few -- brown fields are on the NPL. But that liability scheme hanging over your head is the cloud that scares away lenders and scares away buyers.

But I would completely agree. If we could keep the 300 away from Superfund, and all the boilerplate and delay with Superfund, and get decisions based on really common sense things, some risk based solutions -- you know, in a lot of cases, you don't need two feet of clay -- I think we could deal with the problem.

Maybe even though the estimate could be much higher, I think we could bring it down to a reasonable estimate where maybe the $50 million a year would be more than adequate.

MR. DAGGETT: But if we could get away from-- Take advantage of Lance Miller still being here.

Of the 300 or whatever number of sites, say, to get it to $500 million, of those sites, do we have some sense of whether they really are bad enough to be on Superfund? I mean, I'm making the assumption here that, were they Superfund-type sites, you probably would have been in there a long time ago doing a lot more by way of assessement to check that out. My assumption and guess is that the overwhelming majority, if not all of them, would not qualify for the Superfund list.

ASSISTANT COMMISSIONER MILLER: (speaking from audience) That's probably correct for a couple of reasons. One being, it's very difficult, based upon the way the EPA has revised the hazard ranking system, to get a site on the master priority list without knowing -- having good information on the quantities of waste material deposited at the site. A lot of these landfills are not going to have that information, so your scores are going to drop to the point where even if you had some groundwater contamination, you might not be able to get it on the national priorities list.

The other reason we haven't seen more sites going on the national priorities list is we've been concerned about the transactional costs and the cost of cleaning up the landfills, and we've made a conscious decision not to recommend that they be put on, pending the additional evaluation of the (indiscernible).

MR. REILLY: The comment I would make is, getting on or off the national priority list is very, very fuzzy, and I would say, almost subjective. So the thing that something being on the list means it's more hazardous than something off the list, that has certainly not been our experience. What often has happened to get you on the list is that there just happened to be some data available, and it just happened for it not to be data for a landfill right across the street -- the same size, the same leachate, the same everything. So I guess I have no faith that, really, the Superfund program has focused its forces on anywhere near the right set of sites. I'm not as optimistic, I guess, as Lance, that there's some precision with getting on or off.

MR. DAGGETT: Well, then I'd go back and underscore my point that we should focus on those sites that are not hardened Superfund programs in the first place.

MR. REILLY: Although the cost recovery actions, Chris, will go on. For instance, at GEMS, we're going to have to deal with the municipal share.

MR. DAGGETT: I know they will, and my argument here is that nothing we do is going to change that, absent a change in Federal law, so why throw--

MR. REILLY: Why throw ourselves in-- I agree with you.

ASSEMBLYMAN OROS: Mr. Kuniholm?

MR. KUNIHOLM: Mr. Reilly, again, just addressing the question that Mr. Miller raised previously, as well, about the hierarchy of sites to be cleaned up, and he was talking about the few sites that have perhaps larger amounts of hazardous waste associated with them: The question is really a duel question for both of you, and the question was previously asked. What is the basis for allocation, exempting these from the Superfund or Spill Act or whatever? These are going into a separate category as Assemblyman Albohn suggested. Would this mean a no fault provision for all of them, or would there be some provisions for cost recovery for PRPs who are now presently implicated? What is your suggestion?

MR. REILLY: My suggestion would be to leave industry involved for the efficient-- If you have an industrial hook-- But maybe the category is such, Lance, that there is no bigger company to, basically, get the efficiencies. Now if that's the case, then I guess it is all from whatever this new fund is.

ASSISTANT COMMISSIONER MILLER: Mr. Reilly's point on private industry being able to bring in contracts at a lower cost than a State contract for the same work, is absolutely correct. And if industry was willing to take on this burden and say, "Yes, we'll clean up these sites. We'll clean up all 200 or 300 of them if you gave us a share from the public side," that would be the best of both worlds.

Am I confident that industry is going to step up and make that offer? Well--

MR. REILLY: When we're issued a unilateral order by the directive from the State of New Jersey, we take that very seriously. But Mr. Miller and his agency have got to have us

at the site. We certainly are-- We've got enough woes staying competitive internationally that take, we think, priority over us going and adopting a site where we have no involvement. And it could be that this category of sites, you simply don't have the big parties there.

MR. KUNIHOLM: So does that mean that if for those sites now that are multigenerator sites currently -- of which presumably there are some, Mr. Miller, on this list now of the 200 -- that if industry were a named major PRP there could be a fairly easy distinction made in that regard, and some provision to involve them in those where they are majors, could be readily made? Again, a question to both of you.

MR. REILLY: If my company is involved, and we get a directive to clean up a site, we're going to do everything we can to make the process work. Certainly, I can't speak for all industry, and I certainly can't speak for the smaller and medium sized companies that may not have the resources. But maybe it gets down to the question of definition of what these sites -- who are in these sites.

ASSISTANT COMMISSIONER MILLER: (speaking from audience) When a company like DuPont does step up to the table -- and we have a number of sites that we're working with them on, they are certainly always in the category where they're doing work and we're overseeing. That's the most efficient way for us to remediate these sites.

But to directly answer your question, for the vast majority of the sites, we haven't even looked to see if there is information that would indicate who dumped there. And as I indicated in response to an earlier question, that's a very labor-intensive and very expensive proposition to do that. That's certainly an option to have the Department do that investigation, and then do a mixed funding approach where it would be a percentage of public funds generated, however applied, and those industries that dumped directly would be responsible for the other portion of use.

What I hear, the Task Force is starting to develop the framework of various options to solve this problem that need to be evaluated, and have the policy aspects developed and the implementation aspects gone over, and you come up with a recommendation.

MR. KUNIHOLM: I guess the thought I had was that -- and again, a question -- even though you had major PRPs who would be willing, and there would be some possibilities of that, still there is a whole bunch of minor players, and you still would have the morass of trying to straighten that out? Even if you involved one major player, wouldn't that player object, with again, everyone else who might be encumbered by the process? So, wouldn't you be right back with the joint and several liability situation in trying to make a split, potentially?

MR. REILLY: Well, again, it would be awfully nice to have a process outside the court system where the split was essentially done by a neutral. Then you've got a good starting point to go after: "Okay, here is the municipal share or the State share," or whatever you'd want to call it. And then for all these other companies who just don't want to play ball, so far that's been industry's headache, and I guess I would assume it would remain industry's headache; that is, the bigger parties have to chase down some of the littler parties. You make your judgement to chase them down: Is it cost effective? Do they have any money? As I'm sure you know, that goes on all the time right now.

ASSEMBLYMAN OROS: Okay. Are there any further questions?

ASSEMBLYMAN WARSH: I just have a couple of questions.

ASSEMBLYMAN OROS: Assemblyman Warsh?

ASSEMBLYMAN WARSH: The point that you brought up, residential versus industrial cleanup standards, is a very

interesting one. Would a private party be able to enter into a consent agreement with the DEPE to have industrial effects remaining?

MR. REILLY: It is possible. It is a bit of a struggle, but in theory it can be done. In our experience I think the DEPE is becoming a bit more comfortable with that notion, but certainly that's more Mr. Miller's purview.

ASSISTANT COMMISSIONER MILLER: (speaking from audience) I would be much more optimistic than Mr. Reilly was in that answer. It is happening daily.

ASSEMBLYMAN WARSH: And the standards, is that a regulatory function or statutory function?

MR. REILLY: Are you talking about how clean to make the site? If done properly, I believe the right answer is, you do a risk assessment on the site and you determine how risky it is, and you deal with the risk. There have been some notions that you can just define for all sites for all times--

ASSEMBLYMAN WARSH: I'm talking about the enabling law -- I didn't mean to cut you off -- but the actual enabling law. Is that regulatory or is that statutory, the cleanup level?

MR. REILLY: I'm sorry. They're undefined right now, is the short of it. I was heading into the risk assessment way.

Another way is just say, "I'm sorry, 500 PPM is it for lead for all times for all places." That's the other way to go. I think it would be a delightful solution if there were an infinite amount of money in the world, but I think most companies, certainly I think most risk assessors, would say that you really should have a risk assessment done and deal with the risks at the site.

ASSEMBLYMAN WARSH: One of the other points that that brings up is just the slowness with which -- whether it's the EPA or the DEPE or a private party -- cleanups are accomplished, whether it's Superfund sites or just run of the

mill, if you will, hazardous waste sites. One of the suggestions that has been heard for years and years is moving toward an engineer's certification, just like we lawyers get to certify to facts as officers of the court. Is that something that you think would speed up the process in New Jersey and would be good policy?

MR. REILLY: I think if there were a consensus about what the target was, it would be very, very straightforward, but regrettably, there is not always a consensus. "Is it 1000 PPM lead; is it 500? Is it one foot of clay; is it two feet of clay?" I think at these municipal landfills, though, perhaps if the DEPE would come up with a presumptive remedy, surely an engineer would be willing to, I believe, put his name on the line, "Yes, this fits the presumption." But until there is a consensus around what is the presumption, I don't see how the engineering community can feel comfortable that it's been able to make that certification.

ASSEMBLYMAN WARSH: For the benefit of the members of the Task Force, what tends to happen is, certain parameters are set. An engineer will, in essence, attempt to certify that the parameters have been met. It goes off to the DEPE and then you go and you get into this war of experts between their engineers and the private entity's engineers, which slows things down and obviously increases cost.

That, to me, sounds like a very reasonable remedy. An engineer isn't going to want to put his or her certification on the line and not be able to practice their profession for the rest of their lives.

MR. REILLY: You're right, and the underlying problem is the target -- the performance target -- has not been set for most sites. I think once set, then you could make decisions, but very often the performance target is very much up in the air.

We just went through a long discussion with Region II and New Jersey over how stable sludge is after you've mixed it with concrete. Do you add another bucket of concrete in there? Do you add some more carbon in it? How stable is stable? I mean, you can argue over that for the indefinite future. Thank goodness, eventually a decision was made, but it was-- There's no consensus. There is nothing you can pull off the shelf and say, "This is the right amount of stability."

ASSEMBLYMAN WARSH: Which brings to mind the other issue as to why there are those kinds of parts. On the one hand the DEPE will be able to argue that it's the kind of flexibility that you require. On the other hand the private sector saying that that allows you to have all the cards because it's at the discretion that private sector is behind the barrel in negotiating with the DEPE.

MR. REILLY: Well, the reason that they are not out there now, and I don't believe they should be out there, is, by the time you set them in a back room, you set them to a level of perfection that's basically unachievable. That's the short answer.

ASSISTANT COMMISSIONER MILLER: (speaking from audience) The Department certainly wants to have articulated-- I talked earlier-- It's much easier for us to have us implement a very articulated statute -- a clearer statute. Basically, now the only statute that tells us to develop standards is the current ECRA statute, and it tells us to clean up sites to the maximum extent practicable, whatever that means, and that has obviously caused difficulties for the agency.

It was the Department that brought this issue to the table in the debate in the Senate -- Senator McNamara's bill, S-1070 -- that addresses for the first time, I think, in the nation, what the risk management goal is for the remediation of contaminated sites. That would make it much easier for the

Department to implement (indiscernible) remedies, because when you look at that statute -- and it will soon be debated in the Assembly -- when you look at that and what all it does is, it brings in the differential standards for residential and nonresidential property. So it gives the Department a tremendous amount of guidance upon which to base its decisions.

ASSEMBLYMAN WARSH: Would that be one of the ways that we could move toward an engineer's certification in New Jersey?

ASSISTANT COMMISSIONER MILLER: An engineer's certification in New Jersey is one that needs to be examined very quickly. Only one other state has moved in that direction. The State of Massachusetts is about to implement it. We are looking at it very, very carefully, and we will monitor what Massachusetts experiences. I applaud them for their initiative.

There is tremendous risk associated with it. The Massachusetts program only focuses on those sites that they would not be dealing with as a priority. There are a tremendous number of fields of expertise. To go to a professional engineer and say, "Certify that this site is going to be remediated, and that the hydrology and all the other aspects are appropriate," gets beyond the field of engineering. And to ask somebody to put their certification on, and how do you give a person that type of certification, is one that is very, very difficult, I think, to develop. It is something that we talked about in the Senate. I think the question starts to come down to, who do you want to have making decisions as to whether a site is being remediated satisfactorily to protect human health or the environment, industry, or the Department? The public doesn't trust either of us a whole lot, but I think in answering that question, I think the public would rather have us making that decision right now, than industry.

Looking to the future, it is possible that we can move to a certification program. Are we ready to do that yet? I would caution that we are not.

ASSEMBLYMAN WARSH: Just one last question, if I may, Mr. Chairman.

If you are close, phrasing it in terms of a private sector versus public sector safeguard, if New Jersey were moved toward an engineering certification, would that denecessitate the need for certain DEPE personnel?

ASSISTANT COMMISSIONER MILLER: To a degree, sure. We would have to replace some of those staff with a certification program, and those won't happen without resources. But if there were a number of cases being handled where they were just being certified by engineers, yes.

MR. REILLY: I think ideally, the DEPE would spend its energy on defining what they want, and a lot less energy on oversight. I think it would be the oversight, at a significant cost-- You could reduce that, perhaps, to zero, as long as the DEPE had defined the goals. Then the engineer puts his name on the line and assures that we'll get there with virtually no oversight.

ASSISTANT COMMISSIONER MILLER: I have to emphasize, though, that you're not dealing with constructing a house in this type of situation, where the engineering is very straightforward. The amount of assumptions that have to get made, the difficultness, the newness of this field, the changing in toxicology regarding the chemicals, are things that are a tremendous burden to stay on top of. And in asking, literally, hundreds and hundreds of certifiers under that type of a program, to maintain that level of expertise, that's an awful lot.

ASSEMBLYMAN OROS: Well, thank you very much.

Thank you very much, Mr. Reilly.

MR. REILLY: Thank you, sir.

ASSEMBLYMAN OROS: Mr. Drew Kodjak, from New Jersey PIRG?

D R E W K O D J A K, ESQ.: Thank you, Mr. Chairman and members of this Task Force, for the opportunity to speak about the issues surrounding the remediation of landfills in New Jersey. I am Drew Kodjak, Environmental Attorney for the New Jersey Public Interest Research Group. New Jersey PIRG is a nonprofit, nonpartisan, research, education, and advocacy organization dedicated to environmental preservation, consumer protection, and government reform.

I wanted, during the testimony and during the questions, to respond to some of the issues that were brought up, but I won't until the end, and then I will try to.

I don't presume to provide a solution to the complex issue of landfill remediation, but merely to provide the historic context which has formed around this issue over the last several years. And in doing so, I will address two questions.

The first is: What is the history of this issue? Today we are calling it landfill remediation, but yesterday it was called the municipal liability issue. Under that name it has developed a large following, both political and, certainly, in the public debate, as well. The name change hasn't changed or eliminated lots of those issues that have surrounded it, so I think it's in the interest of this Committee to understand where we've come from.

The whole idea that somehow landfills are different animals from traditional Superfund sites, or Spill Act sites, or whatever hazardous waste sites you want to call them didn't, spring out of a hat. It started-- The impetus was found with contribution suits brought against local towns, school boards, an Elks Club, a gymnasium, or the Girl Scouts by law firms whose clients were generally large polluters. Perhaps DuPont doesn't relish the idea of bringing lawsuits against

municipalities, and I certainly wouldn't fault them for it. I think it's a good way of bringing out the issues that surround this.

But I should be clear in saying that there are lots of different transaction costs. They've been raised a lot today. There are some transaction costs that take place before Lance Miller gets the shovels into the ground. There are also transaction costs which take place when you have different corporations suing each other to figure out what the exact liability should be. And there are also transaction costs which take place when you have a large polluter suing very, very small companies in order to make a point. And the point is, they don't like the current situation because it's forcing them to spend lots of dollars to clean up hazardous contaminants that generally they are responsible for. Those are things which this Committee should keep in mind while it is reviewing testimony.

The second question which I'd like to try to at least get a handle on is: Does a landfill approach make sense? And what we're talking about here is looking at landfills as a separate category, and how we define landfills is, obviously, crucial.

When the Superfund was developed in 1980, and reauthorized in 1986, and the Spill Act is somewhat, a part of that -- the Spill Act in 1976 -- we were very unfamiliar with the magnitude of the problem that confronted the cleanup of hazardous waste sites, both in New Jersey and on the Federal level. We've gotten a lot smarter, to use an expression that Scott Weiner uses a lot, over the last -- I don't know, decade, decade-and-a-half? And now we can see that while strict joint and several liability may make sense when you are dealing with companies that you know must have polluted this site but have a difficult time proving it, or a contribution suit makes sense when you want to minimize transaction costs to the government

because you don't want to have Lance Miller spending lots of tax dollars to figure out every responsible party for a site-- So we allow third-party contribution site actions. And what that allows is for Lance to find the five biggest, and if those five biggest polluters -- the biggest generators and transporters into the hazardous waste site -- then decide they want to-- If party "A" spent $10,000, and they think they were only responsible for $5000, and they can go after another one for $5000, then that's their option, and Lance doesn't have to spend tax dollars to do that. That was the impetus behind the third-party contribution suit actions.

Now, the problem is that that is being abused, and hazardous substances are being equated to household garbage. And so, you're having large corporate polluters suing towns saying that household garbage did as much damage to the landfill as their toxic substances did. That doesn't make sense. That is a problem. That was an unintended consequence of both the Spill Act and the Superfund Act.

There have been legislative proposals and administrative proposals to deal with that problem. The EPA started to address it in, I believe, 1989. I have a time line for you on page two. (referring to written statement)

In 1989 the EPA said, "We are generally not going to sue municipalities, because we do not judge municipal solid waste, household garbage, to be what Superfund was intended to collect on. That's not the problem." That, as it turned out, was a dumb move, because corporate parties then said, "Well, fine, if you're not going to sue them, we will sue them, because we consider them responsible." So EPA never did, but the corporate parties did.

In April of 1991 -- and I'm not going to go through the dates-- There have been two general legislative proposals out there. The first is basically this: Let's take municipal solid waste out of the definition of hazardous substances, and

let's bar contribution suits against public entities like school boards, like municipalities. Let's cut that thing off. Let's let EPA or DEPE deal with that problem separately.

The EPA proposed a draft regulation a little later, and that was referred to by Mr. Reilly. What they tried to figure out was: What is a fair cost allocation? Someone mentioned that.

And the idea was this: Let's compare the costs. Here was a landfill. We closed it down; here's the cost. Here we have a hazardous waste site of equal size. We close it down and clean it up; here's the cost. The ratio was, basically, 4 percent to close down a landfill versus that.

Now, there are other issues around that, but that is at least giving you a sense as to the differences between the real harm of household garbage and the cost of cleaning up hazardous waste sites. That's a starting point.

Where are we today? The Lautenberg bill, which would basically codify that EPA approach as the 4 percent, would fast track municipalities to get them into settlement quickly, and would require municipality household collection days, to make sure that municipalities are now cleaning up their act so they don't get into trouble anymore. All those aspects are in a present bill that has Lautenberg, Torricelli, and Christopher Smith-- And the bill is also mentioned in Lance's document. That bill last session passed the U.S. Senate, but failed to pass the Assembly (sic) before the session ended. And it had the support of the environmental community as a rational way of going about correcting the unintended consequence of strict joint and several liability, combined with the third-party contribution suit actions which allowed for corporate entities to sue municipalities and small businesses for almost anything.

I want to address the issue of transaction costs because it's a very serious issue. It's an issue which has been bandied about a lot without a lot of thought going into

it. I mean so much so, that President Clinton even mentioned some kind of an astronomical number in one of his addresses -- budget addresses. There was a report done by the Rand Corporation -- and I don't know who paid for that report, but I can only guess -- and the report said one thing. But if you read it carefully, it actually came out with a different number. The report said the transaction costs are the vast majority of costs for cleanup. So in other words, somewhere around 80 percent.

The interesting thing is, if you read it carefully and you break it down, you look at transaction costs for corporations, and those have been declining. Also, you understand that transaction costs are front-loaded. All the litigation that has taken place, all the negotiations for cost allocation are something that is done before you start cleaning up the sites. Many, many, many of the sites are not completed yet. In fact, some of them -- most of them -- just got started or haven't been started yet. And when you factor in how much it's going to take to clean up the sites, the actual transaction cost percentage drops significantly.

It also was apparent after reading the report that there is a tremendous -- there is a lot more cooperation, a lot more voluntary cleanups going on now, which have much, much less transaction costs than we had in the past, when we were first working out all the liability schemes. You're not going to have judges now going through the case analysis and the factual analysis that they did in the early days of Superfund and the Spill Act to figure out who should pay what and what the definitions are. You're going to get summary judgments, and you're going to clean up the site.

The problem that remained is with insurance companies, and even those transaction costs will go down. But a lot of those cases still haven't been resolved yet. So insurance

companies, where basically you haven't paid very little in actual cleanup costs because they've either been successful in court, or if they haven't, they've paid and they've appealed--

So, it's very important for this Committee to also understand that when you hear transaction costs as some kind of a horror, number one, it is generally not the taxpayer who is paying, but corporate entities that have decided that they would rather litigate than clean up. And the second is that a lot of the information out there is not altogether factually true. I put a long analysis in this paper that I have out. It's mainly responding to the Rand Corporation report, but it's something that this Committee should take notice of.

That is it for my testimony, basically. I didn't want to come in here and propose that I knew a solution to this problem. But I wanted to update you on sort of where we've come from, from a different angle.

I think the real question is something that's already been raised, and that is: Out of the municipal sites, how many corporate entities are there out there that also generated hazardous substances and put them into those sites, or are they pure municipal sites? That cost allocation problem-- And is it fair to the taxpayer who is going to have to bear the added cost of tipping fees and things like that, to have them shoulder the burden for cleaning up municipal sites, when the real cause of the problem there was not household garbage, but the toxic substances that were deposited there?

ASSEMBLYMAN OROS: Are there any questions? Mr. Daggett?

MR. DAGGETT: Yes.

This is well done. I appreciate your comments and your document. I think it really comes down to, though, a question of whether-- When you say the transaction costs are going to drop, it's true, I think, over the life cycle of the cleanup. The question is whether 21 percent, which is the

average number you use now for the current costs, not taking the life cycle at the site, because we're assuming-- I assume by that you mean costs of the investigation, feasibility study, plus transaction costs. It's about 21 percent. Is that correct?

MR. KODJAK: Correct, to date.

MR. DAGGETT: To date, I'm saying. But you don't have in that 21 percent the full-scale cleanup. That's when it's going to start to drop. The question is whether that 21 percent, or whether for the insurance companies to drop from 88 percent to 69 percent when all is said and done, is a good number or not a good number. And I think that's really what the issue is. Is even 21 percent too high? If you argue that it is, then you say we have to figure out how to reduce transaction costs. If you say, "Well, no. It's not so bad when you think later on, when you take everything into account, it might drop to 8 percent or 10 percent or whatever." I really think that's the nub of the issue here. What we all, collectively as a group, think are acceptable percentages for transaction costs. Would you concur with that?

MR. KODJAK: Yes, and I think we should use our understanding of what generates those transaction costs and what doesn't in the definition of what a landfill is. If we have many, many parties, and a very old site where you're not going to be able to figure out who they are, generally speaking, then it is probably-- And most of those parties are not large corporate entities, but either municipalities or school boards or small waste generators, then it probably makes sense to use a different approach than what we've been using for traditional Superfund sites or Spill Act sites.

MR. DAGGETT: I guess I go back to and then ask the question again -- back to our list for today to get to the $500 million, of those 300 sites-- Is that right? Let's use 300.

If there are 300 sites, how many of those 300 are primarily municipal waste, as opposed to the contention here that they may be largely industrial wastes that are in those sites?

ASSISTANT COMMISSIONER MILLER: A very, very difficult question to answer. Most of those sites are going to be by facility type. Of that 300 are going to be that 194 municipal landfill sites, and you go back in time to each municipality had it's own landfill and what was going in there. In anything from that municipality is there going to be industrial waste in there? Yes, depending upon the nature of the industry that was in that town.

I get on my staff when they say, "Well, this is a hazardous waste landfill." And I say, "When did it close?" And they tell me, "Well, it closed in 1965." So how could it be a hazardous waste landfill? Hazardous waste didn't exist until 1980.

But people -- even my staff who are very articulate in this -- have the perception that these things are hazardous waste by today's definition and should be treated like today, versus let's look at what happened back then, and to try to go back into those individual municipalities and say, "What was the industrial base of your municipality during the period of operation, and where did their waste go?" It's very, very difficult to determine.

So saying a strict municipal waste landfill that only took garbage is a very, very stringent definition, and one that's very difficult-- You would have very few facilities in that category, I'm afraid.

MR. DAGGETT: And I think that underscores-- For me the difficulty comes that if we knew, clearly, that these municipal sites were overwhelmingly full of industrial waste, and we could identify those responsible parties fairly quickly, it would make it a lot easier to go and say, "Let's go after the industry and maybe assess some small percentage to the

municipalities for keeping the "polluter pays" principle in place, and having the 4 percent, or whatever number you want to pick." When it gets real difficult to figure out who's who, and you have definitions that change as a result based of when things closed, it makes the percentage of the transaction costs go higher and higher, it seems to me, as you go through it. It makes for a strong argument that, "Look, it isn't the cleanest way. Nobody particularly likes letting anybody off the hook. But if we're going to get these sites cleaned up, let's just go clean them up, and let's put a fund together somehow and do it."

Again, distinguishing from Superfund sites, and distinguishing from some of the others we have identified, for those municipal landfills it may make the best sense to do something like that.

If you get-- Arguing is not a perfect world. You can't get it the way we all maybe feel most comfortable.

MR. KODJAK: Mr. Daggett, you're addressing the exact issue that I'm concerned about. If that's the case, then, you know, I'm not looking for a perfect world, and I understand that things get very, very messy when we're dealing with old records and landfills and things like that. I just don't see, certainly, in this document anyway, a lot of information on who we think the generators are for a lot of the 300 sites that are out there. And I don't think we know yet.

MR. DAGGETT: No, and that underscores, actually, some of the difficulty, because then we have to ask ourselves, if we have 300 sites, and we know that the DEPE is going to have to be additionally funded just to go out and figure out all that information, and that money could otherwise be spent on the actual cleanup of the those sites, does it make an argument that, "Why don't we just go clean them up?"

I don't have the answer right off the top of my head myself, but I have to tell you from my experience and watching

it happen, and being involved in it happening over time, I probably would tend to fall on the side of, let's just go and clean them up.

Again, for that 300 family of sites, I'm not going to-- You know, we've got other issues to discuss with other types of landfills, but for those municipal facilities, I tend to have come to the point where I'm leaning on the side of, "Let's just put something together by way of a fund and clean them up and be done with it and move on, and work forward and really hit hard on liability for people who do things today."

ASSEMBLYMAN OROS: Thank you, Mr. Daggett.

Assemblyman Albohn?

ASSEMBLYMAN ALBOHN: Just a few comments, really. I got the impression from the speaker's initial comments, and part way through, that PIRG's position is that industrial waste is always hazardous, and municipal waste is always not hazardous. And yet, you know, by the same token, it's only within the past month or so that we were discussing, I think, this very same Committee meeting, the municipal hazardous waste bill because there was so much in the way of toxics in the municipal hazardous waste, that we somehow or other had to get it out of that material.

I don't disagree with you that there are such materials in municipal hazardous waste, and that is exactly the reason why we should not be discriminating between industrial hazardous waste and municipal waste. For all practical purposes, they are blended into one composite, and as a result the kinds of toxicity that you might have to remove from an industrial waste landfill might be the very same kinds of toxicity that are coming from your household hazardous wastes -- paint wastes and the like.

So all the more reason, it seems to me, and all the more justification, for one common fund to clean up the entire project, which is neither going to put every industry in the

State of New Jersey out of business, nor is it going to pose an insurmountable or an impossible burden on the individual taxpayers of the State.

I think by sharing this expense, as I suggested earlier, we can resolve the whole problem without arguing over who is the victim and who is the culprit.

MR. KODJAK: I have just a brief comment to that Assemblyman: I was before your Committee when I testified against a bill which would have given a blanket contribution suit protection to municipalities because I felt that municipalities are responsible for a certain share of the cost of cleanup of even municipal solid waste landfills, because municipal solid waste does have toxics within it.

Second of all, assertions that we're all going to drive industry out of New Jersey from a law that has been on the books since 1976 is something which carries a lot of weight during these dire times, but something which I think is not particularly helpful when we're trying to actually discuss topics that will be around for another 10 or 20 or 30 years.

ASSEMBLYMAN OROS: Mr. Kuniholm?

MR. KUNIHOLM: Yes.

Mr. Kodjak, I think you made an interesting point in your paper, and I think you just touched on it now about the question of household hazardous waste collections from municipalities. Just to ask you a couple of questions about that, and maybe to make an analogy here: I think that if you have just a question in this context, if you have a glass of water and you put a drop of arsenic in it, no one wants to drink it. At the same time, if you have a glass of water and you put in five ounces of arsenic, for sure nobody wants to drink it. The question of the relative contamination of municipal waste is an interesting one, and certainly what we haven't been talking about, the great amount of conventional pollutants that are associated with municipal waste, of which there are a lot that aren't on the PCL list.

But I wanted to ask you about that with regard to this definition. Are you suggesting that you would concur with the proposition that Assemblyman Albohn has discussed earlier about a broad-based approach, but with, perhaps, some inclusion of household hazardous waste removal as an assistance to encourage the removal of municipal hazardous waste components?

MR. KODJAK: I'm not sure what the particulars are. My general position is, I think there is merit to the proposal that landfills are different animals in general from other traditional Superfund sites or hazardous waste sites, and that in dealing with them differently, it could make some sense. But the particulars of cost allocation, I would have to wait for before I decided whether or not I thought the final plan was sound.

So, I'm not sure what the particulars are. But certainly there are a good deal of household hazardous waste collection days going on in New Jersey already, and an initiative that would make them all uniform or standardize them would certainly be helpful, if that answers your question at all.

MR. KUNIHOLM: Yes. And just to the question, yes, partly. And to the question of how you view the hazardous nature of municipal waste versus industrial waste. I think that was the first part of my question. How do you view that in the light of--

MR. KODJAK: Municipal waste, according to the best estimates, is between 0.2 and 0.5 percent toxic. The rest of it is nontoxic. So that's how I generally view it.

MR. KUNIHOLM: I guess that was the question in my analogy about the drop of arsenic and so on, contaminating the whole thing. I just wondered if you-- Do you resonate to that as having any semblance of correctness in terms of a small amount you see--

MR. KODJAK: Sure.

MR. KUNIHOLM: --contaminating the whole thing, possibly? Do you see what I mean?

MR. KODJAK: Maybe I can get-- I'm trying to understand what you're saying, but I think what also speaks to that is that, generally, when you're dealing with landfills that are closed down that just have municipal solid waste in them, that haven't had accepted any industrial hazardous substances -- just municipal solid waste -- the cost is 4 percent of the average cost of cleaning up a hazardous waste site.

Now that's a rough estimate that the EPA put together, and that can be certainly torn down, but that gives you a sense -- or it gives me a sense, anyway.

ASSEMBLYMAN OROS: Susan?

MS. HOFFMAN: Well, in fact, the remedies or the closure techniques that DEPE included in its paper here that they distributed today are largely derived from ordinary municipal landfill closure techniques, or at least the lesser expensive ones. So if you have a landfill that has primarily municipal waste, which includes some hazardous components, and it may have some industrial waste which may, in fact, be nonhazardous industrial waste, or you could have some hazardous, and the cleanup method is basically the same method you would use to clean up an ordinary municipal landfill without any industrial waste, how then do you deal with the municipal share versus the industrial share to fund that cleanup?

MR. KODJAK: It's a good question. I think the point is, though, that the DEPE mentions two different types of cappings that they have to go through, depending on the amount of hazardous substances that are in those landfills. And certainly, the more the municipality, or whoever was operating that landfill, accepted in hazardous substances, the higher the cost will be, even given the two examples that we have here.

MS. HOFFMAN: Should there be, in your view, some correlation, or is it appropriate to have some correlation or relationship between the waste which the industries may have been responsible for bringing, and the components or constituents which are driving the remedy? In other words, should those be related?

MR. KODJAK: I missed you.

MS. HOFFMAN: All right. Let's say the reason that you have to go to a higher, more expensive remedy is a reason separate and apart from whatever hazardous materials the industry brought.

MR. KODJAK: Oh, I see.

MS. HOFFMAN: Say because of the location of the municipal landfill and its connection at or below the water table level, and perhaps the hazardous constituents aren't even being detected or are not the parameters which are driving the installation of an advanced or more technical cap-- In that instance, if the industry contribution to that landfill does not--

MR. KODJAK: Is not the causal--

MS. HOFFMAN: --is not driving the choice to go to the more expensive remedy, how then might the cost be allocated?

MR. KODJAK: Are you aware of a case like that?

MS. HOFFMAN: Well, yes. I've heard of--

MR. KODJAK: You've heard of cases.

MS. HOFFMAN: --certain arguments being raised on facilities like this.

MR. KODJAK: Yes, it certainly seems that if the waste that wasn't generated is not driving the remedy, fairness seems to dictate that that shouldn't be taken into account. The only issue that I would think of on that circumstance, and I haven't thought about it before, is that on a factual basis, that must be very difficult to determine. When you get into that transaction cost, and all that kind of thing, I'm sure it would begin to bear weight.

MS. HOFFMAN: And that is one of the areas where I think the transactional costs are becoming most apparent.

ASSEMBLYMAN OROS: Thank you, Susan.

Yes, Tom?

MR. MORAN: You mentioned-- If you would, clarify your point about 0.2 to 0.5 percent toxicity?

MR. KODJAK: Right.

MR. MORAN: Are you saying municipal--

MR. KODJAK: Solid waste.

MR. MORAN: --solid waste is 0.2 to 0.5 percent of the total toxicity? Is that what you're saying? Could you clarify that point?

MR. KODJAK: Sure. Let's just take a hypothetical bag of garbage. In that bag of garbage there is roughly, at the maximum, I guess, 0.5 percent of toxics in there; the remnants of a Wite-Out bottle, a little bit of Drano, whatever you want to call it, batteries.

MR. MORAN: From where would these numbers have come?

MR. KODJAK: Where did I derive these percentages?

MR. MORAN: Yes.

MR. KODJAK: There was a report done by the DEPE, I think, a long time ago. And also it's a number that they refer to, even in the last testimony that I heard on that household hazardous waste bill.

MR. MORAN: Does that take into account that prior to RCRA, which was implemented in 1980, which is the first time we came into the definition of what is and what isn't hazardous waste-- Does that have anything to do with that percentage? Or prior to that time, was there material going into the landfills from municipal -- into municipal landfills that may have been toxic or considered hazardous prior to that time?

MR. KODJAK: This is a strange-- Lance made this determination. I'm not sure what he means. Certainly hazardous substances were around long before we defined them.

And certainly they're still a problem now, even though we hadn't defined them before. And certainly the Spill Act and the Superfund Act are retroactive. So to make a determination that this isn't a hazardous waste site simply because it was before that substance was defined doesn't make any sense to me.

MR. MORAN: I guess that's part of my point, because the definitions came later.

MR. KODJAK: Right.

MR. MORAN: And is it considered toxic in terms of systemically toxic? And again, I'm asking you to explain a statistic that apparently isn't your statistic, so forgive me. I don't know, but I'd certainly like clarification on this because of the time line that's involved with a lot of these old landfills, whether we're talking toxicity or hazardous waste classification.

ASSEMBLYMAN OROS: Dr. Kosson?

DR. KOSSON: I have two comments or questions for you. The first is, we're debating the toxicity, or the toxicity that went into this landfill, and being that I've worked with leachates and landfills for longer than a decade now, I would suggest that from a municipal waste landfill that received no industrial contribution, or just your average bag of garbage, as you've been referring to it, accumulated in a landfill will generate a leachate that will contaminate groundwater to a nonpotable sense in the absence of any industrial contribution, as well as we end up with the issue of how contaminated it is. And the remedy is frequently going to be the same whether industrial contribution or not. So I think the debate, when we have both municipal and industrial contributions, as to which made the leachate worse, which, regardless of how bad it is, we're still in the position of having to isolate the landfill and minimize the generation of leachate, is a pointless debate.

So I think our focus on that is kind of misguided.

MR. KODJAK: I would agree.

DR. KOSSON: Secondly, I think the issue here of transaction costs is not who pays the transaction costs, because whether we're paying it because Commissioner Miller's group is carrying out those investigations, or a private entity is carrying out those investigations, ultimately we're either paying it directly through taxes or indirectly through increased product costs. One way or another, we're the people who are paying for them, especially when we're in a situation when we cannot say that one type of waste generated the material, or another type did. We're not seeking to penalize either the municipality nor the other contributor inappropriately, but we're trying to get the problem solved at the least cost to the public, ultimately, either directly or indirectly.

Therefore, I wonder about whether we're appropriately debating whether or not who should pay the transaction costs because ultimately we, either as consumers or as taxpayers, are going to pay them.

MR. KODJAK: I would largely agree with you on that point as well. The reason I raised it is because there was some comment as to all transaction costs being a burden on the taxpayer directly, and I wanted to just clarify that.

DR. KOSSON: Either way, we pay, unfortunately.

MR. KODJAK: Political decisions are often made. This is a political body, and there is a great deal of import put to burdening the taxpayer directly, and so I wanted to make that clarification. I agree with you, though, that either way, we pay.

ASSEMBLYMAN OROS: Hearing no further questions, thank you very much, Mr. Kodjak.

MR. KODJAK: Thank you.

ASSEMBLYMAN OROS: At this time I'd like to call Mr. Philip Kirschner, New Jersey Business and Industry Association?

P H I L I P K I R S C H N E R: Thank you very much, Mr. Chairman. I'll try to be as brief as possible. My colleague, Jim Sinclair, will submit separate written testimony on the issues of oversight of cleanups and the process by which cleanup standards are determined, if that is acceptable.

ASSEMBLYMAN OROS: Sure.

MR. KIRSCHNER: I will concentrate my brief remarks today on the issue of municipal liability, which is something that has come up a number of times in the Assembly Energy and Hazardous Waste Committee. I know it is a prime reason why we are here today.

There are many, many views on that, but I think one thing that all parties can agree on, is that during the past seven, eight, or nine years, there has been far too much litigation and not enough remediation. I think none of us benefit by that, and partly the responses to date have been legislative proposals to carve out, limit, or exempt municipal liability in terms of the cleanup costs. That has been talked about a little bit. It has not been very productive. It hasn't been productive in the Legislature so far. We don't think it's productive in the dialogue of getting these things cleaned up.

Even if successful, such a strategy would result in even more litigation as companies resist shouldering even more of a burden on them than they feel is unwise. So the bottom line would be there would be even more litigation and less remediation, and we're talking years and years down the line.

The discussion on the amounts of hazardous wastes in municipal waste, again, we think is somewhat pointless. We would agree in that the amount of hazardous substances in municipal waste, or municipal waste in and of itself, is enough to contaminate an entire water supply, and is enough to cause a great deal of damage. That is something that we've recognized

a long time, and that is why employers resist any legislative scheme or enactment that would limit the liability of municipalities and cause them to assume those costs.

We believe that a better course, instead of warring with municipalities and school boards and the like on this issue, is to work together on the common problem, as has been elicited by Commissioner Miller and in the discussion paper on the issue of allocation of costs and joint and several liability -- strict joint and several liability. As he correctly explained, that is a situation that concerns all of us, not just the municipalities and school boards and the public entities, but employers also, where no one wants to shoulder more costs than they feel they are responsible for -- not just municipalities and school boards. We sympathize with their problem because we have the same problem.

I can tell you, nothing perplexes small businessmen, particularly -- not just talking about big companies, but a lot of these cleanup cases are the small businessmen-- They cannot understand how it is, if they've only contributed a small amount to the problem, where they can be on the hook for all of it, and why there could be a legislative remedy that says that the liability of other people would be capped or limited, with no ability for them to recoup their costs, as they can under current law. They can't understand that at all.

So, we share the same problem. We believe that strict joint and several liability is the driving force behind it. It is--

In previous testimony we've heard the municipalities talk a great deal about the transaction costs, and there are a great deal of transaction costs, perhaps not enough to fund all remedial efforts. But what they do do, and what a limiting of them will do, is significantly cut the time which we need to get to the heart of the problem, fix a solution, and remediate the site. It is, I think, the savings, not so much even the

money, as it is in time. If we could have an allocation scheme that made sense, that is really the good thing about it. And it will, in fact, save some money in the transaction costs and in the inflation costs if we can get some of these cleanups started sooner.

We think there are a number of ways to go with that. One thing that should be recognized is environmental tort actions, and this whole issue of strict joint and several liability is the exception and not the rule in terms of all other liability. Under our current New Jersey law in all other areas of liability, there is, in fact, an exception to joint and several liability that says that if you were 20 percent or less responsible, you do not have to pay more than your share at that point. If you're more than that, then there's a sliding scale by which you do.

There is an exception in that law for one type of action only, and that's environmental actions. We think that the concept in that bill -- not in the bill, in the current law -- is a sound one, and that is, I think, our shared problem, that if you're a minimal party, that you should not have to face the fear of having to shoulder more than your fair share.

And this is the fear. Part of the thing we think playing into this whole issue is, we're all operating in a vacuum. Virtually none of these cases have come to a conclusion in terms of the courts. We're also working in a vacuum in terms of insurance coverage. And that does play-- It hasn't been talked about, but that does play a key component in the fears of everyone on this. There is a case pending before the Supreme Court, and no one knows, exactly, whether there will be or there will not be insurance coverage. Insurance companies are defending under something called "reservation of rights," where they are paying the defense costs and are defending, but that doesn't obligate them

somewhere down the line to necessarily pay the costs. So that brings fear into everyone's heart, and a degree of uncertainty in which we must argue.

We think that a separate funding source which takes this out of joint and several liability for at least de minimis parties -- minimal parties -- would be a starting point, and can be expanded or contracted based on your wishes. Also, limiting or modifying the 20 percent exemption for the environmental torts is something to look at. Again, it doesn't have to be 20 percent; you can pick a number. It could be 5 percent, it could be 10 percent, whatever. But if we're going to keep joint and several liability for the foreseeable future, you may want to adopt a scheme that says, "Any party that is less than 5 percent responsible need not worry that they're on the hook for more than that." It doesn't have to track the current law 100 percent.

We think that that's preferable to any scheme, for instance, say 4 percent, that caps the liability. Yet it's meaningless in terms of allocating a responsibility. It's a very arbitrary number that may or may not stand up under any analysis depending on the number of municipalities involved in the case, depending on the type of toxics involved, and things of that sort.

You should also know that 4 percent number in the EPA is the third number they came out with. It's a political number; it's not a scientific number. The first draft report had 30 percent, and that sent certain parties screaming. Then there was another report that had 15 percent that had parties screaming. And then there was a 4 percent, and that had other parties screaming, and they withdrew all of those. Some legislators picked up the 4 percent, but EPA, in fact, withdrew all of those proposals. So it's more of a political figure than it was a scientific figure. I think that's important to know.

There are a number of other issues, but I think in the interest of time, I will just encourage you to look at that whole scheme.

ASSEMBLYMAN OROS: I Thank you for being brief.

Are there any questions from this side? (no response)

How about this side? (no response)

Thank you, Mr. Kirschner.

MR. KIRSCHNER: Thank you.

ASSEMBLYMAN OROS: At this time I would like to call-- Is there anybody from the New Jersey Environmental Federation? (no response)

Mr. Daniel Posternock, School Boards, and GEMS litigation?

K A T H R Y N M c M I C H A E L: (speaking from audience) Ernie, could we go as a group, all of us?

ASSEMBLYMAN OROS: Oh, you want to go as a group? Do you want to go next, or do you want to wait?

MS. McMICHAEL: Yes, we'll go as a group.

ASSEMBLYMAN OROS: Oh, you'll go now?

MS. McMICHAEL: Okay, fine. We'll go now.

ASSEMBLYMAN OROS: You want to go now?

MS. McMICHAEL: Sure, is that okay?

ASSEMBLYMAN OROS: Then we're going to have--

MS. McMICHAEL: We'll do the School Boards first, and then the League will go next, okay? We'll do it that way.

ASSEMBLYMAN OROS: All right.

This is going to be Kathy McMichael--

MS. McMICHAEL: Right.

ASSEMBLYMAN OROS: John Ross?

D A N I E L P O S T E R N O C K, ESQ.: Daniel Posternock.

ASSEMBLYMAN OROS: Oh, I'm sorry. Okay. Go right ahead. Identify yourselves, please.

MS. McMICHAEL: Coming around is a brief synopsis of our position paper, and you have already, I believe, received

quite an amount of stuff from the New Jersey School Boards Association.

It's Kathy McMichael. I'm Associate Director of Governmental Relations of the New Jersey School Boards Association.

MR. POSTERNOCK: And I'm Daniel Posternock. I'm an attorney who represents 23 school boards that are named in the GEMS litigation.

MS. McMICHAEL: Basically, what we need to say to you all is-- I know you've read our ideas and know where we're coming from. The School Boards Association has been fighting this crusade for quite a long time. You can see from our resolution in front of you, dated June 8, 1991, that our boards have been faced with it since that time. Dan represents a firm that has clients from about half of our school boards, and there is another firm that represents the other group.

These boards have been saddled with exorbitant costs for things that they only took out, maybe a $600-or-less amount of cleanup costs for underground oil tanks, that they cleaned out. Dan can go into detail on how the GEMS problem started, if you want any detail on that.

But what we're saying is, all of you say that you sympathize with municipalities, the problems that school boards have because they're turning around and suing us as third-party defendants for double and triple -- many, many more times our costs, because of litigation costs -- than what we can, what we have even put into this. And we're saying, "This doesn't seem to be fair." Everyone is calling it a fairness issue. Well, we're saying the same thing.

We started this fight a long, long, time ago and feel that we need some kind of relief, and that's why we've been going after legislation. And you can see the copy of our position statement on the next page, which is Assembly Bill No.

539, which is the bill that we've been fighting for the past two or three years now to try to get some relief for school boards and municipalities.

We, at this point, do not have a universal solution. I can't say anything except that we're saying, "We're bringing to you our problems and saying, for the 53 boards we have, which is right now the tip of the iceberg, what's going to happen when more and more of our boards continue to be sued for this, and we can barely get our budgets passed right now"? We have programs, educational concerns. The kids are not going to get their education because we're going to be fighting litigation to try to solve these silly lawsuits which nobody anticipated.

So we're saying, "We need relief." I've come before your Committee, Assemblyman Oros. I've come before the Senate Committee on this. We've gone federally and testified in front of Senator Lautenberg and other people for relief, and that's our general problem.

Dan?

MR. POSTERNOCK: I'll try to be very brief because most of the comments that I would have made have been made by other people, as well as by Kathy. I didn't come here this afternoon with any prepared comments, but some thoughts have come to my mind as I sat and listened to everyone.

I'll move to a little bit more of a grass-roots focus, because that's where I come from, the 23 school boards. I will tell you that there is one school board from Teaneck, Bergen County, which is in the GEMS litigation for a landfill that's in Gloucester County. I will tell you that there is one school board, Shrewsbury, that is in the GEMS litigation because they had one tank cleaning. Most of the school boards that are in the litigation had less than three -- three or less. There is one school board that is in the GEMS litigation for $25 -- a $25 tank cleaning, and they're in the GEMS litigation.

When we first got named as third parties, there were some conferences and meetings with respect to, "We are not a big player here. How do we get out of it?" The number that was thrown around at that point was $10 million. That number hasn't changed. Despite all the discovery that's been done, despite all the focus about what role the school boards may or may not play in the landfill, in and of itself, that $10 million hasn't changed.

There was a recent meeting which you may, Mr. Chairman, be familiar with, which occurred on March 15, where some sort of solution was attempted. And the bottom line is, it was fruitless. And more than that, the school boards and the other political entities that are in this-- It became more obvious at that meeting than at any other point, why we're in the litigation.

In terms of transactional costs, our clients alone have spent over $130,000 as part of this litigation. Now 23 school boards and $130,000 may not seem a lot when you're talking about millions of dollars for a cleanup, but to a school board budget, it's a lot of money.

There is pending legislation before your Committee. I would urge that that's the first thing that you address. There are those that would say that that is a quick fix and doesn't resolve the whole problem. I would probably agree with them. But what it is to us is an immediate solution to the problem of dealing with our school budgets, and it's a solution that needs to be addressed immediately.

On a broader scale -- and again, this is off the cuff as I sit in the back -- I think some thought should be given to, in the context of litigation, approaching it with a Tort Claims Act type of standard, and perhaps, a de minimus relief from the beginning, and I'll explain what I mean by that.

There should be some condition upon the ability of someone to sue a de minimis party. They should have to come before the court and show that a party is a certain percentage

part of the problem before they're even entitled to name a party in a lawsuit, and therefore, start to cause transactional costs.

Once they reach that level and then are entitled to sue that party, the standard of relief for them, and the standard for which those governmental entities should be judged, should be like the Tort Claims Act, not a simple negligence standard. That's the long-standing policy of this State when it comes to governmental entities; the school boards are no less.

With that kind of approach, it will hold up the long-standing policy, and in addition, it will derail those entities that are simply naming entities like school boards as political pawns.

ASSEMBLYMAN OROS: Are there any questions on this? Susan?

MS. HOFFMAN: Yes, I have a couple of brief ones.

You say that the standard should be the negligence standard--

MR. POSTERNOCK: Should be the Tort Claims Act, rather than the negligence standard.

MS. HOFFMAN: --claims act, rather than the negligence standard.

These are actually-- Many of these claims are based on strict liability, are they not?

MR. POSTERNOCK: They're based on CERCLA. With respect to the school boards, they're actually based on the Spill Act, not the Federal law. Our particular clients are simply in this litigation through the State law.

MS. HOFFMAN: Yes.

MR. POSTERNOCK: And there has been some discussion about the fact that we can't fix anything until the Feds do it. As far as the school boards are concerned, that's not true. We're only in the GEMS litigation because of the Spill Act. We are not named via CERCLA.

MS. HOFFMAN: I guess what I'm unclear on is, what is the standard that you are suggesting to be used in order to maintain an action against a non-de minimis party?

MR. POSTERNOCK: My suggestion is -- and again, off the cuff as I sit in the back of the room-- There should be a precondition to even naming de minimis parties to a lawsuit. That means that you have to show that they are a certain percentage of the problem. If you can't show that from the start with some reasonable proof, you can't even name them and then begin transactional costs.

After that, the standard then becomes similar to a Tort Claims Act standard, which is higher than your normal negligence standard, and which is in line with this State's long-standing policy with respect to governmental entities and public entities.

MS. HOFFMAN: Okay, but should that standard then only apply to those de minimis parties that are shown to contribute a certain amount to the problem?

MR. POSTERNOCK: They would only be able to apply to governmental-like entities.

MS. HOFFMAN: Governmental like entities should have that higher standard. And nongovernmental entities would still--

MR. POSTERNOCK: With the precondition that no one should be entitled to be sued unless it can be shown that they are a larger part of the problem than the examples that I just gave you. A $25 invoice, and this school board is spending thousands of dollars.

MR. MORAN: Just quickly?

ASSEMBLYMAN OROS: One more.

MR. MORAN: What would you consider de minimis, number one? And I need clarification on your point about, "We can't do anything until the Feds do." I understand that under RCRA, but I'm not sure that applies to Superfund.

MR. POSTERNOCK: Okay. With respect to my comment about the fixes from the Federal level: The school boards are in the GEMS litigation via the Spill Act, and that is the New Jersey Act. They are not in the litigation at all via CERCLA. There was some discussion that the efforts that are made to fix -- what we would consider fixing the Spill Act -- would be for naught simply because it doesn't parallel efforts to change the Federal law.

MR. MORAN: Maybe I don't understand the preemptions of RCRA

MS. McMICHAEL: That has been said by DEPE in previous Committee meetings; that both have to be settled at the same time, that we don't preempt what the Federal government is doing by settling our problems in a different manner. And we need-- We're asking right now for some kind of relief. We are not abandoning, however, the idea of something that will handle this in future matters, because this is going to be a problem that's going to go on, and we applaud what your Committee is doing for what is going on in the general sense. I mean, we're not negating anything in that regard, please.

MR. MORAN: Can I get clarification from the Department?

ASSISTANT COMMISSIONER MILLER: If I may try.

J O H N F. L Y N C H, JR. ESQ: (speaking from audience) I might be the better one to do that, because I'm the fellow on the other side. I'm Jack Lynch, and I'm on the list. But I think I can explain this question: The general idea of New Jersey relieving the municipalities on the issue of whether to change the Spill Act, although they will still not be under CERCLA.

What the school boards are raising is, the damage differs, because the suit against them is for waste oil, and there's already the Federal petroleum exclusions. So if you change the Spill Act for them and the GEMS case, there's not the same problem with municipal waste in landfill cases.

MS. McMICHAEL: There's a bill right now to do that, A-2264.

K A R L D E L A N E Y: (speaking from audience) If I may go one step further into that.

MR. LYNCH: Yes, please.

MR. DELANEY: (speaking from audience) He is certainly correct. The issue -- the highlight here is -- up to this point we've generally been discussing municipalities or other government bodies relative to their constitution by virtue of trash or garbage, as Lance called it. In this situation, as Mr. Posternock clarified, we're talking about waste oil and other petroleum products that were generated, traditionally generated, and there is a standard of-- The parties begin to change. It's not this -- what a number of folks refer to as the innocuous standard activity generating waste. It's a more traditional hazardous waste type of generator.

The other difference, of course, is that the material we're talking about is, in many cases, a hazardous waste in New Jersey, but would not be a hazardous waste on the Federal level.

MR. MORAN: Specifically, then, the waste oil now?

MR. DELANEY: Waste oil, and that, if I may put a fine point on it-- I realize there are other issues in terms of generation, but when we get to that liability, what Lance said still stands, relative to the issue of the allocation of cash out, orphans' share, and strict joint and several liability.

ASSEMBLYMAN OROS: Would you identify yourself for the record?

MR. DELANEY: I'm sorry. Karl Delaney, I'm a Division Director for the Site Remediation Program.

ASSEMBLYMAN OROS: Very good. Seeing no other questions, I thank you very much.

MS. McMICHAEL: Thank you, Mr. Chairman.

MR. POSTERNOCK: Thank you.

ASSEMBLYMAN OROS: We're doing pretty good on the time. We have to just keep going pretty good.

From the New Jersey League of Municipalities we have John Ross and Chris Carew.

C H R I S O P H E R J. C A R E W: I thank you, Mr. Chairman. I'll be extremely brief. My name is Chris Carew. I am a Senior Legislative Analyst with the New Jersey State League of Municipalities, and I'd like to introduce Special Counsel, John Ross. I'll defer to John so we can get this moving.

J O H N J. R O S S, ESQ.: Thank you very much. Also in the interest of brevity, I submitted statements on behalf of both the League-- Well, the League of Municipalities submitted one. I also submitted one on behalf of the New Jersey Association of School Business Officials, and as brief as they were, I'll try to be even more brief today.

Succinctly stated, the issue that the municipal community has brought to the table, I think, is somewhat misunderstood, and certainly has been misrepresented today. The central issue is not one of what special protection are we going to give municipalities, but rather, whether and to what extent people are going to have Spill Fund liability assessed against them for the simple act of disposing of household trash. That is the issue that, in essence, the organizations that I represent have thrown on the table. That, to a large extent, is the issue that has driven this meeting here today.

And when I say, "To what extent should people be subject to liability?" I mean people. It's just the reaction to the circumstances that it's been the municipal community that's driven this issue because we have been the surrogates who have been sued under this principle. But the reality remains that the relief that we're looking for is going to apply equally, not only to municipalities and school boards,

but to small businesses and private individuals whose materials fit within the definition of household waste and municipal solid waste that we're seeking.

This real person concept takes on real dimensions when you recognize that in more than approximately a third of the municipalities of this State, the municipality has no responsibility in connection to the collection and disposal of household garbage. So with respect to those one-third of the municipalities in the State, if the law continues in its present form, the entities or the individuals who are going to be sued are not the municipalities. The bill is going to go to the customer of the cartage companies who took their garbage out on Sunday night, or Thursday night, or whatever. I think it's imperative that of among all the issues that have to be addressed by the Legislature and by this Committee, I think it's imperative that this public policy issue be addressed.

Some people go and try to disparage that as a piecemeal solution. That piecemeal solution is no more piecemeal than the other actions that the Legislature has taken within the last year or so. First of all, I refer to the bill that was passed in January of 1992 -- or signed into law in January of 1992 -- by which the Legislature created an express right of contribution against generators of all types. Prior to that law being enacted it was speculative whether or not these third-party contribution suits were even allowed. So the Legislature, although I think it was an unintended consequence, not recognizing the connection-- The State actually made this situation worse because they strengthened the club that was being put in the hands of the people who were perpetrating these third-party lawsuits.

The other thing that statute did was, it also created the right for the Department of Environmental Protection and Energy to assign the right to collect triple damages to the proponents of these third-party litigations. So not only is

the right of contribution more express now as the result of recent actions of the Legislature, the penalty provision which was originally created and intended to be held in the hands of the State can now, under some unspecified circumstances, be put into the hands of the private parties.

The second piece of so-called piecemeal action relates to the issue of lender liability that Mr. Reilly was discussing before. Presently sitting on the Governor's desk is a bill that would, in fact, provide some protection to lenders. It was passed by both Houses and is on the desk of the Governor, awaiting his signature.

So the League takes the position and recognizes that the problems raised by the Spill Act and the problems raised by landfills of all natures, particularly sanitary landfills, are great and need to be addressed. But that does not do away, and that does not justify putting on the back burner, the issue of how much and to what extent people should be assessed a de facto garbage tax. The courts have addressed this issue. People in various types of litigation, including the pending, current GEMS case which you're hearing about -- you've heard it talked about in various contexts today -- have had thrust upon them the issue: Does household waste -- does municipal solid waste serve as a predicate for liability under the Act?

And the courts have said, "We understand the policy purposes as to why it should or why it should not. But the fact remains the plain reading of the statute says it should, and if this problem is going to be corrected, it's up to the Legislature."

This issue has been on the table of the Legislature for approximately two years now, and the Legislature hasn't spoken. I respectfully submit that the speculation about the legislative intent back in 1978 and the early '80s is irrelevant now. The Legislature is having an issue squarely posed to them, and if the Legislature does not act, it is, in

fact, telling the taxpayers that they do believe that liability should be imposed on people who throw out their garbage every night -- or once a week or twice a week -- and that is something they accept.

If the Legislature wants to send that message and say, "Okay, we think liability should be predicated on household garbage," then I think we should be looking along the lines of something Assemblyman Albohn has proposed. Create some type of universal funding mechanism to take care of the liability or the cleanup costs that are driven by the municipal solid waste. It's the only fair way of doing it, because otherwise what happens is, if Assemblyman Oros' garbage goes to the GEMS landfill, and my garbage goes to the Pure as the Driven Snow Landfill, okay, we've both thrown out, essentially, the same stuff, but you're going to be a defendant -- or your municipality is going to be a defendant in one of these cleanup costs, and I'm not. The same act, radically different consequences.

So, once again, I encourage this Committee to take the holistic approach that it's seeking, but that does not mean, or shouldn't mean that the issue of whether and to what extent people should be drawn into this Spill Fund, toxic tag litigation-- You know, that should not be put on the back burner.

ASSEMBLYMAN OROS: Are there any questions?

MR. DAGGETT: Are you making a distinction between the-- I'm not sure I'm following you all the way through here. In the case of GEMS, that's a Federal Superfund site. Are you saying that the State Legislature should make some statement with respect to the Federal law? Or are you talking about GEMS with respect to claims made by citizens for damages under the Spill Fund associated with the GEMS site?

MR. ROSS: I'm drawing an analogy with GEMS because the litigation that's being played out in GEMS or Lone Pine, or any of the other Federal cases--

MR. DAGGETT: But that's under Superfund.

MR. ROSS: I understand that; I understand that. But the liabilities and the transaction costs and the predicates for liabilities are analogous, if not identical, to those under the Spill Fund. So, the court cases that have addressed the Spill Fund have, in fact, looked at CERCLA experience by analogy, and have, in fact, said those principles are guiding. What I'm talking about, and you could--

MR. DAGGETT: Let me just interrupt you for a second. You're saying not GEMS, per se, to that Superfund, but for those sites that are not Superfund, but under the Spill Fund-- You're saying, those are the ones you're focusing on?

MR. ROSS: Exactly.

MR. DAGGETT: Okay. That's what I want to know.

ASSEMBLYMAN OROS: Any questions on this side? (no response)

Thank you very much.

I think the last witness that we have is-- Florio left, I think.

MR. DAGGETT: Dale Florio-- I think that's his material. It's still there.

MS. McMICHAEL: He's not testifying.

ASSEMBLYMAN OROS: Oh, he's not testifying. Well, we have Jack Lynch from the Chemical Council.

MR. LYNCH: Mr. Chairman, I am Jack Lynch. I was asked to join the panel the Chemical Industry Association was putting before you. I'm not doing so in a representative capacity. I'm just-- I agreed to do it, hoping that I have something to add, and hoping that from my perspective, if I can pass something along to you for your understanding, we'll all be better for it, I hope.

Originally I was going to testify on A-539. Let me hand these up and I'll sit down and talk about it. (referring to written material distributed to the Task Force)

ASSEMBLYMAN OROS: Jack, would you reidentify yourself for the record?

MR. LYNCH: Yes, sure. I'm John Lynch -- Jack Lynch. I live in Morristown. I was asked by the Chemical Industry Council to join its panel, both on this and a couple of other pieces of legislation, by reason of my experience in the area, in the hope that it would be helpful to somebody. I agreed to do so, but only if I could do it under private -- not a representative capacity. No one has had the right to edit what I've said. This is what I think about it, and if it helps you, fine. And if it doesn't, you know, we'll pick my brain and we'll see where we go with it.

I wrote something for A-539. I got down to the hearing-- I got down to lunch before the hearing at Pete Lorenzo's, and I was told that it had been canceled. I went home. Bernie Reilly was there. They called him in, in emergency, and said, "It's back on." So he got to testify, and he gave you a rough draft of the first of those larger documents because he had it in hand. I had given it to him to give me his views of it. Again, not to edit it.

He came back and reported to me that one of the questions that kept coming up was, "Is it still right to stick it to industry -- local industry -- through the Spill Act, Superfund, whatever, for the waste that's in the municipal stuff because, after all, they're the ones that made it?" I consider that New Jersey industry, as surrogates for world industry, argument, and I supplemented the larger of those two documents with the last few pages to respond specifically to that question.

Then, A-2264 directly involving the GEMS case, where I'm involved, came along, and I wrote something for that. We got to the hearing there and it was canceled, so people could tell us to go off and settle things. So I don't mean to give you a rehash, but having written these things, I thought you

might want to read them. I think they're fairly easy to read. They have some of these concepts, and we'll go from there.

Speaking about today's hearing, I will say that I've seen a very impressive, but diverse array of sophistication in what's been said before you. And also I'm very impressed, and I don't have anything pejorative or critical to say, about what's come back from the panel. I think you folks are really on top of this. I would only bring-- Probably the central thing I would bring to you is that I've seen more reason here today, than I have in practicing heavily in this area for the last six years.

What you are hearing in theory is dramatically, remarkedly removed from what's happening under the Spill Act and Superfund in practice. These are bills of enormous power, and there are those people who are using this power without the kind of reasoned, balanced, public policy considerations that you have before you today.

Not knowing what level of sophistication I was going to encounter in this, I started out prepared to deal with things that I think you folks presume, such as: Is municipal waste hazardous? How bad is it?

I had, for example, the Hazardous Waste Wheel which the State has given out, with its logo on it, and I'll give you four of them. You can pass it around. (witness distributes exhibit) It was published by a private agency, and the State's Siting Commission put its logo on it and gave it out to illustrate that there is hazardous stuff in material. But you folks certainly know that.

I brought my stuff from my basement, which someday will be in somebody's garbage in Morristown, and I can show you hazardous material. It's there. You folks don't need to know that. Perhaps some who have spoken before me might not acknowledge that, but the fact of the matter is, the stuff that goes into my garbage, and went in when I was stripping paint in

an old Victorian house, or taking Polaroid pictures with their embedded mercury batteries, or using chrome plated this, or, like everyone else in the country, putting 50 percent of the pesticides that I buy-- You know, 50 percent of the pesticides sold in the United States for household use don't leave the bottle until they are in the landfill.

I mean, there is stuff going out in the garbage that's not nice. It's there, and I think, Doctor, as you know, and certainly Mr. Kuniholm knows, there are studies from perfectly no-industrial sites as to what's in the groundwater. There are those that have mixed industrial sites, if you look at the groundwater under some of the ones that become Superfund in New Jersey, and it's what you see in the studies, for example, in Minnesota or Wisconsin, of what you expect to find.

New Jersey has a particular problem. The southern half of the State is sand. Most landfills were a sand operation where people scooped out the sand and sold it for roads until they got to the groundwater, waited for the dry season, scooped some more -- they had a dredge that even went further -- and then decided to do the benefit of landfilling, and they put garbage in it. The groundwater goes rushing through it and it doesn't do anybody a whole lot of good, and that's what a South Jersey landfill is about.

In North Jersey we have different problems with clay, but it's still-- You know, basically, people took landfills of 20 years ago as a word, a euphemism, for using land that was not otherwise useful. What we used to call a swamp we now call a wetland, but that's where we put the garbage, and it isn't doing the groundwater any good.

What I'm afraid has happened, and one of the reasons why these things have become an issue, is that, some people have seen, identified in Superfund, "Hey, here's power. We can grab an industry or two and fund what we didn't have enough money to fund before, which is cleaning up all these old

landfills that are a problem." And if you think there is anything significantly different in the groundwater at GEMS, or at Sharkeys', or any of these other ones you can name than there is at most landfills around the country, I think you're just wrong. And you can compare those things, one to the other, and I'd be glad to do it. And we'd get out the studies. You're familiar with them, whether it's by Rathje or whether it's by people in the different state universities around the country looking at it. I can talk about those things more broadly.

Since you have my written materials in front of you, I'm not going to repeat that stuff. I would, hopefully, try to aid the debate that we have here today by talking on a few issues that have been the subject today. This is, therefore, a little bit more ad lib than otherwise.

One of the statements made earlier was that the transactional costs are being caused by the expenditures of funds. I think not. I think the transactional costs largely derive in multiparty sites -- and I'm involved in many of them -- by people trying to be sure that they do only pay their fair share, not the one person who has been identified to go and be the lead party bearing the whole thing. "Oh, good, the State, in its discretion, has chosen me. I will pay the next $16 million," but trying to pass it around, and people coming together, trying to cooperatively figure out how we can each put up a reasonable amount of money for this particular site and move on to the next thing.

The second thing: There has been the suggestion of a broad-based user tax. I think you've -- and I say it in the materials -- you've already decided to do that a long time ago, and it was a wise decision. When you finally decided to regulate the landfills through the PUC, and I guess even after that in the '80 Act, there was a decision to take the costs for those landfills that are going forward -- the ones that Lance

told us about that are now being properly operated -- and to have a sinking fund so that the money will be there to clean it up when it closes. Actually, the operators of GEMS asked for such a sinking fund in the PUC hearings for their operation rate base and were disallowed it. Whether they would have saved it or not, that's another story. It's speculative.

But you decided that you would put the money in the pot for those that are operating and going forward. You also said that, to the extent that there is a landfill that's closed, this fund will help--

Let me just say, those people were taxed two ways: They were required to have a fund to close their own thing. And the continuing landfills were to be taxed to pay into the Sanitary Landfill Industry's Closure Fund, which was to pay for everybody else who was already closed, and to pay for the people who are not yet closed, but sufficiently close to closure that you couldn't put an economic increase in their rates and allow them to stay open. In other words, there was not enough time to amortize without having to charge so high a price that it wouldn't work.

So you decided it would be a current user fee for paying into the past. A good decision, but you then decided to allow the Sanitary Landfill Closure Fund to pay for everybody who figures he's lived too close to a landfill and, therefore, his house value is down, so he can claim against the Fund, and that's been its own separate scandal.

And then, when most of the prices of New Jersey landfills went up so dramatically that people wanted to go to Indiana, and there was regulatory-- The Legislature addressed that, as far as I can tell, through these transfer station regulations and everything. They didn't carry the tax over. If you were going to a New Jersey landfill, you were paying to a Fund which, hopefully, should handle these pre 1970-- You know, those kinds of landfills. But if you're going to an

Indiana landfill through a New Jersey transfer station, that isn't in there. Maybe you ought to look at that. That may be the place to put it. The Sanitary Landfill Fund ought to be funded not just from ongoing landfills, but also from transfer station operations.

You probably know the idea-- This is Jack Lynch's idea; no industry is telling me to say this. Believe me, I could be shot for something that's raised by what you're looking at today.

Some of these costs are so runaway, that I've heard this idea of $600 million. I almost feel, from dealing with these cases, that if you told the Fortune 500 that they could pay $600 million, and never pay for another municipal landfill in New Jersey, we might be able to raise it, okay? That's not my money, but I am in the business in some of these cases of trying to get things out, get money out of them. And I have looked them in the eye, when they're forcing up with money-- I can't volunteer their money, but I can tell you-- And Bernie is over there probably turning nervous.

But I'm saying to you that the costs are so soft, as everyone has pointed out to you, that when you look at Helen Kramer at $185 million; Global at $160 million; GEMS at $70 million; Sharkey's at $66 million original estimate, probably coming in at $35 million; Sayreville Landfill III at $16 million, you're already up to $385 million (sic) and you've only got five of them.

If you turn that into a health issue-- We've got drugs in this country which we will not allow to be funded and paid for by insurance where it will only add $1 billion and will save -- particularly wit a drug with regard to sepsis -- save 22,000 lives a year, that we will not allow to be funded through a loss distribution mechanism of insurance. And we're spending close to $1 billion on five landfills within 10 miles of each other in South Jersey. It's meshuga. It's not risk

based. If the head of the EPA can come out in February and say that secondhand cigarette smoke is 10 times more important than any other contamination they deal with, and we're running around spending how many billions of dollars on landfill leachate, which is part of what the EPA is looking at, so it must be one of those one-tenth risks? Something's out of whack.

The assumption of 100-- Chris asked the question about O&M being what percentage. My estimate is that O&M is probably, in most cases, about equal to capital costs. Most O&M assumptions in pump and treat remedies are assumed on 30 years. Interest rates are low. If you collect the money and you start to pay, and you're earning interest, you collect the money to fund the O&M. You put it in a bank; it earns interest; you get taxed on the interest. So you're only growing at the after-tax rate. Then you're spending it toward a cleanup that may or may not inflate. You have to raise a lot of money. If you assume a 2.75 percent net increase, that's going to cost you $1 million a year for 30 years. You have to assume that you're paying $20 million into that pot for that one year.

And then your question: What happens at the end of 30? I mean, who knows?

The question about protecting the health and environment-- We've already talked about South Jersey geology as being significant. I've already talked about--

I can tell you that before Congress, one of the representatives of DEPE-- We're talking about the higher cap, the cost of the cap being in perspective to the amount of the hazard. They have made decisions based on the fact that we're going to try to get industry stuck on this site -- to pay for this site -- rather than the private sector. In order to be intellectually consistent, we therefore have to increase the cap from one foot to two feet of clay. I made this statement

at a congressional hearing, and the fellows from DEPE said, "Yes, that's right." And that could possibly cost as much as $10 million to $20 million difference at a site. And that's in a congressional hearing record.

Chris Daggett's assumption that things on the Superfund list are not a concern to what we have to deal with is not quite correct. I'm sure it's made in good faith, Chris, but, for example, the GEMS site that you refer to-- While it's a number 12 on the National Priority List, the lawsuit was initiated by the State under the Spill Act, which for eight years of that lawsuit the State refused to add a CERCLA count, because it didn't, for whatever internal reasons, we can only surmise--

MR. DAGGETT: What was the assumption that you said I made?

MR. LYNCH: Well, you were talking about the fact that some of these Superfund sites are markedly different. And you later asked about--

MR. DAGGETT: Markedly different only in that the Federal law covers it, not the State law.

MR. LYNCH: Yes, but it does. I'm saying that the GEMS case, for example, while it's an NPL site, it's being managed under the administration of the Spill Act. That's a State lead site, as you know, but it's also-- The lawsuit has been under Spill Act law up until the fact that the EPA only joined the case in the last, maybe, eight months.

So they're very closely related. It's kind of what the other witness said, the two things are going hand in glove, and parallel, and particularly with regard to the early sites that were added to the list. The hazard presented by them is not significantly different -- even identifiably different -- from the average municipal landfill around this country. In that list I include Sharkey's, specifically, and GEMS among them. These two things are very parallel.

Private sector contracting has been pointed to. I would commend to you that the-- It's been suggested that maybe one have a mixed funding program. A mixed funding program does allow private sector lead with later reimbursement. I think the reason the Federal mixed funding requires the private sector to put everything in first and then pay some of them back is so that the use of the Federal funds does not get involved in Federal sector contracting, because it is more costly.

I know you got the-- The statements from PIRG, I think, were-- I could respond to them; I will not, unless you ask me to.

With regard to the explanation of the connection with the school boards, and I think as a three-time former school board member among other things, in Morristown and Morris Township-- What happened there was the State decided to sue industries which were on a particular tank cleaning company's invoices. And basically, my directions were, "What's good for the goose is good for the gander."

We look at these documents. They're evidence enough to bring us in. "Look, here's industry 'A'. Here's school board 'B'. The amounts of money are the same. It's the same list. It's the same evidence. If we have to get sued for our $250 tank cleaning, bring them in, too." What's wrong is not that it's a school board. What's wrong is that $250 of a tank cleaning, and then they use the waste oil to keep the road from being too dusty so the garbage trucks-- It's enough to bring a company in to be told he's liable for 100 percent of the $60 million cleanup for such little -- less that he's able to lay off on somebody else.

That's what happened there. I bleed for the school boards and the fact that they're brought in for $250 cleanups. That's wrong. But what's wrong is not that they're school

boards, it's that anybody should be subjected to that, and that's what's reality for industry out there, and that's what you're being asked to examine.

The $10 million settlement figure is for all municipalities in that lawsuit, not the school boards; all municipalities including those that brought the municipal waste to the site, and it is massively a municipal waste site.

Lastly, on the League of Municipalities' situation: I know of no case in this State where industry has sued an individual customer of a garbage company that took their stuff to a landfill. There was a case recently decided in Connecticut, a follow-on of the Murtha case, which says you can't bring those kinds of lawsuits. The only instance in New Jersey that I know of of a lawsuit where somebody is suing the customers of the municipal waste collector is being brought by the town of Pennsauken, seeking contributions for its particular landfill. It's the municipality that's bringing this claim.

Industry has instructed me, so far as it seems that I've acted, so far, that there's no further loss distribution to be gained, why go after the individual party? The Murtha case was based on the idea, "Well, statistical evidence will say that a town's garbage contains hazardous material. There's no valid evidence to say that an individual person's stuff contains hazardous material, so we're not going to allow the suit." Both arguments are valid, and really, the only one who has gone beyond it is a township, and that's in Pennsauken.

Those are the issues.

ASSEMBLYMAN OROS: Mr. Lynch, I thank you very much for your testimony. We're running out of time here.

MR. LYNCH: I understand that.

ASSEMBLYMAN OROS: I certainly appreciate--

I have one last witness, Mark Bertneskie? Did you want to read this, or did you want me to read-- You just want to make a statement? There is no affiliation?

M A R K B E R T N E S K I E: I know everybody wants to get out of here.

ASSEMBLYMAN OROS: Yes, we have to get out.

MR. BERTNESKIE: It will take five minutes, if that.

ASSEMBLYMAN OROS: Two minutes.

MR. BERTNESKIE: Two minutes? Okay.

ASSEMBLYMAN OROS: I'm sorry, but we do have to get out. The library closes.

MR. BERTNESKIE: Okay.

My name is Mark Bertneskie. I'm from Hewitt, New Jersey. That's in--

ASSEMBLYMAN OROS: Where?

MR. BERTNESKIE: Hewitt, H-E-W-I-T-T, New Jersey. That's in West Milford, Passaic County. It's on the New York/New Jersey border, by Greenwood Lakes.

I'm just a private citizen. I don't have any affiliation with any group or anything. But I would just like to make some basic comments.

We've heard all sorts of issues about litigation and liability, and I'm not even going to address those because I'm not degreed and I'm not knowledgeable in them. But I'd just like to talk about the landfill issue and how it affects me, personally in a way, because there's a Superfund site in the Greenwood watershed. It's in New York, but it's still going to affect the Greenwood watershed, ultimately. And it's going to affect the Wanaque Reservoir, and that means it's going to effect the drinking water for millions of people in New Jersey.

I guess it's so obvious that I don't even have to say it. The landfill issue doesn't honor any state, county, or municipal border.

When I was a kid growing up, I remember there was a chemical company -- or a chemical conglomerate -- that advertised on T.V. -- sponsored a lot of programs on T.V. --

and their slogan was, "Better living through chemistry." That's true. It gives a higher standard of living, and a better quality of life for all of us, frankly, but it's degraded the quality of the environment and the water resources, and the landfill issue plays into this.

It's degrading our watersheds, our aquifers, our streams, our rivers, our ponds and lakes, and ultimately, our reservoirs and our drinking water, and it's a public health issue.

I'll be quick.

We've had studies recently in the New York/New Jersey highlands. There was a New York/New Jersey highland study by the U.S. Forest Service. There's been the New Jersey Highlands Treasures at Risk Study. There's an ongoing study called The Watershed Strategies for New Jersey. There are hearings going on. And New York has had their New York Water Quality Survey hearings.

A lot of these landfills that you're talking about -- Superfund sites -- are in the highlands of New York and New Jersey. So I'll just talk about New Jersey right now. We're talking about an area of nearly one million acres. Five hundred thousand acres of this is open space, and frankly, it's critical watershed. There are landfills, old municipal landfills, and toxic sites throughout the area.

You're talking about cleaning up these areas in your discussion paper on landfill closure and remediation issues, okay? But the cleanup you're talking about is remediation, and remediation is not cleanup, okay? These sites are still going to be there. I mean, the pyramids have been around for a few thousand years, okay, and how are we going to maintain these sites for a few thousand years as these chemicals continue to leach out? Who is going to pay for this, year after year after year? It's us, the taxpayers, all of us. Whether the corporations pay, or the municipalities pay, the taxpayer is going to have to pay.

What I'm suggesting is why not, instead of remediating these sites, why not have a pilot program -- let's say a 5-acre site, a 10-acre site, a 20-acre site, a 50-acre site, a 100-acre site -- in New Jersey, especially in the highlands area where these watersheds are, and mine the landfills; mine these sites?

These landfills that are 20-, 40-, 50-years old, some of them go back-- They got started in revolutionary times. Waste has been dumped in them from the iron industry in New Jersey that was prevalent in the highlands. These dumping sites, some of them are 200 years old.

Why not mine these sites like we mine the iron out of the highlands? There are recyclables in there, all sorts of metals -- you know, aluminum, copper, iron, all sorts of metals. There are all sorts of plastics, all sorts of plastic fibers. And the organics that are left can be composted.

These organic wastes can be treated. The leachates can be treated. They can be isolated. They can be stabilized. They can be concentrated. All these chemical contaminants can be removed. And we have an example of this in our wastewater and water treatment facilities. We spent $50 million to $150 million building these facilities throughout New Jersey. It costs tens of millions of dollars a year to operate these facilities. Why not build these facilities at some of these landfills and treat the problem at its source before it gets into the water?

I don't know if any of you are familiar with this intended symposium? It's called Land Lab, out in California. I would urge someone from the New Jersey Department of Environmental Protection and Energy, someone from the Landfill Association, someone from the chemical industry, municipal representatives, State representatives, county representatives, to attend one of these sessions.

ASSEMBLYMAN OROS: Mr. Bertneskie, I must-- We cannot continue because we're just not going to pay overtime.

MR. BERTNESKIE: Okay. Let me just have 30 seconds. Most of these organic solvents, these petrochemicals, can be oxidized. They can be oxidized, as articles said recently in "Smithsonian"--

ASSEMBLYMAN OROS: They just passed me a note here that says, "He would be happy to know we in the Legislature are exploring the landfill mining issue." How's that?

MR. BERTNESKIE: Okay, good.

And there is a company in Canada that's working with Hughes Aircraft, right now. They're doing a pilot program on oxidation of chemical contaminants, be they organic or metal, to precipitate them out.

I hope you can set up a pilot program and start mining these landfills, especially in the highlands.

ASSEMBLYMAN OROS: I appreciate your testimony.

MR. BERTNESKIE: Thank you.

ASSEMBLYMAN OROS: I want to thank everyone for attending. I just want to say, anyone who did not get some of this testimony and would like copies, please let us know. And I would appreciate-- Did you get this memorandum from the Committee? It was dated April 23. If you did get it, fine. I would appreciate a response in writing back. If you didn't get it, just let us know who you are and we'll try and get you a copy right now.

I want to thank everyone for coming. Are there any final remarks, Chris?

MR. DAGGETT: What's your timetable on taking action?

ASSEMBLYMAN OROS: Well, my question would be, do you think we need other meetings among us prior to June 4, or would you rather just wait?

MR. DAGGETT: What is June 4? I'm sorry.

ASSEMBLYMAN OROS: On June 4, we're going to sum up, just the Committee, or whenever your recommendation would be.

MR. DAGGETT: So the Committee will get together June 4--

ASSEMBLYMAN OROS: Yes.

MR. DAGGETT: --on its own, and talk about both the input that we have received and anything else that comes in?

ASSEMBLYMAN OROS: Yes. June 4 we will meet here again, and try to put it together as a group.

MR. DAGGETT: Is it a public meeting?

ASSEMBLYMAN OROS: No, no. It will just be--

Are there any comments that you have for now?

MR. KUNIHOLM: Just maybe a suggestion that maybe we circulate amongst us before that meeting some thoughts on what we're going to talk about before we get together, because otherwise I'm afraid--

ASSEMBLYMAN OROS: I thought that would be okay, too. We can do that, too, as a Committee, sure. Because there's a lot of testimony here. A lot of good testimony, I think, was given here today, and the construction of this panel, I feel, is such that the input will -- not only from the Legislature, but also from the private sector--

MR. MORAN: What can the public expect from us, then, after June 4?

ASSEMBLYMAN OROS: On June 4 we will put together, hopefully, a written document that would summarize what we've come up with and any recommendations that we make, with the possibility of policy for future legislation.

I want to thank everyone for coming. I appreciate your attendance. You'll be hearing from us. If any of you need any information, please let us know right now.

Thank you very much.

(HEARING CONCLUDED)

APPENDIX

New Jersey State Legislature

ASSEMBLY ENERGY AND HAZARDOUS WASTE COMMITTEE
LEGISLATIVE OFFICE BUILDING, CN-068
TRENTON, NEW JERSEY 08625-0068
(609) 292-7676

MEMORANDUM

TO: Site Remediation Task Force Members

FROM: Assemblyman Ernest L. Oros ELO

DATE: April 23, 1993

SUBJECT: LANDFILL REMEDIATION AND REGULATION

This memorandum has been prepared for the purpose of providing background and focus to the April 30 meeting of the Task Force for the Review of Waste Site Remediation Programs. The April 30 meeting will consider the remediation and regulation of the 578 known and suspected landfill facilities in the State, 24 of which are federal Superfund sites on the National Priorities List for cleanup. Because the meeting will address only sanitary landfill remediation in the State, this paper focuses on three broad but related issues that may arise in the landfill context: (1) the applicability of the Spill Act to landfill remediation; (2) the uses of the Spill Fund, and (3) the imposition of joint, strict and several liability on dischargers of hazardous substances.

The Spill Act was enacted in 1976 primarily to respond to oil spills from vessels or large petroleum storage facilities and to create a Spill Fund with tax revenue for cleaning them up. Since then, the act has been applied in a much wider context, partly as a result of extensive amendments. Because the act was broadly worded to address the cleanup of any discharge or threatened discharge to water, it soon became the primary mechanism with which the State addressed all site remediation, including discharges on land or underground that threatened streams or groundwater. The scope of the act was broadened considerably when it was amended in 1979 to impose liability on discharges that occurred prior to the 1976 enactment of the Spill Act. These historic discharges covered by the 1979 amendment clearly refer to discharges to land, because any oil spill or other discharge to open water occurring prior to 1976 would have already dissipated. Many of these historic discharges occurred at landfills, which regularly received large amounts of waste containing hazardous substances prior to 1976.

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The way that site remediation is funded in New Jersey has changed with the enlarged scope of the act. The original funding mechanism--the Spill Fund with its tax on major facilities--has proven less effective as a catalyst for cleanups than the joint, strict and several liability that the act imposes on every discharger. That liability allows the Department of Environmental Protection and Energy (DEPE) to require that a party in any way responsible for any part of the contamination of a site must pay for the entire cleanup and removal. The cleanup can thus be accomplished without the delay of finding all of the responsible parties, and the DEPE does not have to expend the considerable resources that would be necessary to obtain payments from all of those parties. The determination of each responsible party's liability is left in the final analysis to the judicial system, where the discharger who is required to perform the cleanup attempts to recoup some of his cleanup expenses by pursuing the other dischargers with contribution suits. The public moneys in the Spill Fund are now used primarily for oil spills and for publicly funded cleanups, which take place chiefly at older sites where no responsible party can be located that can undertake the cleanup.

This short summary shows how the purpose of the Spill Act has expanded, raising a variety of issues. One fundamental question is whether the Spill Act should be re-worked to separate oil spill cleanups from land-based site remediation. Discharges of petroleum, which were the basis of the Spill Act, are specifically excluded from the scope of the federal law that addresses land-based remediation, the "Comprehensive Environmental Response, Compensation, and Liability Act of 1980" ("CERCLA"). Because oil spills and land-based discharges differ greatly in the number and nature of the dischargers and in the nature of the necessary response, and because federal law addresses the two issues separately, the Task Force may decide to recommend amendment of the Spill Act to reflect these differences.

Once these two types of discharges are separated, there is a question of how site remediation should be funded in New Jersey. Is it fair to continue to tax only major facilities, when the Spill Act is now applied broadly to cover prior discharges and discharges on land? If a broader tax were applied, could the joint, strict and several liability scheme be abandoned in favor of a cleanup program that is entirely State-funded? Although this would require a major tax increase or bond act, it would eliminate the high transaction costs involved when Spill Act liability cases drag on for years in the State court system. A major problem with an entirely publicly-funded cleanup program is that it would reject the "polluter pays" principle which has guided the State in recent years. Perhaps a publicly-funded program only for discharges prior to 1976, or only for landfill cleanups, would reflect a sound public policy. Industries would still have an incentive to act in the public good because future discharges would remain their responsibility. Even with responsibility only for prior discharges, the Spill Fund would have a greatly expanded role in the cleanup of several highly contaminated sites.

The nature and use of the Spill Fund is closely related to the next major issue: the imposition of joint, strict and several liability. The Assembly Energy and Hazardous Waste Committee has been faced with this issue in a variety of settings, particularly in regard to municipal liability. As long as responsible parties, who are

mostly large industrial dischargers, are forced to accept several liability for the contamination of a landfill or other site, they will bring contribution suits against every other potentially responsible party in order to relieve themselves of some of the cost of these major cleanups. While this rationale is legitimate and even encouraged in the Spill Act, there have been some problems with this system. Some large companies in New Jersey or across the nation under similar provisions of CERCLA have used the threat of lawsuit essentially to force contributions from small businesses or public entities that do not have the resources for prolonged court battles over liability.

Even legitimate contribution claims against public entities have been questioned as misguided public policy. These claims generally occur in the case of landfill remediations, because landfills are the main sites of public entity discharges. Towns and school boards, however, historically dumped municipal solid waste, which does not contain the quantities of hazardous substances that are the primary sources of contamination at these sites. Even if a public entity has contributed heavily to the contamination of a site, there is an issue of whether taxpayers in a small community should be forced to pay large amounts of money to remediate a landfill which was operated in accordance with the standards that existed at the time of the waste disposal.

The larger the entity that is responsible for the cleanup, the lower the transaction costs and the easier it is to spread the cleanup cost fairly across society. There may be both efficiency and equity in placing the cost of cleanups entirely on industry, which to some extent may be able to pass the cost through in higher prices for products. There may be even greater efficiency and equity in a landfill cleanup program that is entirely publicly-funded, as mentioned in the discussion above. It seems clear that the greater the number of small parties that are responsible for cleanup costs, the more money that will be spent on lawyers and legal battles over liability. The theoretical advantages of some form of "no-fault" site remediation, however, must be balanced against the difficulty of raising a major new tax and the perception that those responsible for the pollution are being subsidized by the taxpayers.

The witnesses at the April 30 meeting may provide different and more specific policy choices than those discussed above. This memorandum has been prepared for informational and discussion purposes only and does not advocate any one approach to the complex and difficult question of landfill remediations. I am enclosing with this memorandum additional testimony that has been submitted since the April 21 mailing.

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Written Statement
Lance R. Miller, Assistant Commissioner
NJ Department of Environmental Protection & Energy
Site Remediation Program

Landfill Remediation Issues
Assembly Task Force on Site Remediation
April 30, 1993

Good Afternoon. My name is Lance Miller. I am the Assistant Commissioner of the New Jersey Department of Environmental Protection & Energy's Site Remediation Program. I am pleased to be here today to discuss an issue of importance to the State and to the Department -- landfill remediation. I would like to start by thanking Assemblyman Oros for his interest in this issue, and his time in coordinating this public hearing.

During this legislative session, the Assembly Energy and Hazardous Waste Committee has heard much testimony -- from local governments, school boards, industry, environmental groups and the Department regarding "municipal liability." The issue of municipal liability is usually associated with the remediation of landfills. However, whether municipal liability is an issue in and of itself; or whether it is a symptom of a larger issue -- landfill remediation -- remains an outstanding policy question.

In recognition of the issues surrounding the remediation of

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landfills, the Department has released a "Discussion Paper on Landfill Closure and Remediation Issues." The purpose of this paper is to facilitate policy discussions and public debate on issues related to landfill closure and remediation.

I would like to briefly summarize the major points contained in the Discussion Paper.

First, and perhaps most important, is the universe, or number of landfills in the State of New Jersey. There are currently 578 known and suspected landfills in New Jersey. There may however, be other landfills about which the Department is not yet aware. For the purpose of discussion today, the universe of currently known and suspected landfills can be broken down in several ways - by operating status and by facility type.

There are 37 operating landfills; 131 landfills that ceased operations after 1982 and which are required to submit closure plans, establish escrow accounts and install ground water monitoring systems; and 410 landfills and suspected disposal sites that ceased operating prior to 1982.

Landfills can also be broken down by facility type. There are 198 "sole source" landfills (landfills which accepted waste typically from on-site operations at an industrial facility); 194 municipal landfills, 67 regional landfills, and 119 "unidentified" landfills (those which the Department has not

been able to confirm their existence or determine facility type).

Of the entire universe of landfills, there are 24 Superfund sites. Another 117 landfills are in some phase of remediation. The remainder will need to be assessed, and possibly remediated at a future date. The Department estimates that, in addition to existing resources for landfill closure and remediation, another $800 million will be needed to properly address all the state's landfills.

Under the state Spill Compensation and Control Act, any party which generated, transported, disposed, or accepted for disposal, hazardous substances at a landfill is liable, strictly, jointly and severally, without regard to fault for all remediation costs of the landfill. The Department will typically negotiate with the owner(s) and/or operator(s) of the landfill and with those who have generated or transported hazardous substances to the landfill to have those parties remediate the landfill site. With the exception of landfill owners and operators, USEPA and the states have not generally pursued local governments for generation or transportation of incidental quantities of hazardous substances which may be present in discarded household refuse. However, other "traditional" responsible parties have pursued local government entities and other businesses for contribution in private third party law suits. This typically results in increased transaction costs and delay in remediation.

This approach is similar to the federal Superfund Program with several notable exceptions -- the state Spill Act contains no legislative guidance regarding "cash-outs" and de minimus settlements.

I should stress here that the issues of transaction costs, municipal liability, litigation and timeliness are not typical of the majority of sites which are remediated under the state Spill Compensation and Control Act and the federal Superfund Law. On the contrary, at sites where there are a limited number of responsible parties, our existing cleanup laws are very effective.

In New Jersey's 12 years of experience with the Superfund Program, much remedial work has been completed. Nearly 50% of our operable units at our state's Superfund sites have been remediated. The state has contracted out for services for 80% of the Superfund dollars we have received on construction activities.

In addition, at any one point in time, the Site Remediation Program oversees 7,000 private party cleanups under the state's Spill Compensation and Control Act, Environmental Cleanup Responsibility Act, Underground Storage of Hazardous Substances Act, and the Water Pollution Control Act.

The goals of the Department relating to landfill remediation

are: to use our existing priority system for evaluating landfills which have terminated operations, but have not been properly closed consistent with Department closure requirements; identify responsible party funding sources, where appropriate, to pay for proper closure; expedite the review and approval of closure plans submitted pursuant to state law; and, where necessary, remediate sites that are polluting our environment. Generally, these are the same steps the Department would follow in remediating any contaminated site.

At the present time, the Department only has one option for remediating closed landfills that have not established sufficient funding to remediate the site -- the Spill Compensation and Control Act. Under authority of the Spill Act, the landfill will be remediated. However, because of the large number of responsible parties at landfill sites, there will be significant transaction costs. The Department will incur costs in identifying and negotiating with potentially responsible parties. Potentially responsible parties will incur costs defending their position on their alleged liability, negotiating an appropriate allocation of responsibility with other responsible parties, and in suing, or in being sued in private contribution suits.

The Discussion Paper is intended to highlight the many policy issues and other questions: should the Department address landfills as a separate category of cleanups; or should these

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sites be handled on a "worst-first" basis, along with the mix of other sites requiring remediation? Should the legislature limit liability of certain parties in landfill cases? Is it in the public interest for government or private industry to litigate in an attempt to bring in the thousands of potentially responsible parties at landfill cases? Or, is it best to abandon cost recovery and look for a more broad based solution?

The Department hopes that the Discussion Paper will serve as a focal point for discussion among all interested parties. We hope that this paper will focus discussion on the true issues, and not the symptoms. We are also hopeful that our state legislature, and our federal delegation, will actively participate in the debate on this paper -- this Summit today is an excellent starting point for this debate.

Thank you for the opportunity to be here today. I would be happy to answer any questions you may have.

DISCUSSION PAPER ON LANDFILL CLOSURE AND REMEDIATION ISSUES

New Jersey Department of Environmental Protection and Energy
April 1993

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State of New Jersey
Department of Environmental Protection and Energy
Site Remediation Program
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Scott A. Weiner
Commissioner

Lance R. Miller
Assistant Commissioner

APR 12 1993

Dear Resident,

The Department of Environmental Protection and Energy is pleased to provide you with the attached "Discussion Paper on Landfill Closure and Remediation Issues."

The purpose of this paper is to facilitate policy discussions and public debate on landfill closure and remediation issues. The Department anticipates that these discussions will result in legislative and administrative action to address the issues surrounding the closure and remediation of New Jersey's landfills. In preparing this document, the Department has undertaken a thorough review of the various programs involved in the closure and remediation of our landfills. This paper describes and summarizes the regulatory mandates, administrative requirements, and technical and institutional considerations pertinent to landfill closure/remediation.

The issues presented are complex and of such consequence that, before any program changes are made, policy makers must have the benefit of comments and input from all interested parties. I encourage you to review this paper and share your views with the Department. In the near future, public meetings will be scheduled to provide a forum to fully debate the options for addressing landfill closure and remediation issues.

Written comments concerning this report should be sent to:

Anthony J. Farro, Director
Publicly Funded Site Remediation
401 East State Street, CN 413
Trenton, New Jersey 08625

Your interest and input in this subject is valued by the Department.

Sincerely,

Lance R. Miller
Assistant Commissioner
Site Remediation Program

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ACKNOWLEDGEMENTS

This report was prepared by the Landfill Strategy Committee under the direction of Assistant Commissioner Lance R. Miller.

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EXECUTIVE SUMMARY

PURPOSE

The purpose of the "Discussion Paper on Landfill Closure and Remediation Issues" is to facilitate policy discussions and public debate on issues related to landfill closure and remediation. This report describes the issues, status and potential solutions pertinent to the proper closure of the 578 known and suspected New Jersey landfills.

The goals of the Department relating to landfill remediation are: to establish a priority system for evaluating landfills which have terminated operations, but have not been properly closed consistent with DEPE closure requirements; identify responsible party funding sources, where appropriate, to pay for proper closure; expedite the review and approval of closure plans submitted pursuant to state law; and, where necessary, remediate sites that are polluting the ground and surface waters of the state. To this end, the Department will be seeking the advice and guidance of the New Jersey Legislature and other interested parties to address the state's landfill universe in the most cost effective and environmentally sound manner.

The report highlights the many questions that need to be answered including: should the Department address landfills as a separate category of cleanups (e.g. notwithstanding environmental impacts) or, should these sites be handled on a "worst first" basis, along with the mix of other sites requiring remediation? Should the Legislature limit liability in landfills cases? Is it in the public interest to require cost recovery efforts in multi-generator landfill cases or, is it best to abandon cost recovery and look for a more broad-based solution?

INSTITUTIONAL ISSUES

A guiding principle of the Department's Site Remediation Program is the belief that parties responsible for contamination should pay the cost of clean-up activities at contaminated sites. This is supported by the strict, joint and several liability and treble damage provisions contained in New Jersey's Spill Act and the Federal Superfund Law. However, landfill cases often include two unique issues that undermine that principle. They are: 1) the transactional costs associated with cases where many parties generated and/or deposited waste material (multi-generator cases); and 2) municipal liability for cleanup of landfills.

Multi-generator Transactional Costs - Negotiating responsible party liability in multi-generator landfill cases has proven to be a difficult, time consuming and expensive process. Sorting out who dumped what, when and the degree of environmental impact that resulted as a consequence of that action, in many cases, takes years. These "transactional costs" translate into considerably increased administrative overhead without addressing the impacted environment. Hundreds of hours of staff time must

be expended during the study phase of a cleanup documenting culpability in a legally defensible manner. Considerably more time must be expended in negotiations and court actions to settle liability issues.

In many multi-generator cases the strict, joint and several liability scheme has resulted in a chain reaction of litigation, where significant "transactional costs" are incurred independent of the environmental concerns. It begins with government taking action against a potentially responsible party (PRP) to initiate a cleanup. In response, the PRP, feeling unfairly singled out, initiates suits against other PRPs in order to spread the cost. In turn, the PRPs, faced with a share of the liability, sue their former insurance companies under a general liabilities claim for a portion of the cost. Insurance companies bring suit against other insurance companies and PRPs; and enormous resources are expended without cleaning up contaminated sites.

Strict, joint and several liability is a reasonable and effective approach for remediating sole source (single responsible party) landfill cases where there is a viable responsible party, in lieu of using public funds. However, in many instances, the transactional costs associated with settling multi-generator cases are so high they may not be cost effective.

Municipal Liability - At landfill sites undergoing remediation, both the state and federal government have pursued municipalities for cleanup costs when a municipality was the owner or operator of the landfill or when the municipality acted as a "traditional" responsible party. However, municipalities that contributed small amounts of hazardous substances to a landfill through disposal of discarded consumer products collected from households, have been sued by "traditional" responsible parties for a share of the remedial costs. To the extent that governmental entities did not undertake collection and disposal activities for commercial gain, it may be justifiable to limit or offset their share of the remediation costs. At the federal level, U.S. Senator Frank Lautenburg and U.S Representatives Robert Torricelli and Chris Smith are sponsors of legislation to address this issue; Assemblywomen Farragher and Wright are sponsoring legislation at the state level.

The issue of whether strict, joint and several liability is an appropriate mechanism to clean up municipal landfills needs to be discussed and debated with the Legislature to arrive at a consistent policy that will make effective use of scarce resources. Additionally, the Department will work with the Legislature to structure the long term funding measures needed to implement the selected program.

FUNDING OPTIONS

In the past, the Legislature has approved a number of laws to address the costs associated with proper landfill closure. Specifically, the Sanitary Landfill Facility Closure and Contingency Fund Act (N.J.S.A. 13:1E-100) mandated the establishment of escrow accounts for sanitary landfills. In addition, the former Board of Public

Utilities ordered facilities under tariff jurisdiction to establish supplemental closure accounts to ensure proper revenues for long-term landfill closure.

The funds are collected during operation, set aside, and dedicated to closure and post closure care of each regulated landfill. As of December 1992, the combined escrow accounts balance totaled $344 million. Unfortunately, only a small percentage of the State's regulated landfills have accrued sufficient funds to meet the closure requirements.

This Report estimates that total landfill closure costs including remedial measures will exceed $1.1 billion. Based on this estimate over $800 million will be needed to fund landfill remediation. Funding options that could be used to implement a comprehensive program are discussed below.

Partial Government Funding - Under this option, a government-financed funding program would provide a partial cost subsidy to responsible parties for landfill remediation. Funding could be made available for either publicly or privately owned facilities, or both. The level of funding could vary from a small amount to a major subsidy. In the event that the responsible party(ies) is unable to pay or is unknown, the Department could access the fund for the total cost of remediating a landfill.

Full Government Funding - Under this option, a funding program would pay 100 percent of the cost of proper landfill remediation. This option would only be available to municipal solid waste landfills that were owned and operated in the interest of the community and not operated for commercial gain. In this way, the landfills that qualify for full government funding would be cleaned up and closed under a public works or grant type program. The percentage of the universe that would qualify for full funding has not been determined.

(The source of funds for partial and full government funding options would be generated from a dedicated tax on sources other than the general public.)

User Funding - An alternative to private versus governmental funding for remediation of terminated landfills is user funding. This option proposes establishing a government funding program that would rely on a solid waste tax, collected from present users (i.e. the general public) to pay for past disposal activities.

CONCLUSION

This report provides information on the status of existing programs related to landfill closure/remediation and data on which to structure a short and long-term legislative and administrative strategy. Specifically, this report will identify the universe of landfills that have been historically active, preliminarily examine their closure needs, and present a range of technical, financial, and institutional options on which to structure a comprehensive landfill remediation plan.

The Department welcomes the opportunity to meet with State and Federal policy makers and other interested parties to discuss and debate the issues presented in this report. It is only with their input that an acceptable landfill remediation plan can be formulated to address the entire landfill universe.

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DISCUSSION PAPER ON LANDFILL CLOSURE AND REMEDIATION ISSUES

I. BACKGROUND

Each year New Jersey residents and businesses generate approximately fourteen million tons of solid waste. Historically, this waste material has been deposited in landfills. Prior to the 1970's there were few statewide regulatory requirements governing the manner in which solid waste was landfilled. At present, New Jersey has among the most stringent design and environmental performance requirements for new landfills of any state in the nation. Nevertheless, the legacy of past landfills that were built without environmental controls and/or were improperly closed remains a significant challenge facing the state.

Prior to the creation of the Department of Environmental Protection (DEP) in 1970, solid waste or refuse disposal was regulated by Chapter VIII of the State Sanitary Health Code and enforced by the New Jersey Department of Health and local Boards of Health. In 1970, the Solid Waste Management Act was signed into law, granting DEP broad authority to regulate solid waste. Also, in 1970, the State legislature enacted the Solid Waste Utility Control Act which brought the Board of Public Utilities (BPU) into the regulatory scheme.

Since that time, regulatory oversight has remained relatively stable. In 1991 the BPU was renamed the Board of Regulatory Commissioners and consolidated, as an "in but not of" entity, within the DEP with the latter denominated as the Department of Environmental Protection & Energy (DEPE). Responsibility for rate setting at privately owned commercial solid waste facilities resides with the Division of Solid Waste Management serving as staff to the Commissioner of the DEPE. In addition, oversight of the collection, disposal and utilization of solid waste as well as closure of non-hazardous sanitary landfills has been vested in the Division of Solid Waste Management.

On July 12, 1991 the Site Remediation Program was created within DEPE to consolidate all contaminated site cleanup activities, including landfill remediation. As a result, responsibility for developing a statewide landfill closure and remediation strategy was assigned to the Site Remediation Program.

To protect public health and the environment, the Site Remediation Program anticipates that some type of remediation activity will be required at most of the landfills that have been active within the last thirty years. The appropriate remediation plan for a given landfill is driven by site conditions and regulatory requirements.

A landfill can be broadly defined as any location where waste material is deposited for more than a six month period. The definition of a landfill can be

further refined to include the type of waste material deposited. Definitions of the four most common types of landfills based on the type of waste received are listed below.

Municipal Solid Waste Landfills: landfills containing primarily municipal solid waste, which is refuse generated by the general public from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, plastics, leather, rubber, and other combustible materials and noncombustible materials such as metal, glass, and rock.

Industrial Waste Landfills: landfills which accepted primarily industrial waste. Industrial waste typically includes process waste such as ashes from power plants, sludges from paper mills or sand wastes from foundries.

Hazardous Waste Landfills: landfills containing primarily hazardous waste which was disposed of after the adoption of New Jersey's hazardous waste regulations.

Demolition Waste Landfills: landfills containing primarily construction debris consisting of wood, metal, rock and masonry products.

The most significant environmental threats posed by improperly closed and pre-environmental regulation landfills are summarized below:

1. Leachate Migration

   a. Natural precipitation or ground water percolating through waste material in a landfill produces a leachate with varying concentrations of pollutants. If measures are not taken to contain the leachate within the landfill, there is a strong probability that it will migrate and eventually commingle with surface and/or ground water causing potentially serious water resource damage. This is especially true if potable water supply wells are impacted by the contaminated ground water.

   b. Many landfills in operation prior to state environmental laws accepted all types of waste, including those now characterized as industrial and hazardous wastes. Therefore, some percentage of the landfill universe is or will produce a hazardous leachate. Many of the closed landfills that accepted significant quantities of hazardous wastes have been discovered and are being addressed by the Site Remediation Program. However, there are still dumps being discovered and investigated that contain high concentrations of industrial and chemical wastes.

   c. Typical municipal solid waste contains minute amounts of many household hazardous wastes. Paints, cleaning agents, batteries, solvents and pesticides/herbicides are some of the household items containing hazardous constituents. When small amounts are aggregated at a

disposal site, a hazardous leachate may be produced resulting in pollutants being released into the environment.

2. Gas Build-up (Methane and other toxic gases)

   Deposition of the waste materials in landfills often results in the production of large volumes of methane gas and potentially other toxic gases. Unless the gas is allowed to vent in a controlled manner, it can migrate below the surface and cause serious risk of fire, explosion or human and environmental exposure both on and off-site.

3. Grading And Cover Failure

   a. Poorly graded landfills may contain depressions and/or exposed objects that are a safety hazard if unauthorized persons enter the landfill. Additionally, this condition increases the infiltration of precipitation thereby increasing leachate generation. Further, inadequate grading and drainage structures can generate off-site flooding and runoff problems for adjoining property owners.

   b. Lack of vegetative cover can result in erosion and/or slope instability. Erosion can eventually lead to slope failure and potentially dangerous mud slides. Lack of cover may also result in exposed waste material which can provide a haven for insects, birds and rodents creating an environment for the spread of infectious organisms.

In excess of 300 million tons of waste material has been deposited in New Jersey's landfills over the last three decades. The inventory of landfills that contain this material must be carefully managed to minimize the types of problems described above.

II. UNIVERSE OF CONCERN

In outlining a landfill remediation strategy, it is first necessary to frame the universe of concern. This report addresses the entire universe of landfill sites which, depending on their termination date, operational status, or ownership type come under various regulatory requirements and financial programs. Although the "Sanitary Landfill Facility Closure and Contingency Fund Act", N.J.S.A. 13:1E-100, limits the requirements for submittal of closure plans to those facilities in operation after January 1, 1982, it is important to understand the larger "universe" of landfills that may require remediation.

New Jersey's landfill inventory consists of a total of 578 known and suspected facilities. This number includes 24 Superfund sites and approximately 117 additional landfills that are in some phase of remediation. Additionally, through

the New Jersey Pollutant Discharge Elimination System (NJPDES) program, limited ground water data is available for over 50% of the state's landfills.

Table 1 summarizes the primary categories that drive the landfill evaluation process: operational status/date of closure, regulatory status and facility type. Following the table is a detailed explanation of each of the categories.

Table 1

Universe of Concern

Regulatory Status	Facility Type	Pre-1982 Closure	Post-1982 Closure	Presently Active	Totals
Registered:	Regional	29	23	12	64
	Municipal	81	83	3	167
	Sole Source	69	25	22	116
	Totals	179	131	37	347
Unregistered:	Regional	3	n/a	0	3
	Municipal	19	n/a	0	19
	Sole Source	53	n/a	0	53
	Unknown	107	n/a	0	107
	Totals	182	n/a	0	182
Unconfirmed:	Municipal	8	n/a	0	8
	Sole Source	30	n/a	0	30
	Unknown	11	n/a	0	11
	Totals	49	n/a	0	49
	Grand Totals	410	131	37	578

A. Operating Status - Landfill facilities can be conveniently subdivided into three subsets based upon a landfills termination date. This categorical division is based upon language contained in N.J.A.C. 7:26-1 et seq. wherein all landfills that operated after January 1, 1982 require implementation of a landfill closure plan.

Subset One includes all operating landfills in the State. Currently, there are 37 operating landfills in New Jersey, regulated under authority of N.J.A.C. 7:26-1.1 et seq. The Division of Solid Waste Management(DSWM), Bureau of Landfill Engineering has maintained primary responsibility for regulating this group. Most have established environmental controls such as leachate collection, liners, caps and grading plans. Additionally, a NJPDES Discharge to Ground

Water (NJPDES/DGW) Permit is required in accordance with N.J.A.C. 7:14A-6. As a result, the thirty-seven operating landfills should not require remediation above what is specified in the individual closure plans, submitted as a condition of receiving an operating license.

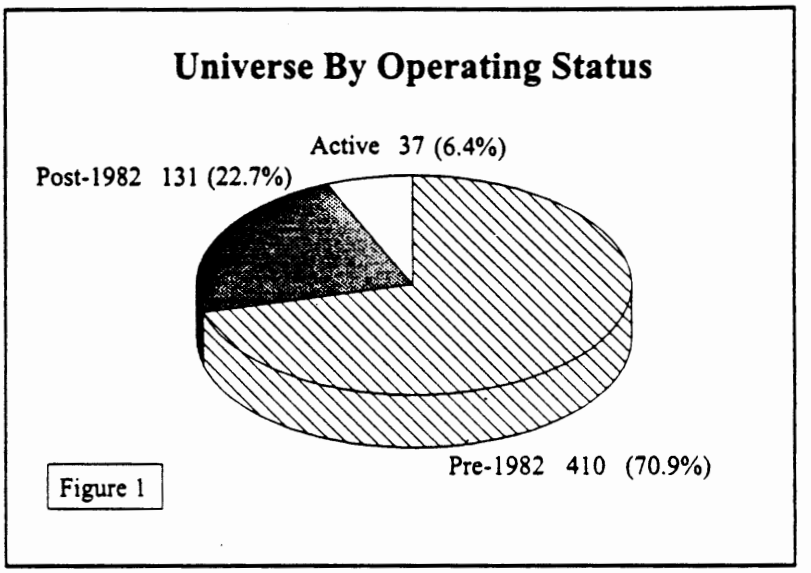


Figure 1

The second subset are landfills that ceased operating after January 1, 1982. There are 131 post-1982 landfills that are required to: 1) submit closure plans in accordance with N.J.A.C. 7:26-1.1 et seq.; 2) establish escrow accounts for closure; and 3) install NJPDES ground water monitoring systems in accordance with N.J.A.C 7:14A-1. The lead group for implementing closure has historically been DSWM, with ground water support provided by the Ground Water Quality Element through issuance of NJPDES permits. Approximately 26 landfills in this group have met all the requirements for closure plan approval and are in the post closure care period.

The third subset includes landfills and suspected sites that ceased operating prior to 1982. It is estimated that a total of 410 landfills are in this subset. Many of these cases will require a pre-remedial site assessment to characterize site conditions and allow prioritization for remediation.

In this group are approximately 210 solid waste landfills that ceased operating prior to 1982 and were issued NJPDES Discharge to Ground Water permits. These pre-'82 landfills were affected by a 1989 New Jersey Supreme Court ruling known as Vi-Concrete v. State of New Jersey, Department of Environmental Protection, 115 N.J. 1 (1989). In this case the court ruled that the NJDEP did not have the authority to "issue (NJPDES) permits categorically to owners of closed sanitary landfills absent a substantial basis for DEP's belief that the landfill is discharging pollutants into state waters." The decision invalidated the NJPDES/DGW permits for these landfills, thereby eliminating an important tool to evaluate landfill leachate contamination. These landfills are being addressed in accordance with standard procedures for any contaminated site and will be remediated based on environmental priority.

B. Regulatory Status - There are three broad classes of facilities that must be addressed under regulatory status; registered landfills, unregistered landfills and unconfirmed landfills. There are 347 facilities known to have accepted

solid waste that have been registered with the DEPE's Division of Solid Waste Management. Of these, 179 ceased operation prior to January 1, 1982, and are not required to submit closure plans under current regulations. Plans are required for the remaining 168 landfills (131 closed post-1982 plus 37 operating landfills).

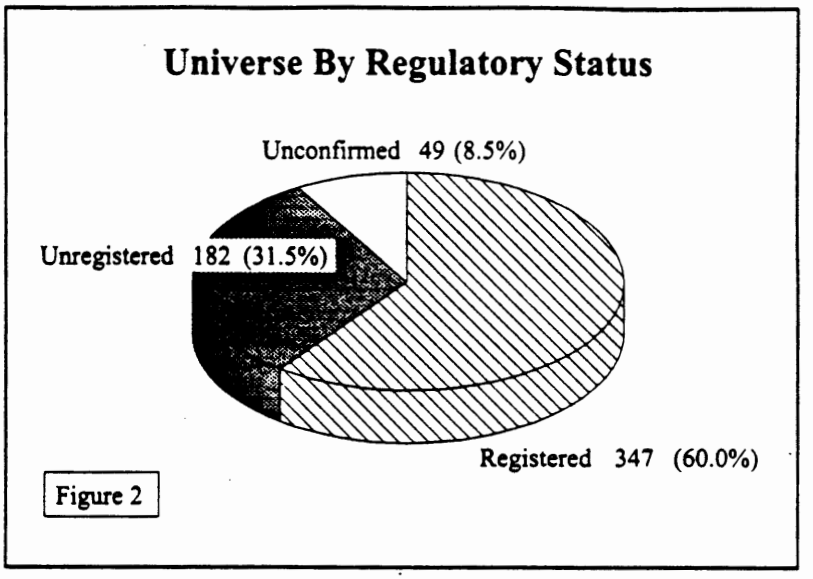


Figure 2

As the Department discharges its various program responsibilities, it occasionally locates previously unidentified landfills. Specifically, the Environmental Cleanup Responsibility Act (ECRA), the Sanitary Landfill Disruption Approval Program, and NJPDES programs have discovered a large percentage of the 182 "unregistered" landfills, through the regulation of local development and property sales activities. While these sites are known to have been used for solid waste disposal, they are categorized as "unregistered" because they did not have solid waste facility permits during operation.

Finally, an additional 49 "unconfirmed" landfills have been identified through surveys performed by the USEPA in the 1970's and other sources. These "unconfirmed" sites have not undergone detailed evaluation. Some may not have ever actually operated as solid waste facilities, although from available information it is probable that others were used for landfilling activities.

C. Facility Type - In assessing the financial capability of responsible parties for closure activities and applicable remedial measures, it is important to note that the Department divides the universe into four broad facility types: 1) privately or commercially operated regional landfills, including those operational sites with a regulated tariff issued by the DEPE; 2) municipally owned and operated facilities which do not charge tipping fees and whose landfill operations were financed by revenues generated from the tax base of the community; 3) private, sole source landfills which only accept waste generated on-site or as part of a specific industry's waste stream, such as a business landfill used for the disposal of construction debris or tree stumps, or, a company landfill used for nonhazardous industrial waste; and, 4) known and suspected landfills with unidentified responsible party(ies).

The significance of subdividing the universe by facility type is that it helps explain the complex nature of financing the closure of landfills (see Section VI, Funding Sources for more detail).

As figure 3 illustrates, there are a large percentage of landfills that were/are municipally or regionally operated. Given this fact and an obvious shortage of dedicated funds, the most pressing question posed by this plan is "how will the remediation of municipally and regionally operated facilities be funded?" The concern is that a disproportionate share of the cost of landfill remediation may be borne by the public through the expenditure of local tax revenues and/or State funds. Further, because assigning responsible party liability in multi-generator cases is often entangled and time consuming, up-front expenditure of public funds may be necessary to remediate landfills which pose an immediate threat to human health and the environment. There will be more discussion on this point throughout this report.

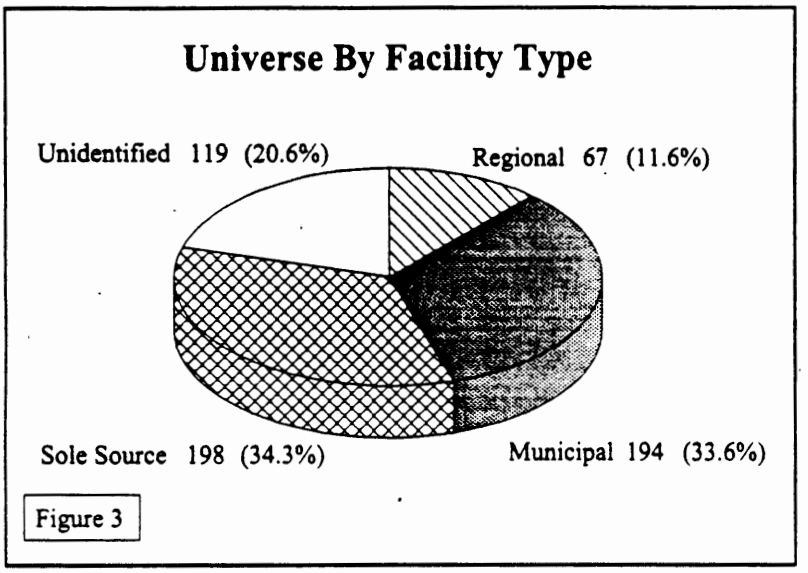
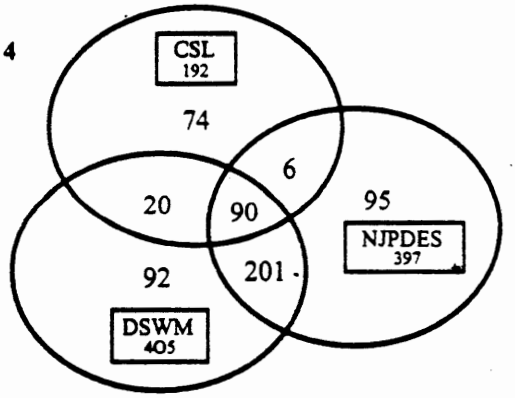


Figure 3

NOTE ON COMPILING THE UNIVERSE OF CONCERN

The inventory was compiled from three databases: the Division of Solid Waste Management (DSWM) database; the New Jersey Pollutant Discharge Elimination System (NJPDES) database; and the Site Remediation Program's Comprehensive Site List (CSL).

Figure 4



Database Overlap Comparison

CSL Only	74
DSWM Only	92
NJPDES Only	95
CSL & DSWM	20
CSL & NJPDES	6
DSWM & NJPDES	201
CSL, DSWM & NJPDES	90
Total	578

Total Landfill Sites = 578

Although there is considerable overlap, unique landfill information is available from each of the three databases. As a result, the following data qualifications must be mentioned.

1. A pre-remedial site assessment program will be invaluable in clarifying the exact number of landfills that are of concern. For instance, there may be landfills that never actually received waste or may have received waste types that are not of concern, while other former landfill sites may have been developed for residential or commercial use.

2. Substantial amounts of landfill specific ground water data already exists through the NJPDES program. This information can be used to make a baseline assessment of conditions at a large number of landfill sites. The end result will be a better defined universe of concern and a good starting point for prioritizing landfill sites requiring remediation.

3. A portion of the universe of concern listed in this document were closed in accordance with solid waste regulations, but must be reviewed for residual contamination to assure that no further action is required.

4. Contiguous sites involving multiple owner/operators or sites that were sequentially expanded have been separately itemized, but may be successfully remediated as a single facility.

III. LEGAL REQUIREMENTS FOR CLOSURE

The problem of inadequate landfill closure stems from an historic lack of comprehensive environmental regulation and financial planning. Prior to 1970, solid waste or refuse disposal was regulated by Chapter VIII of the State Sanitary Health Code. Environmental controls were minimal and statewide landfill registration was not required. Therefore, the location and types of waste buried at many landfills sites is unknown. This problem has been exacerbated by a lack of financial assurance for closure by the owners and operators of these sites during facility operation.

The requirements for closure of landfills operating after January 1, 1982 are established by regulation, at N.J.A.C 7:26-2A.9, promulgated under the Solid Waste Management Act, (SWMA) N.J.S.A. 13:1E-1 et seq. and the Sanitary Landfill Facility Closure and Contingency Fund Act (Closure Act), N.J.S.A. 13:1E-100 et seq., amending the SWMA. Landfills operating between 1970 and January 1, 1982 are outside the scope of the rule. Landfills operating after 1970 were subject to some final cover and maintenance requirements imposed by earlier regulations. The Closure Act more specifically recognizes the need to close all landfills to protect human health and the environment and imposes liability for closure costs and associated damages upon landfill owners and operators, and the Sanitary Landfill Contingency Fund. Closure of pre-1982 landfills is required by the plain language of that statute, even though the existing regulation does not cover them.

The closure of a landfill may require compliance with a variety of other programs, depending on the activity and the location of the landfill (See the discussion of

permitting and Applicable or Relevant and Appropriate Requirements (ARARS) on page 22). Whether these other programs would apply is determined by the scope of a specific program rather than whether the landfill ceased operation before or after January 1, 1982. For the most part, these programs would be triggered by remedial activities for closure, such as a NJPDES permit for discharge of treated leachate.

This section on legal requirements for closure is therefore divided into three parts: sanitary landfills operating after January 1, 1982; sanitary landfills operating before January 1, 1982; and remediation of contaminated landfills under the authority of the New Jersey Spill Compensation and Control Act. Other requirements for specific remediation activities are discussed in Section IV.

A. Closure of Landfills Operating After January 1, 1982

N.J.A.C. 7:26-2A.9 should be referenced for a complete list of requirements but certain provisions of the rule are highlighted below.

The post closure care period is 30 years unless this period is reduced or extended by the DEPE, after public notice. The operator must submit a Closure and Post Closure Care Plan that provides for the design, implementation and maintenance of: 1) a Soil Erosion and Sediment Control Plan certified by the local soil conservation district pursuant to the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq.; 2) final soil and vegetative cover; 3) run-on and run-off control; 4) ground water monitoring in accordance with the NJPDES rules, N.J.A.C. 7:14A-1 et seq; 5) a methane gas venting system; and 6) a leachate collection and/or control system.

The rule lists tasks, not permits, although a permit may be required to accomplish a particular task. Because the same kind of activities and permits might be required to close landfills not covered by this regulation, Section IV will address permitting applicable to all landfills.

Finally, N.J.A.C. 7:26-2A.9 includes the requirements for a financial plan. In addition to a Care Plan (engineering/environmental provisions) the financial plan includes the need to have full-funding and financial assurances. It requires that closure funds, including post-closure funds, are to be wholly dedicated and set aside for each specific site.

B. Closure of Landfills That Operated Before January 1, 1982

The Closure Act establishes certain statutory obligations that apply to all landfills, including those not covered by the regulations. Owners and operators are liable for proper operation and closure. N.J.S.A. 13:1E-103. Closure activities can be defined as all measures the DEPE requires to prevent, monitor or minimize pollution or health hazards, including "placement of earthen or vegetative cover, the installation of methane gas vents or monitors and leachate

monitoring wells at the site of the sanitary landfill facility..." N.J.S.A. 13:1E-102(a). The DEPE may require such activities on a case by case basis under the authority of the statute or may promulgate regulations to do so. The Sanitary Landfill Contingency Fund is strictly liable for damages including costs associated with these kinds of activities where necessary to protect the public health, safety and welfare. N.J.S.A. 13:1E-106(a)(4).

Landfills operating after 1970 were required by regulation to have 24 inches of final cover. Regulations effective in 1974 mandated gas venting and monitoring wells for new landfills, and imposed maintenance requirements after operations ceased. Those regulations were substantially amended in 1987, when the current closure regulations were adopted in their present form.

Accordingly, while closure activities are not specified by regulation, measures to protect human health and the environment appear to be required by the statute. The Supreme Court in Vi-Concrete read the Closure Act to impose closure obligations for landfills that ceased operations before January 1, 1982, the effective date of the Act. The Court indicated that the Fund could be used to pay for measures the DEPE considers necessary to protect human health and welfare. The claim would be made by the current owner in that case, and DEPE would acquire subrogation rights against the owner and operator of the landfill. It is unclear whether the DEPE could file its own claim against the Fund, although the Statute does not preclude it.

Prior to the Supreme Court decision in Vi-Concrete, the DEPE's regulatory position was that all landfills, whether closed, non operating, or currently operating, discharge pollutants to ground water and therefore required a New Jersey Pollutant Discharge Elimination System (NJPDES) ground water monitoring permit. The Court held that DEPE had the statutory authority to require ground water monitoring under a NJPDES permit, but that there must be a sufficient basis for believing there is a discharge to ground water[1]. DEPE could promulgate regulations showing the technical basis applicable to closed landfills or unilaterally issue a permit pursuant to N.J.A.C. 7:14A-2.1(d) to any landfill where it had evidence of a discharge.

The existing regulations leave a significant class of sanitary landfills that ceased operating before January 1, 1982 without a specific requirement that they have a NJPDES permit. The authority to require permits solely for leachate at such landfills may be limited to discharges that occurred after the effective date of the Water Pollution Control Act in 1977 because the trend in recent court decisions[2] is moving toward limiting the term "discharge" to the

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1 The Water Pollution Control Act (WPCA) prohibits any discharge of a pollutant without a permit issued under the NJPDES program.

2 State Department of Environmenal Protection v. J.T. Baker Co. 234 N.J. Super. 234 (Ch. Div. 1989).

initial dumping or spilling and not continued leaching. NJPDES permitting for remediation activities is discussed further in the section on permitting and ARARS (see page 22).

C. New Jersey Spill Compensation and Control Act (N.J.S.A. 58:10.23 et seq.)

The New Jersey Spill Compensation and Control Act (Spill Act) provides for the cleanup and removal of a discharge of a hazardous substance. The Spill Act would apply where a hazardous substance is discharged to or from a landfill. The DEPE may, at its discretion, conduct cleanup activities, drawing on the Spill Fund, or direct the discharger to clean up. Although the Spill Act does not specify the activities required for cleanup and removal, such activities would be similar or identical to those required under the Closure Act. Remedial objectives would likely include ground water remediation/monitoring, gas venting, leachate collection and runoff control.

IV. TECHNICAL APPROACHES AND PERMIT REQUIREMENTS

From a technical perspective, there are three broad practical approaches for closing out a landfill case:

1. Ground Water Monitoring without Remediation
2. Terminate Monitoring Without Remediation
3. Remediation
   a. Followed by Cessation of Ground Water Monitoring
   b. Followed by Continuing Ground Water Monitoring

1. Ground Water Monitoring without Remediation

All operating landfills are required to have a NJPDES/DGW detection monitoring network. All post 1982 landfill closures are required to have a ground water monitoring network. Ground water monitoring without remediation may be selected for post closure care at any landfill closure regardless of when it operated.

2. Termination of Ground Water Monitoring without Remediation

Cases regulated by valid NJPDES permits (post 1982 landfills, landfills with demonstrated contamination and DSWM approved landfill disruptions) may be terminated under one of two scenarios: when the required 30 year post-closure period ends; or when there is no continuing statistically significant exceedance of ground water quality standards (GWQS) between upgradient and downgradient wells.

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3. Remediation

Selection of the appropriate remedial alternative for a landfill site is dependent on a number of factors including:

- Sources and Pathways of Potential Risk to Human Health and the Environment.
- Applicable or Relevant and Appropriate Requirements (ARARS) for a site (chemical, action and location specific)
- Waste Characteristics
- Site Characteristics (including the surrounding area)
- Regional Surface and Ground Water Characteristics

Landfill remediation can be achieved by implementing a DSWM approved closure plan or through Site Remediation Program oversight. Post-closure maintenance may or may not include long term monitoring of ground water.

a. Termination of Ground Water Monitoring
Some landfills have been monitoring ground water because it is required by closure law and NJPDES regulations. An assessment can be made of those landfills where, once remediation has been implemented, the Department will be able to terminate the ground water monitoring in accordance with applicable regulations.

b. Continuing Ground Water Monitoring
There are 26 known landfills for which a closure plan has been approved and the NJPDES permits are in force. These cases are in effect a long term remediation case. The post-closure care period is 30 years according to the regulations. As more closure plans are approved, additional cases will be required to conduct long term ground water monitoring in accordance with the regulations.

Technologies and Methods Frequently Used at Landfills:
Because characteristics are similar for many landfills the selection of remedial alternatives is generally limited to a combination of the methods and technologies summarized in Table 2 below.

TECHNOLOGIES AND METHODS FREQUENTLY USED AT LANDFILLS

TECHNOLOGY	PURPOSE	EFFECTIVENESS	COMMENTS
Institutional Controls (Property Restriction)	To restrict access and/or development potential.	An important tool for limiting human exposure.	Standard procedure
Fencing	To restrict access to direct contact residual threat	Important interim measure. Easy to evaluate.	Easy to implement. No permits required except in wetlands.
Grading/Revegetation	To reduce runoff, leachate formation and erosion	Critical to cap integrity. Easy to evaluate.	Easy to implement.
Soil Cover	To reduce direct contact risk and leachate formation	Necessary to any closure. Soil type is important factor	Easy to implement.
Single-Barrier Cap	To reduce direct contact risk and leachate formation	Added protection from ground/surface water contamination	Need local source of clay or snythetic substitute.
Composite-Barrier Cap	Significantly reduce leachate formation & ground water contamination	Virtually eliminates infiltration	Considerable effort required depending on size
Excavation: Consolidation and/or Hot Spot Removal	To remove or contain concentrated areas of contamination	Highly effective in eliminating risk on-site	Risk of exposure during handling
Stabilization	Soil erosion and sediment control measures. Required by State and Federal Government	This is necessary to protect site cover and soil loss from site.	Permit is required but easy to implement
Subsurface Drainage	To intercept leachate or ground water to limit contamination.	Reliable if there is continuous monitoring.	Costs are relatively inexpensive. Not suitable in low permeable soils.

30x

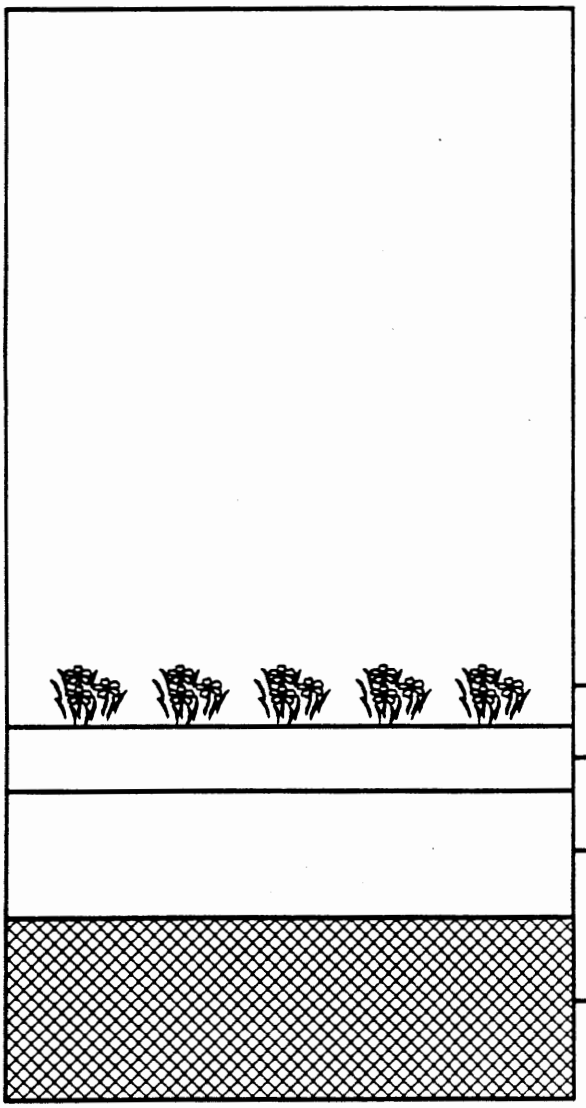
TECHNOLOGIES AND METHODS FREQUENTLY USED AT LANDFILLS (Continued)

TECHNOLOGY	PURPOSE	EFFECTIVENESS	COMMENTS
Ground Water Extraction Wells	To lower water table, relieve hydrostatic pressure at barriers.	Depends on number and spacing of wells, pumping cycles & rates.	Installations are complex field operations. Costs vary from site to site.
Onsite Water Treatment & Discharge	Long term solution to contamination problem.	Removes contaminants, can be remediated to drinking water standards.	Permits require stringent surface water discharge criteria
Treatment at Publicly Owned Treatment Works	If contaminant level is low and acceptable to Publicly Owned Treatment Works with partial treatment.	Eliminating an onsite treatment plant & cost reduced.	Agreement required between Publicly Owned Treatment Works owner and landfill owner.
Slurry Wall	Self containment system and to prevent movement of the plume.	Recommended for high level contamination of ground water.	Requires thorough hydro geologist & geotechnical investigation.
Landfill Gas Passive Vent System	To prevent migration of gas to neighboring properties.	Control emissions from landfills. Minimizes lateral gas migration.	Costs are relatively low. Liner increases effectiveness.
Active Gas Collection	To prevent release of toxic gases into the atmosphere.	Necessary to landfills to protect nearby population.	Cost is high. Requires significant long term O&M.
Landfill Gas Thermal Treatment (Flaring System)	To prevent release of toxic gas and air pollution.	Necessary to landfills containing VOCs and toxic compounds.	Air permit necessary.
Removal, Onsite Consolidation of Sediments	Contaminated sediments need to be disposed of onsite or offsite.	Important measure to limit human exposure.	Easy to implement using appropriate machinery.
Compensatory Wetlands	To prevent loss of wetlands in the area.	An important natural resource.	Effort required to create similar to the original condition.

Table 2 above, lists technologies and measures commonly used at landfill remediation projects and gives a brief explanation of each. In fact, landfill remediation typically consist of a combination of a number of these technologies and measures, depending on the degree of contamination. Presented below are the three most frequently designed closure scenarios including cost estimates for each. The closure scenarios demonstrate a full range of remedial possibilities from limited to moderate, to full scale closure.

SCENARIO 1

LANDFILL FINAL COVER
LIMITED CLOSURE



1. Grading, Landscaping, Revegetation
2. Security (Fence)
3. Drainage Control (Rip Rap along perimeter w/ swale)
4. GW Monitoring (1 well per 700 lf along perimeter)

COST: $ 60,000 / ACRE

 32x

Scenario 1 - Cost Estimate

Item	Description	Unit	Unit Price	10 acres	30 acres	60 acres
1	Clearing & Grubbing	Acre	$1,500	$15,000	$45,000	90,000
2	6 inches Top Soil	Acre	$12,000	$120,000	$360,000	$720,000
3	18 inches Common Fill	Acre	$20,000	$200,000	$600,000	$1,200,000
4	Seeding	Acre	$3,000	$30,000	$90,000	$180,000
5	Landscaping	Acre	$2,000	$20,000	$60,000	$120,000
6	Fencing & Signs (10ac=3500lf; 30ac=5500lf; 60ac=7500lf)	lf	$21	$73,500	$115,500	$157,500
7	Drainage Control (Rip Rap) (10ac=4500sy; 30ac=1000sy; 60ac=11200sy)	sy	$35	$157,500	$280,000	$392,000
8	Groundwater Monitoring Wells (10ac=5 wells; 30ac=8 wells; 60ac=11 wells	Each	$10,000	$50,000	$80,000	$110,000
			Total	$666,000	$1,630,500	$2,969,500
			Price Per Acre	$66,600	$54,350	$49,492
Weightage(<20ac=6/10; <40ac=3/10; >40ac=1/10)				$39,960	$16,305	$4,949
				Weighted Total =		$61,214

COST: $ 60,000 / ACRE

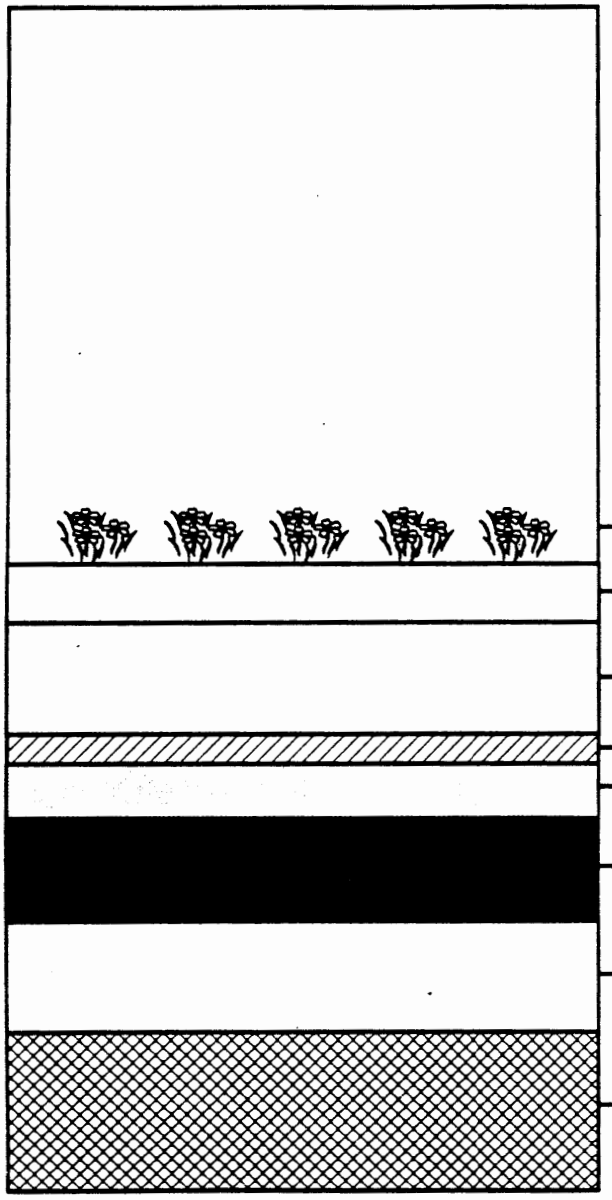
Estimate of Operation & Maintenance Cost per Year	$50,000	$75,000	$100,000

Unit Prices Based on:

1. Florence Landfill - 1991 Bid Data
2. Mean Site Work Cost Data
3. Bems, Sayerville FS Estimates

SCENARIO 2

LANDFILL CAP TYPE 1
MODERATE CLOSURE



1. Grading, Landscaping, Revegetation
2. Security (Fencing & Sign)
3. 1ft Clay + 6in Sand, 6in Topsoil
4. Drainage Controls (Perimeter Rip Rap w\ swale)
5. GW Monitoring (1 well per 700lf along perimerter)
6. Passive Gas Vent System

COST: $ 135,000 / ACRE

 34 x

Scenario 2 - Cost Estimate

Item	Description	Unit	Unit Price	10 acres	30 acres	60 acres.
1	Clearing & Grubbing	Acre	$1,500	$15,000	$45,000	90,000
2	6 inches Top Soil	Acre	$12,000	$120,000	$360,000	$720,000
3	12 inches Common Fill	Acre	$14,000	$140,000	$420,000	$840,000
4	Geotextile	sy	$1	$48,400	$145,200	$290,400
5	6 inches Sand Layer	sy	$2	$96,800	$290,400	$580,800
6	12 inches Clay Layer	sy	$10	$484,000	$1,452,000	$2,904,000
7	12 inches Soil & Regrading	Acre	$14,000	$140,000	$420,000	$840,000
8	Seeding	Acre	$3,000	$30,000	$90,000	$180,000
9	Landscaping	Acre	$2,000	$20,000	$60,000	$120,000
10	Fencing & Signs (10ac=3500lf; 30ac=5500lf; 60ac=7500lf)	lf	$21	$73,500	$115,500	$157,500
11	Drainage Control (Rip Rap) (10ac=4500sy; 30ac=1000sy; 60ac=11200sy)	sy	$35	$157,500	$192,500	$262,500
12	Groundwater Monitoring Wells (10ac=5 wells; 30ac=8 wells; 60ac=11 wells	Each	$10,000	$50,000	$80,000	$110,000
13	Passive Gas Vent System (2 Vents/Ac)	sy	$1	$48,400	$145,200	$290,400
			Total	$1,423,600	$3,815,800	$7,385,600
			Price Per Acre	$142,360	$127,193	$123,093
	Weightage(<20ac=6/10; <40ac=3/10; >40ac=1/10)			$85,416	$38,158	$12,309
				Weighted Total =		$135,883

COST: $ 135,000 / ACRE

Estimate of Operation & Maintenance Cost per Year $150,000 $200,000 $250,000

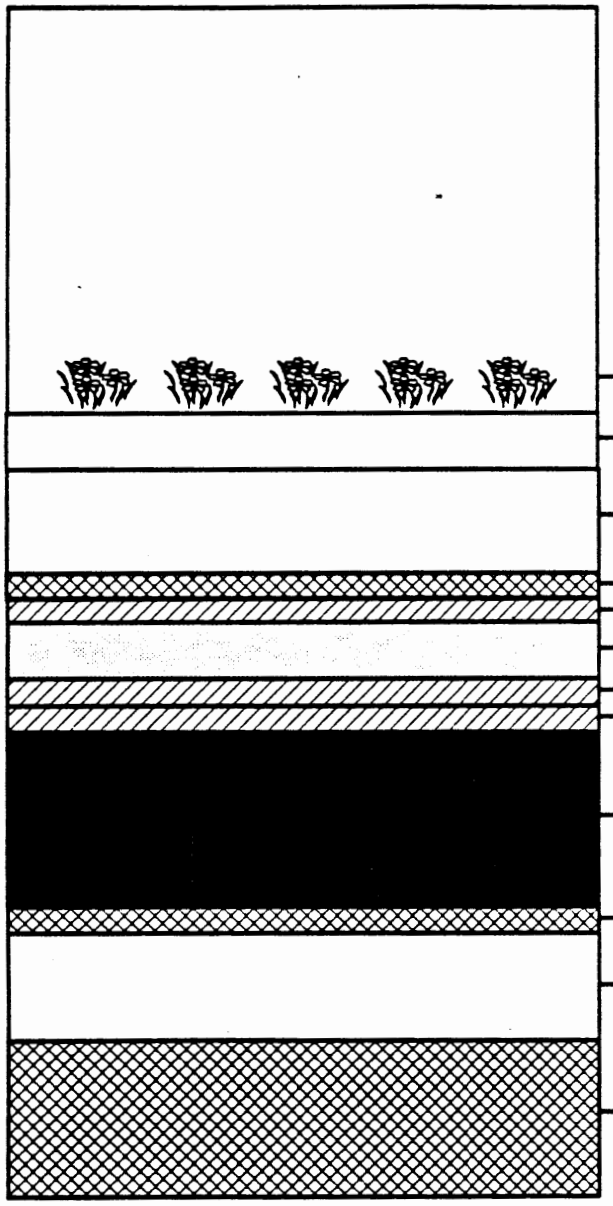
Unit Prices Based on:
1. Florence Landfill - 1991 Bid Data
2. Mean Site Work Cost Data
3. Bems, Sayerville FS Estimates

 35X

SCENARIO 3

LANDFILL CAP TYPE 2
FULL SCALE CLOSURE

1. Grading, Landscaping, Revegetation
2. Security (Fencing & Signs)
3. Double Layer Impermeable Cap
4. Drainage Controls (Perimeter Rip Rap w\ swale)
5. GW Monitoring (1 well per 700lf along perimerter)
6. Active Gas Controls
7. Leachate Controls - Perimeter Controls/ Passive System
8. Slurry Wall (Soil Bentonite) - Assume 25' Deep



COST: $ 460,000 / ACRE

 36x

Scenario 3 - Cost Estimate

Item	Description	Unit	Unit Price	10 acres	30 acres	60 acres
1	Clearing & Grubbing	Acre	$1,500	$15,000	$45,000	90,000
2	6 inches Top Soil	Acre	$12,000	$120,000	$360,000	$720,000
3	12 inches Common Fill	Acre	$14,000	$140,000	$420,000	$840,000
4	Geogrid	sy	$7	$338,800	$1,016,400	$2,032,800
5	Geotextile	sy	$1	$48,400	$145,200	$290,400
6	12 inch Sand Layer	sy	$4	$193,600	$580,800	$1,161,600
7	Geomembrane	sy	$3	$145,200	$435,600	$871,200
8	Geotextile	sy	$1	$48,400	$145,200	$290,400
9	24 inch Clay Layer	sy	$20	$968,000	$2,904,000	$5,808,000
10	Geogrid	sy	$7	$338,800	$1,016,400	$2,032,800
11	12 inch Soil & Regrading	Acre	$14,000	$140,000	$420,000	$840,000
12	Seeding	Acre	$3,000	$30,000	$90,000	$180,000
13	Landscaping	Acre	$2,000	$20,000	$60,000	$120,000
14	Fencing & Signs (10ac=3500lf; 30ac=5500lf; 60ac=7500lf)	lf	$21	$73,500	$115,500	$157,500
15	Drainage Control (Rip Rap) (10ac=4500sy; 30ac=8000sy; 60ac=11200sy)	sy	$35	$157,500	$280,000	$392,000
16	Groundwater Monitoring Wells (10ac=5 wells; 30ac=8 wells; 60ac=11 wells	Each	$10,000	$50,000	$80,000	$110,000
17	Gas Control Collection System	sy	$8	$387,200	$1,161,600	$2,323,200
18	Flare System	Each	L.S.	$200,000	$400,000	$500,000
19	Leachate Controls (10ac=2700lf; 30ac=4700lf; 60ac=6700lf)	lf	$25	$67,500	$117,500	$167,500
20	Leachate Treatment	Each	L.S.	$1,000,000	$1,250,000	$1,500,000
21	Slurry Wall (10ac=2700sf; 30ac=4700sf; 60ac=6700sf)	sf	$8	$540,000	$940,000	$1,340,000
			Total	$5,023,400	$11,987,700	$21,769,900
			Price Per Acre	$502,340	$399,590	$362,832
	Weightage(<20ac=6/10; <40ac=3/10; >40ac=1/10)			$301,404	$119,877	$36,283
					Weighted Total =	$457,564

COST: $ 460,000 / ACRE

Estimate of Operation & Maintenance Cost per Year	$500,000	$750,000	$1,000,000

Unit Prices Based on: 1. Florence Landfill - 1991 Bid Data 2. Mean Site Work Cost Data 3. Bems, Sayerville FS Estimates

 37X

Permitting and Applicable or Relevant and Appropriate Requirements (ARARS)

A comprehensive list of programs that might be triggered in implementation of landfill closure is provided below.

Ground water monitoring, leachate collection and control, and possibly a run-off control system may require permitting under the New Jersey Pollutant Discharge Elimination System (NJPDES), established under the provisions of the Water Pollution Control Act (WPCA), N.J.S.A. 58:10A-1 et. seq., and implementing regulations at N.J.A.C. 7:14A-1 et seq. As the WPCA prohibits the discharge of pollutant without a permit it applies whenever there is a discharge of a pollutant.

NJPDES requirements applicable to Discharges to Ground Water from sanitary landfills are listed at N.J.A.C. 7:14A-6.1 et seq., particularly N.J.A.C. 7:14A-6.7 to 6.11 regulating nonhazardous discharges to ground water, and N.J.A.C. 7:4A-6.15, criteria for ground water protection and response.

Closure operations other than ground water monitoring do require a NJPDES permit if they are current discharges. A leachate collection system would likely involve a discharge either with or without treatment. A treatment system requires a treatment works approval pursuant to N.J.A.C. 7:14A-12.1 et seq. The discharge from a leachate collection system might be to any one of the following, requiring the applicable permit:

1. Discharge to ground water (DGW), N.J.A.C. 7:14A-6.1 et seq.

2. Discharge to surface water (DSW), N.J.A.C. 7:14A-3.1 et seq.

3. Discharges to a domestic treatment works as a significant indirect user (SIU), N.J.A.C. 7:14A-13.4 et seq.

A run-off system may require permitting as above if it involves collection and discharge with or without treatment of water that contains pollutants.

Installation of ground water monitoring wells requires a well drilling permit under N.J.S.A. 58:4A-1 et. seq. See N.J.A.C. 7:14-6.13(a).

Equipment used for the purpose of venting a closed or operating dump, sanitary landfill, hazardous waste landfill, or other solid waste facility directly or indirectly into the outdoor atmosphere requires an air permit and operating certificate under N.J.A.C. 7:27-8.3(a)(16).

The excavation, disruption or removal of deposited material in an active, terminated, or closed landfill requires a disruption permit. N.J.A.C. &:26-2A.8(j).

Closure activities that involve dredging or filling, piling, construction of roads, or other tasks affecting wetlands may require permitting under the Freshwater Wetlands Act, N.J.S.A. 13:9B-1 et. seq, development programs, the Coastal Area Facilities Review Act (CAFRA), N.J.S.A. 13:9B-1 et seq., or the Waterfront Development Act, N.J.S.A. 12:5-1 et seq. The rules governing permitting are at N.J.A.C. 7:7-1.1 et seq., N.J.A.C. 7:7A-1.1 et seq. and N.J.A.C. 7:7E-1.1 et seq. (coastal protection policies).

Dredging or filling in federally regulated wetlands may also require a permit under Section 404 of the Federal Clean Water Act. 33 U.S.C. 1344. Projects subject to Section 404 also must have a State Water Quality Certification pursuant to 33 U.S.C. 1341.

A stream encroachment permit may be necessary if remedial actions involve installation or alteration of fill along or across a stream channel or flood plain. N.J.S.A. 58:16A-50 et seq.; N.J.A.C. 7:13-1.1 et seq.

A Water Quality Management Plan Consistency Determination is necessary for "projects and activities affecting water quality in any planning area." N.J.S.A. 58:11A-10. Examples include discharges to surface water, discharges to ground water, discharges to a publicly owned treatment works, and activities in wetlands.

Construction, improvements or rehabilitation of sanitary landfills in the Meadowlands District would require compliance with the Hackensack Meadowlands Reclamation and Development Act, N.J.S.A. 13:17-1 et seq. Landfills in this district have been regulated by the Hackensack Meadowlands Development Commission since 1971 under N.J.A.C 19:7-1.1 et seq. Regulations governing the operation of landfills and continuing maintenance appear at N.J.A.C. 19:7-1.7 and N.J.A.C. 19:7-1.8 respectively. These regulations require a system for monitoring and control of gases, a leachate control system, at least two feet of final cover, and a runoff system.

Sanitary landfills within the Pinelands protection areas are regulated under the Pinelands Management Plan. Minimum standards for the plan were promulgated at N.J.A.C 7:50-1 et seq. pursuant to the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq. (1979). These standards are implemented through county and municipal master plans and zoning ordinances. Minimum standards for continued operation of existing landfills, defined as those in operation on August 8, 1980, appear at N.J.A.C. 7:50-6.74. Capping with an impervious material is required within one year of filling to final design elevations. The type of capping is to be in accordance with the standards for the New Jersey SWMA. However standards for capping were proposed but never adopted under the SWMA.

A tidelands grant may be required for activities in riparian lands, that is lands flowed by tidal waters pursuant to N.J.S.A. 12:2-1 et seq. For example, a license

is required to lay pipe on or under lands of the state under tidewaters. N.J.S.A. 12:3-26.

The Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901, and regulations promulgated thereunder are applicable to sanitary landfills. 40 CFR Section 257 sets criteria for determining when landfills pose a reasonable probability of adverse affects on health and the environment. The criteria are generally directed to operating landfills although not expressly so limited. Some of the minimum criteria, for ground water maximum contaminant levels, air pollution control, and safety may be applicable to landfills no longer in operation. 40 CFR Section 258 sets minimum national criteria, including closure requirements for landfills accepting waste after October 9, 1991.

In conclusion, a variety of state and federal requirements may be implicated depending on the location of the landfill, whether it operated after January 1, 1982, and the activities that will be performed.

V. ESTIMATE OF TOTAL LANDFILL REMEDIATION COSTS

An estimate of total public funds required to properly close the entire landfill universe is difficult to calculate. There are many variables that need to be examined in order to obtain a reasonably accurate assessment of total costs. For example, if all the sole source industrial landfills identified in this report (198 sites) are properly remediated by responsible parties the estimate offered below could, potentially, be reduced by one third. A number of sites on the list will require no further action; others may suddenly and unexpectedly cause an immediate threat to human health and the environment. In many cases, the estimate of total public funds required to close a landfill case is determined by the type of ownership, type of waste deposited and when, and the physical size of the landfill.

It is useful to return to the categorization of "registered", "unregistered", and "unconfirmed" to explain the scope of the financing issue. For unconfirmed sites the first step in the Department's strategy is to determine if the properties in question were in fact used for solid waste disposal. When that question is answered it will be possible to assess financial needs and responsible parties. The unregistered universe is primarily comprised of municipal landfills which closed prior to the effective date of the Landfill Closure Act and, therefore, it is reasonable to assume that no dedicated funds exist for the closure. Similarly, the 179 registered landfills which closed prior to January 1, 1982 are unlikely to have any dedicated funding source to address closure.

For presentation purposes, the estimate of closure cost offered below represents gross costs based on the per acre costs derived in Scenario 1 through 3 above. An adjusted figure is offered in the summary table (page 26) that considers potential responsible party funding for the 198 sole source industrial landfills and other

"polluter pay" type funding sources which act to lower the demand on the overall tax base.

New Jersey's 578 known and suspected landfills average 30 acres in size, although they range from under 5 acres to well over 100 acres. Approximately 250 of New Jersey's landfills are small (10 acres or less) municipal and sole source sites, closed for ten or more years. This group would in most cases require only limited closure as detailed in Scenario 1 (Landfill Final Cover - Cost $60,000 per acre). Therefore, the remediation costs for 250 small municipal and sole source landfills is estimated at:

$$\$ 60{,}000 * \underline{5\ Ac.} * 250 = \$ 75{,}000{,}000$$

There are approximately 200 medium (10 to 30 acres) municipal and sole source landfills that may require a limited closure as detailed in Scenario 1 (Landfill Final Cover - Cost $60,000 per acre). Therefore, remediation costs for 200 medium sized municipal and sole source landfills is estimated at:

$$\$ 60{,}000 * \underline{15\ Ac.} * 200 = \$ 180{,}000{,}000$$

There are an estimated 50 medium sized (10 to 30 acres) municipal and sole source landfills which may require a moderate closure as detailed in Scenario 2 (Landfill Cap Type 1 - Cost $190,000 per acre). Therefore, remediation costs for 50 medium sized municipal and sole source landfills is estimated at:

$$\$ 135{,}000 * \underline{15\ Ac.} * 50 = \$ 101{,}250{,}000$$

Approximately 50 large (over 30 acres) landfills may require moderate closure as detailed in Scenario 2 (Landfill Cap Type 1 - Cost $190,000 per acre. Therefore, remediation costs for 50 large landfills is estimated at:

$$\$ 135{,}000 * \underline{40\ Ac.} * 50 = \$270{,}000{,}000$$

There are approximately 10 special cases (i.e. very large landfills) that may require a full scale closure as detailed in Scenario 3 Landfill Cap Type 2 - Cost $460,000 per acre. Therefore the remediation costs for 10 special cases is estimated at:

$$\$ 460{,}000 * \underline{100\ Ac.} * 10 = \$ 460{,}000{,}000$$

The following chart gives a summary of the estimated closure costs. Not included in this estimate are the costs associated with ground water remediation and post closure care, also referred to as long term operations and maintenance (O&M). Ground water remediation needs will have to be determined on a case-by-case basis and remediation costs cannot be estimated, although they can significantly increase the cost of remediation. Estimated annual costs were derived for O&M of the three closure scenarios (see pages 16, 18 and 20), however it would be erroneous to add on a lump sum amount to the landfill remediation estimate. As

better information is available for the entire universe, an estimate of O&M costs should be evaluated. The gross estimated cost for remediating the entire universe of New Jersey's landfills is therefore considered to be in excess of 1.1 billion.

Table 3

Estimate Of Total Landfill Closure Costs

Closure Type	# of Landfills	Facility Size	Cost Estimate
Landfill Final Cover: $ 60,000 per acre	~250	< 10 Acres	$ 75,000,000
	~200	< 30 Acres	$ 180,000,000
Landfill Cap Type 1: $ 190,000 per acre	~50	< 30 Acres	$ 101,250,000
	~50	> 30 Acres	$ 270,000,000
Landfill Cap Type 2: $ 460,000 per acre	~10	> 50 Acres	$ 460,000,000
			$1,086,250,000*

*Total may be reduced by $300 million assuming RP monies are available for Industrial Sole Source Landfill cleanup.

VI. EXISTING AND POTENTIAL FUNDING SOURCES

In developing this landfill report, a review of the potential funding sources was conducted to ascertain what funds are available to assist in paying the costs of landfill remediation.

Presented below is a discussion of funding programs administered by the DEPE. The section is divided into three subsections. Subsection A describes the existing sources of monies dedicated for landfill purposes; Subsection B identifies the hazardous waste funding sources which may be used at landfills containing hazardous constituents; and, Subsection C presents a discussion on potential sources of monies.

It should be noted from the outset that a number of the potential funding sources identified below, specifically the Resource Recovery Investment Tax and the Solid Waste Service Tax, have been recommended by the Governor's Task Force on Solid Waste for other solid waste related programs in the areas of source reduction and recycling. These funding sources are being included in this report to provide the most complete listing of existing and potential funding sources.

Subsection A - Existing Sources of Funds

1. Sanitary Landfill Contingency Funds (N.J.S.A. 13:1E-106)

   This tax was established to provide funds for any damages to real or personal property resulting from the operations or closure of a sanitary

landfill facility; for the cost of restoring any natural resource including potable water supply; and for the cost of any personal injuries.

N.J.S.A. 13:1E-106(4) also provides that the Fund may be used for "the costs of the design, construction, installation, operation and maintenance of any device or action deemed necessary by the Department to clean up, remedy, mitigate, monitor or analyze any threat to the public health, safety or welfare of the citizens of this State, including the installation and maintenance of methane gas monitors and vents and leachate monitoring wells and collection systems...". It would appear that this provision contemplated the use of these monies for purposes other than claims. In fact monies from the Contingency Claims Fund were used for remediation activities at the HUB Recycling Facility and the Hagaman Property.

As of October 31, 1992, the fund balance was $45 million. Potential claims against these funds is at least $22.2 million, which leaves, at most, an available balance of $22.8 million. Since the inception of the fund, approximately 380 claims have been awarded totaling $7 million.

2. Sanitary Landfill Closure Escrow Accounts (N.J.S.A. 13:1E-109)

N.J.S.A. 13:1E-109 requires that every owner/operator of a landfill facility shall deposit in an escrow account an amount equal to $1.00 per ton of all solid waste accepted for disposal. The account constitutes an escrow for the closure of the particular landfill facility funding the escrow. Funds may only be distributed in a manner consistent with a DEPE approved closure plan or by order of the DEPE.

As of October 1992, the cumulative escrow balance, including interest, for 161 facilities was $136 million. It is important to note from Table 4 below, that since individual escrow accounts are based upon tonnages received, the 33 largest landfills, representing 20% of the total, have more than $99 million or 73% of the total available funds. Stated conversely, based upon the receipt of limited tonnages and/or facility closure taking place shortly after the initiation of the effective date of the Closure Act (January 1982), approximately 80% of the facilities with accounts have marginal sums of money for closure activities.

3. BPU Environmental Improvement Escrow Accounts

The former Board of Public Utilities (BPU), within its jurisdiction, required certain landfill operators to deposit funds into an escrow account to fund environmental improvements. These funds are necessary to cover the costs of closure at larger commercial landfills where monies accrued under the closure escrow account program are insufficient. The BPU specified, in an order applicable to each such escrow account, the amount of funding required and the purposes for which the escrow could be used. As of

September 1992, the cumulative escrow balance, including interest, for 29 accounts was $208.2 million. To determine if these funds are available, a review of each Order would be required.

Presented below is a summary of the combined escrow account monies that have been set aside for landfill closure.

Table 4

Landfill Escrow Account Balances

Facility Size	DEPE Accounts	Balance (000)	BRC Accounts	Balance (000)	Combined Balance (000)
< 20 Acres	32	$ 9,062	0	$ 0	$ 9,062
< 40 Acres	96	27,146	0	0	27,146
> 40 Acres	33	99,719	29	208,151	307,870
Total	161	$135,968	29	$208,151	$344,119

Based upon current escrow account balances, 190 landfills have accumulated $344,119,000 in funds to provide for closure activities.

Subsection B - Hazardous Waste Funds

Since the inception of the Federal Superfund and State Spill Fund programs in the late 1970's, some of the state's most contaminated landfills have been remediated using these monies. While the Department is confident that most of the worst cases are being addressed, it is likely that other landfill cases will qualify for these funds. Therefore, a brief description of the four primary cleanup funds are listed below.

1. Federal Superfund (42 U.S.C. Section 9601 et seq.)

Currently, there are 24 landfills being remediated using Superfund monies. The fund, largely financed by taxes on petroleum and chemicals, and an "environmental tax" on corporations, provides operating money for government-financed actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Superfund allows government to take action to clean up a site now and seek reimbursement from responsible parties later or it can provide non-reimbursable money for sites where no responsible party with sufficient funds exists. To qualify for clean-up funds a site must meet the requirements for listing on the National Priorities List (NPL). Federal grant money is available to states for conducting preliminary assessments on sites, even if a site does not qualify for clean-up under Superfund and, in fact, many New Jersey landfills have

been assessed using these funds. Also, emergency work can be done even if the site is not listed on the NPL.

2. Spill Fund (N.J.S.A. 58:10-23.11)

   The Spill Fund consists of revenues collected under the authority of the Spill Compensation and Control Act. Revenue is generated by taxing the number of barrels of materials handled by major hazardous waste handling facilities. The fund has a statutory cap of $50 million per annum. Funds may be used for the cleanup of hazardous discharges or threatened discharges, replacement of/or connection to an alternate water supply for private residential wells destroyed by hazardous substances; payment of damages; and, fund administration. Spill Fund money has also been used to conduct site assessments at landfills.

3. Hazardous Waste Discharge Bond Funds (P.L. 1981, c.275 & P.L. 1986 c.113)

   Two bond funds have been established to provide for contaminated site clean-ups. The 1981 bond issue was authorized in the amount of $100 million and the 1986 bond issue was authorized in the amount of $200 million. Collectively, the bond funds are the largest source of funds dedicated to contaminated site clean-up in the state. The bond money may be used for identification, cleanup and removal of hazardous substance discharges. The law requires DEPE to seek recovery from the discharger for any dollars spent from the 1981 bond. The 1981 and the 1986 bond acts were amended to allow for 0% interest loans to locals for cost incurred for construction of water supply treatment or replacement projects when ground water is contaminated, or threatened. Based on the current pace of cleanups, the latest projections estimate that the Bond Funds will be depleted by 1995.

4. Hazardous Discharge Site Cleanup Fund (N.J.S.A. 58:10-23.34)

   The Hazardous Discharge Site Cleanup (HDSC) Fund was established to procure feasibility studies, engineering designs, and other work necessary for the cleanup or mitigation of contaminated sites. The balance in the fund may consist of annual legislative appropriations, responsible party contributed monies, CERCLA generated monies, or Hazardous Discharge Bond Fund monies.

Subsection C - Potential Sources of Funds

The sources of funds discussed below have historically been used for purposes other than landfill remediation. The priority of utilization of these funds has been for construction of solid waste facilites, rate stabilization, administrative costs associated with implementing a solid waste management plan, and for source reduction and recycling purposes.

These potential sources of funds are provided so that a full understanding of all revenue sources is available to decision makers.

1. Resource Recovery Investment Tax (RRIT) (N.J.S.A 13:1E-138,-149,-150)

   This tax is levied on solid waste disposed at landfills in New Jersey. The funds are provided to county governments for the following purposes:

   a. To subsidize the cost differential between current landfill disposal costs and anticipated resource recovery tipping fees.

   b. To finance the design, construction, operation, and maintenance of environmentally sound state-of-the-art sanitary landfill facilities to be utilized for disposal of ash residue and unprocessible waste, or for the long-term disposal of solid waste where resource recovery may not be feasible.

   c. To finance the closure costs associated with terminated landfills in those counties which have adjusted their investment tax rate pursuant to a study, provided that only the revenues derived from the increased rate may be used for this purpose.

   In order to use RRIT monies for closure purposes N.J.S.A. 13:1E-146 provides, in part, that each county must conduct a study to determine the investment tax rate necessary to finance the closing costs for the proper closure of any terminated landfill facility. Only the additional tax revenues generated by a specified closure rate adjustment may be expended for closure costs. To date, no county has performed such a study, nor has any interest been expressed in using RRIT funds for closure purposes.

   It may be possible that RRIT monies could be used within the framework of 1.b. above, if "maintain and operate environmentally sound state-of-the-art sanitary landfill facilities" can be construed to include closure activities. If it can be interpreted in this manner, then the study identified in 1.c. above is not necessary.

   There is approximately $53 million pending DEPE approval for other purposes. DEPE could possibly determine that these funds could be applied to governmental landfill closure purposes. However, current intended uses of these funds would have to be balanced against the need for closure monies. Further, it is also possible that legislative changes would be needed to designate closure costs as eligible uses in general.

2. Solid Waste Importation Tax (N.J.S.A. 13:1E-138,-149,-150)

   This tax is imposed on all out-of-district waste accepted for disposal at a sanitary landfill facility. The tax compensates receiving districts for the

accelerated loss of landfill capacity caused by receiving out-of-district waste. The Importation Tax is combined with the RRIT which are annually allocated to the 21 counties. It is available for the same purposes as the RRIT discussed above. The Legislature is currently considering elimination of this tax in light of the increased development of regional solid waste projects and associated disincentive that the importation tax represents.

3. Solid Waste Services Tax (N.J.S.A. 13:1E-138,-147,-148)

   This tax is levied on solid waste disposed of at landfills in New Jersey. A fund is established in the DEPE and DEPE authorizes grants to county governments for the purpose of preparing, revising and implementing solid waste management plans, and the goals of the State Recycling Plan.

   If "implementing a solid waste management plan" can be interpreted to include the costs associated with closure, it might be possible to utilize these funds. It would require that each County submit its application specifying that the use of funds will be for closure purposes. Approximately $3.5 million is provided to 21 counties annually. Historically, the Attorney General's Office has given its opinion that this law only authorizes awards to counties under a contract management approach for "planning" activities, such as funding consultant studies and organizing household hazardous waste collection days. Program "implementation" such as brick and mortar construction activities, have normally been rejected. If this historical legal interpretation is still valid, only closure plan development activities would appear eligible. In addition, as with the RRIT fund noted earlier, existing planned uses, which often involve source reduction and recycling activities, would have to be balanced against the need for closure funding.

4. Natural Resources Bond Act of 1980 and Resource Recovery and Solid Waste Disposal Facility Bond Act of 1985

   Existing legislation provided authorization of $168 million to establish a revolving loan program designed to provide low or no interest loans for the development of resource recovery facilities and/or environmentally sound sanitary landfills. To date, Bond Fund disbursements total $83.2 million. Approximately $49.1 million in appropriations is waiting for funding. There is a balance of $35.7 million plus interest earnings of unauthorized appropriations available. Further research is required to determine if landfill closure is a permissible use of these funds.

   Historical application of these proceeds has been for resource recovery construction purposes. Within the 1985 Bond Act, the definition of environmentally sound sanitary landfill facility means "a sanitary landfill facility which is equipped with a liner or liners, a leachate control and collection system, and a ground water pollution monitoring system, or any other pollution control or other engineering device required by the

Department ...". It appears that given the deficient state of most landfills, the requirements of closure might be appropriate within this definition. However, beyond the $49.1 million in appropriations waiting for funding, pending appropriations in excess of the $50 million are before the legislature at this time.

VII. FINANCIAL AND INSTITUTIONAL ISSUES

A. Funding Issues and Options

Even if all the existing funding sources listed in Section VI, above, were made available to address the landfill universe, there would still be a shortfall of approximately $800 Million. Under existing law, the Department will to the greatest extent possible, seek to have those responsible for contamination pay the cleanup costs. However, due to the lack of accurate disposal records at older landfills, it has been difficult to identify responsible parties in landfill cases. Additionally, the transactional costs associated with the negotiation and/or litigation of large numbers of potentially responsible parties are significant. Therefore, other approaches to funding landfill remediation may be appropriate. New funding options that could be used for landfill remediation are discussed below.

Partial Funding by Government - Under this option, a governmentally financed funding program would be established to provide a partial cost subsidy to responsible parties for landfill remediation. Funding could be made available for either publicly or privately owned facilities, or both. The level of funding could vary from a small amount to a major subsidy. In the event that the responsible party(ies) are unable, unwilling, or unknown, the Department would also have access to the fund for remediating a landfill.

Full Government Funding - Under this option, a funding program would be established to pay for 100% of the cost of proper landfill remediation. This option would only be available to Municipal Solid Waste Landfills that were owned and operated in the interest of the community and not operated for commercial gain. In this way, the landfills that qualify for full government funding would be remediated under a public works type program.

User Funding - An alternative to private versus governmental funding for the remediation of terminated landfills is user funding. This option proposes establishing a governmental funding program that would rely on a solid waste tax, collected from present users (i.e. the general public) to pay for past disposal activities.

B. Institutional Issues

A guiding principle of the State's Site Remediation Program is the belief that responsible parties should pay the cost of clean-up activities at contaminated sites. This is supported by the strict, joint and several liability and treble

damage provisions contained in New Jersey's Spill Act and the Federal Superfund Law. However, landfill cases generally include two unique issues that undermine that principle. They are: 1) municipal liability; and 2) the transactional costs associated with multi-generator cases.

Municipal Liability - Approximately forty percent of the landfill inventory are/were owned and operated by municipal or other governmental entities. To the extent that municipal and other governmental entities did not undertake landfill activities for commercial gain, it may be justifiable to offset their share of the costs with a general government funding program.

At existing landfill cleanup sites, both the state and federal government have pursued municipalities for cleanup costs when the municipality was the owner or operator of the landfill. However, in some cases, municipalities which contributed only incidental amounts of hazardous substances to a landfill through disposal of discarded consumer products collected from households have been sued by "traditional" responsible parties for a share of the remedial costs. For these cleanups, the Department supports federal legislative efforts to develop clear, precise and non-variable statutory criteria for determining the liability of municipalities who contributed household garbage to municipal landfills. At the federal level, U.S. Senator Frank Lautenberg and U.S. Representative Robert Torricelli and Chris Smith are sponsors of legislation to address this issue; Assemblywomen Farragher and Wright are sponsoring legislation at the state level. As the legislature considers how to pay for the closure of municipal landfills, the issue of municipal liability for the remedial costs should also be addressed.

Multi-generator Transactional Costs - Negotiating responsible party liability in multi-generator landfill cases has proven to be a difficult, time consuming and expensive process. Sorting out who dumped what, when and the degree of environmental impact that resulted as a consequence of that action, in many cases, takes years. These "transactional costs" translate into considerably increased administrative overhead without addressing the impacted environment. Hours of staff time must be expended during the study phase of a cleanup documenting culpability in a legally defensible manner. Considerably more time must be expended in negotiations and court actions to settle liability issues. Although this cost recovery approach may be reasonable and effective for sole source landfill cases where there is a viable responsible party, it appears inappropriate for the multi-generator landfill cases. The issue of when the Department will seek cost recovery in landfill cases needs to be discussed and debated by the legislature to determine if an alternative approach to strict, joint and several liability is appropriate for these cases.

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VIII. CONCLUSIONS

The purpose of this report is to describe and summarize the regulatory mandates, administrative requirements, and technical and institutional considerations pertinent to landfill remediation. The information is intended to provide the basis and background for policy level discussions which will result in legislative and administrative action to address New Jersey's 578 actual or potential landfills.

Absent any change in policy or legislation the Department will implement the landfill closure strategy detailed in section 12 of the draft "Solid Waste Management State Plan Update - 1993 - 2002." The State Plan Update should be referenced for a complete description of the strategy but a brief summary is offered below.

a. Expedite closure plan review and implementation for post 1982 regulated landfills.

b. Develop a priority list for evaluating the need for closure, and where appropriate remediation, of all landfill that have not complied with closure laws.

c. Perform site assessments and initiate enforcement action on a worst-case-first basis along with the mix of other sites requiring remediation.

d. Use strict, joint, and several liability provisions of CERCLA and Spill Act to pay for landfill remediation.

However, the Department is interested in developing alternative approaches to the expensive and inefficient process currently employed to address the large number of multi-generator landfill cases throughout the state.

The Department welcomes the opportunity to meet with the Legislature and other interested parties to discuss and debate the issues presented in this report. It is only with their guidance that an acceptable landfill remediation plan can be formulated to address the entire landfill universe.

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ASSEMBLY TASK FORCE ON SITE REMEDIATION

STATEMENT OF CIC/NJ

APRIL 30, 1993

My name is Bernard J. Reilly, I am an attorney with the DuPont Company, I am speaking today on behalf of DuPont and the Chemical Industry Council of New Jersey. We appreciate this opportunity to provide our input on the very important issue of accelerating the remediation of the many older mixed waste landfills in New Jersey. We are certain this matter can be solved with good will and a willingness by all parties to be part of the solution.

We agree that progress has been slow and contentious. We believe a few common sense changes to the Spill Act, or at least the enforcement policies of the DEPE, could dramatically improve this situation.

The press quotes a recent Department of Environmental Protection and Energy study as concluding there are 578 such landfills in the State, and that closing them properly would cost in excess of $1 billion. We are not surprised at the number of sites, but based on our experience with landfill closures in New Jersey the cleanup estimate seems very low. The current closing of Kramer alone is vastly exceeding $100 million, Lone Pine will approach this number, and GEMS likely will be two-thirds of it.

We are not plowing new ground. I attach a slightly updated version of the comments we made at the Energy and Hazardous Waste Committee in January. All we need to advance progress is to get past the notion that the mixed public/private responsibilities and costs associated with the proper closure of old municipal/industrial landfills can be shifted entirely onto the private sector. As we have seen, all the enforcement tools in the world will not get industry to accept the notion it should pay the share of other financially capable parties, public or private. Even the most responsible companies cannot concede that the public share of costs at these landfills should be shouldered only by the private sector. Unless this enforcement posture is cured, contention will surround this issue for the indefinite future. And contention breeds delay.

Industry does not mind if the "public" (municipal and government agency) share of costs at these sites comes directly from these parties, is paid for by in-kind services, or is paid for by a Fund created for this purpose. For cash strapped towns, perhaps the latter is the best solution. We are not in the business of telling lawmakers how to raise moneys for such a Fund, but one

suggestion is to adjust the current fees on municipal solid waste, such as tipping fees, registration fees, the recycling tax, or the Sanitary Landfill Facility Closure and Contingency Fund. These tie directly to current waste streams that are similar to the wastes that are the source of most of the municipal share at these older sites.

When the Spill Act is reformulated to resolve this problem, we suggest you consider one other very important fix that also could speed remediations. The contention that now surrounds sites often is caused by the inability to reach acceptable allocations among the parties. If a new Fund is created (or existing Fund enhanced) to pay the public share at these sites, it will be every important that the public has confidence that this share is calculated in good faith. This mirrors the need industrial parties have for acceptable allocations. We now must contrive these allocations among parties who sometimes are not cooperative.

To resolve these twin needs, we suggest a mechanism in the law under which any party at a site can trigger an allocation process. This would provide for selection of a neutral person or panel who would receive and consider the history, current conditions, and remedy of the site and come up with the allocation based on this inquiry. Any party willing to accept this finding would be bound by it. Parties unwilling to accept it could appeal to the court system, on the record, where their share could go up or down. We think this would dramatically cut time consuming site squabbles.

In sum, we are delighted you are addressing the issue of older landfill closures, and encourage you to take this issue head on by dealing with the public share at these sites in an honest and straightforward manner. We believe that will allow public and private parties to get on with the process of closing out these sites.

ADOPTED FROM TESTIMONY OF THE CIC/NJ

JANUARY 14, 1993

MUNICIPAL LIABILITY BILL (A-539)

ASSEMBLY ENERGY AND HAZARDOUS WASTE COMMITTEE

My name is Bernard Reilly, I am an attorney in the DuPont Company. I am testifying on behalf of the Chemical Industry Council of New Jersey and DuPont in opposition to A-539, a Bill that would impose all the costs of cleaning municipal landfills solely on the non-municipal entities who used them, relieving completely from responsibility the cities and towns that often contributed over 95% of the volume and the greatest share of hazardous substances. This is entirely unfair, anti-industry, and likely to impede cleanup of these sites.

In short, we believe instead that comprehensive reform of the Spill Act is necessary. Remedy costs should be more aligned with an honest assessment of risks; and all parties should pay their fair share. A broad based new Fund should be created to cover costs attributable to those unable or unwilling to pay. Selective relief for the municipalities would only sweep these more important needs under the rug, slow cleanups, fail to deal with the urban renewal problems created by the Spill Act, and send another negative message to industry in or considering investing in New Jersey.

DuPont and New Jersey industry are entirely sympathetic to the pressing budget needs of New Jersey's cities and towns. Companies large and small also are fighting for survival in difficult economic times. We should not solve the municipal landfill challenge, or any other societal problem, however, by merely passing the bills off-budget to industry. New Jersey needs its industry to save and create jobs, and bolster the tax bases of its communities. For many reasons New Jersey is an excellent place to invest, to include its trained work force, infrastructure, and great communities and beaches. However, as we all know, industry located in, or considering location into, New Jersey faces enormous hurdles to success in the form of high labor and utility costs, and high taxes, combined with perhaps the most difficult regulatory web in the nation. These hurdles should not be compounded by this Bill.

There likely are hundreds of old municipal landfills in New Jersey, and under the current approach to remedy selection single sites can cost up to $200 million to remediate. Tossing the

entire, costly burden of cleaning them solely to its industry not only may slow cleanups, but would be one more strong message that New Jersey is not interested in accommodating industry, but merely sees companies as cash cows that can be milked without ever needing nourishment. This can only erode further the already shrunken industrial base of the State.

What is needed instead is a fresh look at the Spill Act, much as many national leaders think a fresh look at Superfund is essential. We are spending too much money to "gold plate" a few sites. Current efforts to reform the Environmental Cleanup Responsibility Act (ECRA) also recognize this need for realism. Most old sites present few risks. Where unacceptable risks are found, in most cases these can be dramatically reduced to fully acceptable levels with reasonable cleanup investment. This can and should be done, with the full participation of all involved parties. A shift to more sensible remedies would result in swifter cleanups and leave us resources to deal will more pressing problems, be they environmental or social.

Not only is this reform necessary to conserve resources, but to allow urban renewal. The costs of remediation now are so high that rare is the investor who dares to buy, or even lease previously used land for fear it will be bankrupt by the cleanup. Even New Jersey's cities have declined to engage in tax foreclosures for the same reason. And for those few hardy souls willing to invest, banks won't lend for fear they might be found liable for a similar unpredictably large amount. We thus have urban gridlock. The places most suitable for industry, and where jobs are needed most, are ruled out not by real risks, but by unrealistic expectations that we can reverse completely the industrial revolution. We don't need virgin land to site a coal fired power plant, operate a small machine shop, or locate a warehouse.

Reform of the Spill Act to allow realistic remedies is much more likely to occur if all responsible parties are at the table. We all get much more interested when our own money is being invested, or wasted. Allowing escape for those with an effective political voice, like the cities and towns, enhances the likelihood that this urgent need will be swept under the rug.

Thereafter, we should be concerned with fairness. Industry can accept the retroactive "polluter pays" fund raising mechanism if it is applied uniformly. We believe, however, that parties should not pay for shares from parties unwilling or unable to pay. A new, broad based Fund should be set up to make up this difference when it exists.

As to municipal shares, clearly they are not zero. However, money

from the towns in many cases may not be necessary. With creativity often the towns can contribute goods (such as clay for a cap), services (such as security or long term maintenance like sampling, cap repair, and grass cutting) or access to a treatment works, at very low cost. Where this is not possible, but the town has no money for cleanup, again a broad based Fund should be considered, rather than simply tapping companies who already have paid their fair share.

What is the "fair" share for a town or city whose waste was taken to the "typical" New Jersey municipal landfill many years ago? Obviously this depends on the volume and nature of the wastes. Shares can be calculated several ways: which waste is driving the remedy costs (e.g., gas collection and treatment costs are almost entirely driven by the decay of municipal waste), or an estimate of the portion of "hazardous substances" attributable to the various parties. I attach a brief summary of the history of the efforts of EPA, industry, municipalities and the courts to deal with this issue. It was authored by the Information Network for Superfund Settlements, a group dedicated to getting on with Superfund site cleanups. I believe it presents the history and issues in an unbiased fashion.

As an example of what could have been a useful analysis of how to determine the municipal share based on the factors that drive the remedy costs, I find informative in this summary the description of how EPA "calculated" in a draft 1992 policy the total municipal share as 4%, after its attempts to deal fairly with this issue ran into politics. EPA compared the costs of closing a "typical" 17 acre industrial landfill to that of closing a "typical" 55.5 acre municipal landfill. EPA made several insupportable assumptions in this calculation, e.g., that the groundwater under an unlined municipal waste landfill would not need to be collected and treated. Under similar assumptions that seemed geared to underestimate the municipal costs, EPA determined the industrial landfill would cost $38.7 million to close, the municipal landfill $5.2 million. EPA then divided each of these costs by the area of the landfill to get a per acre cost ($2.2 million and $94 thousand, respectively), and hence the 4% relationship. However, even if we were to consider each EPA assumption appropriate, EPA's "analysis" merely supports the conclusion that the municipal share is 4% where a landfill has <u>equal</u> volumes of municipal and industrial waste. However, we usually find the municipal volume is in the range of 90 to 95% of the landfill. When EPA's 4% is simply adjusted to take into account this volume reality, the municipal share comes out in the range 27-44%. For good cause, EPA abandoned the draft "4% solution" in the face of severe criticism regarding its intellectual honesty and, we suspect, high concern that the courts would not sustain such a blatant assault on logic.

Alternatively, as noted, sometimes efforts to allocate are made based on the amount of "hazardous substances" in the various wastes. There are recent legislative proposals that would leap from the conclusion that, since generally municipal waste contains about half of one percent of hazardous substances, the total municipal share should be half a per cent of cleanup costs. This might work except that nearly every other waste would also need to be adjusted down to reflect it is less than 100% hazardous substances, e.g., plastic might be multiplied by zero. Then, if all waste could be accounted for, there would need to be an upward adjustment in order to make the numbers add to 100%, since all costs must be recovered. For example, at a "typical" landfill where the split is 95%-5% municipal to industrial volumes, if we adjust the municipal share by half percent, it becomes 0.475%. Assuming a very high 50% hazardous substances in the industrial waste, after adjustment this becomes 2.5%. Adding these together we account for only about 3% of the costs. In order to reach 100%, each must be multiplied roughly by a factor of 33. The municipal share then would be about 16%. Obviously it would not be reasonable if only the municipal share could not be adjusted upward to get to the 100%. In addition, in most cases there is a sizable "orphan" share resulting from poor records and companies unable to pay. Under the Spill Act the parties also must pay this share, but if the municipal share were fixed by law, all the orphan share would go to the other parties. This also would be highly unfair.

I am personally familiar with many of the New Jersey municipal landfills that are subject to the Spill Act, like GEMS in Gloucester Township, Kramer in Mantua, and Global in Old Bridge. Industry is cleaning GEMS at an estimated cost of $60 million, EPA and New Jersey are cleaning Kramer at an estimate of $180 million. Global landfill closure costs certainly will exceed $40 million. Each is well over 90% municipal waste (garbage and sewage sludge), as near as we can tell from reviewing old records. The City of Philadelphia alone is by far the largest volume contributor to Kramer and GEMS. At GEMS when we account for all the waste that can be traced, the municipal volume is approximately 98% of this. We estimate GEMS contains 10 million tons of waste. The 0.5% of this attributable to municipal entities calculates to 100 millions pounds of hazardous substances at this site from solely the municipalities, likely far in excess of the industrial contribution of hazardous substances. A-539 apparently would completely absolve Philadelphia from its responsibilities for the cleanups now ongoing. We are entirely sympathetic to Philadelphia's budget problems, but likely they are no worse than those faced by many companies in New Jersey, onto whom these costs apparently would be imposed by A-539.

The unfairnesses are compounded at landfills like Global, which purportedly received a considerable volume of illegal waste. DuPont's wastes went to this site legally, and indeed in the 1980's we were compelled to use this site under the waste flow laws imposed by New Jersey. Despite the municipal volumes, the Department of Environmental Protection and Energy (DEPE) issued a cleanup directive only to industry, some 40 companies, yet there are many more who should be liable. This is the same regulatory agency that continued to issue permits for the operation of this site as it was being built into a wetland, until the day its face collapsed into the wetland in a rain storm in 1984. Further, the volume of the parties receiving the directive is so small that collectively they should all be minor players in the cleanup. We can't find the illegal shippers, so they and their customers are getting a free ride. My company, which as noted used Global legally, shows from old records as a higher volume contributor compared to the other directive recipients, so we have taken a leadership role. However, nearly all of our waste was plastic ("Mylar"), it presents no harm to the environment, and contains vanishingly small, single digit parts per million quantities of "hazardous substances" (trace metals), while, as noted above, municipal waste typically contains half a percent hazardous substances, which translates to 5,000 parts per million.

Needless to say, it is highly unfair for DuPont to be ordered to clean a site with the history of Global with no help from the towns that have larger shares. If this bill passes and the towns are absolved from responsibility, I believe industry will be far less willing to take a leadership role in such sites. This is a recipe for delay, the DEPE hasn't done anything to clean the site since the collapse nine years ago. Further, if this were to happen with any frequency the Spill Fund clearly would not be adequate. A handful of landfills like Kramer would cost in excess of $1 billion.

The current system, under which the DEPE has adopted a policy of only ordering cleanups from industry, is unfair enough, but at least we can recover a fair share from the municipalities in court. This should not be compounded by a legislative endorsement of this unfairness that eliminates this relief. Not only is this wrong, it may hurt the environment by slowing or stopping cleanups.

We thus urge a comprehensive, fresh review of the Spill Act to focus it onto our real needs. Pending that, the unfairnesses in the current law should not be compounded by imposing on industry the costs of selective escape for cities and towns with Spill Act responsibilities.

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Public Hearing on

NEW APPROACHES TO LANDFILL REGULATION AND REMEDIATION

Before the

ASSEMBLY ENERGY AND HAZARDOUS WASTE COMMITTEE'S

TASK FORCE ON SITE REMEDIATION

Woodbridge, New Jersey

Presented by Drew Kodjak, Environmental Attorney

April 30, 1993

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Thank you, Mr. Chairman, and members of the Task Force on Site Remediation, for this opportunity to speak with you about issues surrounding the remediation of landfills in New Jersey. I am Drew Kodjak, Environmental Attorney for the New Jersey Public Interest Research Group (NJPIRG). NJPIRG is a non-profit, non-partisan, research, education and advocacy organization dedicated to environmental preservation, consumer protection and government reform. NJPIRG has roughly 70,000 members statewide.

I do not presume to provide a solution to the complex issue of landfill remediation, but merely to provide the historic context which has formed around this issue over the last several years. And in doing so, I will attempt to address two questions.

1. What is the history of this issue? Today it is called the Landfill Remediation issue, but yesterday it was called the Municipal Liability debate. The name change has not changed the issue, although perhaps it has altered the perspective. The point is that the difficulty with landfill cleanups was not the original impetus behind this political movement. Rather, this movement was born several years ago when corporate polluters unscrupulously began bringing lawsuits against towns and school boards and small businesses under the pretense that household garbage is the equivalent of hazardous waste. Our discussions today must recognize the history of this issue, and also take into account the larger political context of Superfund reauthorization.

2. Does a landfill approach make sense? There is merit to the position that landfills are a different animal from traditional hazardous waste sites, and as such should be treated differently. The New Jersey DEPE's "Discussion Paper on Landfill Closure and Remediation Issues" is a very useful document , but it has a bias towards dealing with landfills separately from the present system. Basically, DEPE is saying that even though we have a one billion dollar landfill cleanup cost on our hands,[1] high transaction costs prohibit the usefulness of the current liability approach. Before we move away from the current liability approach for landfills, we should thoroughly investigate all other remedies and secondly, we must then find an appropriate and practical replacement funding source.

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HISTORY OF THE MUNICIPAL LANDFILL ISSUE

The problem with landfills did not originate, as it perhaps now appears from the DEPE's Discussion Paper, with a sudden recognition that landfills are somehow different from "traditional" hazardous waste sites. Instead, the impetus for this discussion, and in fact, this very hearing, is an effort by large corporate polluters, insurance companies and their legal counsel to undermine the strict, joint and several liability scheme found in both the federal Superfund Act and the New Jersey Spill Act by suing small businesses, towns and school boards.[2]

When the New Jersey legislature enacted the Spill Act in 1976, the fundamental underlying objective was that the polluter pay the cost of its pollution. The polluters who have been found responsible for cleanup costs under the Spill Act over the last decade -- primarily large chemical firms who deal regularly with with significant amounts of toxic materials -- have been busy trying to subvert the law to require municipalities which are collecting and transporting household trash to pay an inordinate and inappropriate share of the costs of Superfund cleanups. The attempts to undermine the Spill Act have raised serious questions regarding its implementation. These questions deserve and have received attention from both the state and federal environmental agencies and legislatures.

TIME LINE OF PROPOSED SOLUTIONS

Dec. 12, 1989 -- EPA announces that it would not routinely prosecute local governments for the generation or transportation of municipal solid waste, including ordinary garbage and sewage sludge. This policy guidance, the "Interim Municipal Settlement Policy" (Policy), was largely viewed as a victory for local governments.[3]

Two years later, the Policy was challenged by a group of corporations in the context of a specific cost recovery enforcement action at the Helen Kramer Landfill in New Jersey, but the court upheld the Policy and the EPA's authority to both issue and adhere to it.[4]

Predictably, corporations decided that if EPA was not going to ask municipalities to share the costs of cleanup, they would use their right to bring

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third-party contribution suits against municipalities. At the GEMS Landfill alone, 50 local governments were sued for millions of dollars in cleanup costs for disposing of household garbage.[5]

April, 1991 -- Representative Smith introduced a bill in the U.S. House of Representatives to amend the Superfund Act.[6] The bill barred corporations from bringing third-party contribution suits against political entities, such as municipalities and school boards. In 1992, New Jersey Assemblywoman Farragher proposed similar amendment to the New Jersey Spill Act.[7] Hearings were held in front of the Assembly Energy and Hazardous Waste Committee in the spring of 1992 and the fall of 1993.

The Smith/Farragher bill would modify the Spill Act by eliminating municipal solid waste from the Spill Act's definition of hazardous substances. It also protects municipalities from all third-party contribution suits brought under the Spill Act. NJ PIRG has several concerns with A.539, listed below:

The Smith/Farragher bill eliminated municipal solid waste from the definition of hazardous substances. NJPIRG found this contradicted the statute's overriding "polluter pays" principle and reduced the incentive for affected parties to adopt proper disposal practices. MSW contains hazardous substances, however minimal, and municipalities should be held responsible to some degree if the statute's "polluter pays" principle is to be maintained. Eliminating municipal solid waste from the statute's definition of hazardous substances reduces the incentive for municipalities to establish household hazardous waste programs, or for individuals and small businesses to properly dispose of their hazardous waste.

The Smith/Farragher bill provided for overbroad contribution protection. Municipal owners/operators of waste sites, in the same position as corporations such as Waste Management, Inc., who own and operate landfills, would be granted contribution suit protection. This provision goes beyond the scope of these amendments, the purpose of which is to establish that municipal solid waste should not be equated with industrial hazardous waste. Some municipalities operate industrial processes,[8] and in these instances they are in a similar position as industrial generators. Again, this overbroad contribution suit protection goes

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beyond the scope of these amendments, the purpose of which is to establish that municipal solid waste should not be equated with industrial hazardous waste.

1991 -- EPA requests public comment on its draft "Interim Settlement Guidance for Generators and Transporters of Municipal Solid Waste (MSW)," which placed a 4% cap on liability for parties who generated/transported MSW.[9] This guidance policy never became a final administrative rule.

July, 1991 -- Senator Lautenberg and Representative Torricelli introduced companion bills which sought to focus on the material generated rather than the parties themselves.[10] These bills attempted to codify the EPA approach found in the draft "Interim Settlement Guidance for Generators and Transporters of Municipal Solid Waste." The bill passed the Senate but failed to pass the House before the session ended.

NJPIRG, and other national and state environmental groups supported this approach because it maintains the "polluter pays" principle while relieving parties which handled municipal solid waste from the unfair burden of defending themselves against law suits by corporate polluters.

The bills provide:

• Block on third-party contribution suits for municipal solid waste (MSW) and sewage sludge during and after settlement.

• Expeditious settlements. EPA would be required to deal with municipalities first.

• Cap on liability for MSW at 4 percent. This figure was calculated by dividing the average cost of remediating a hazardous waste site with the cost of closing a landfill.

• Future disposal practices. If a municipality did not establish a household hazardous waste collection program within three years, the settlement option would be available to them.

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March, 1993 -- Senator Lautenberg and Representative Torricelli (as well as Representative Smith) introduce "Toxic Cleanup Equity and Acceleration Act." Senator Lautenberg begins hearings on the reauthorization of Superfund in Trenton, NJ.

THE LANDFILL APPROACH

NJPIRG recognizes the need to develop solutions for how best to clean up municipal landfills. They are a different animal from the majority of hazardous waste sites. The average size of municipal landfills in New Jersey is 50 to 100 times greater than the traditional industrial site. Municipal landfills often contain a large diversity of toxic substances. Municipal landfills often have a large numbers of contributors, often in small quantities, of hazardous (and non-hazardous) substances. And there practical limitations to remedies for municipal landfills due to their size and complexity.

However, at the same time, municipal landfills are some of the worst threats to public health, safety and the environment. And the practical difficulties in their cleanup should not divert our attention from the ultimate goal of cleaning up these hazardous sites.

One approach would entail streamlining the Spill Act in recognition of these practical realities. De minimus parties should be fast tracked. Generators of municipal solid waste should be dealt with under the Lautenberg approach (see above). A practical range of potential remedies should be established (see DEPE Discussion of Landfills). All these administrative changes should work to decrease or eliminate the burden of third party contribution suits.

TRANSACTION COSTS

The primary argument against continuing on the present course is that transaction costs are too high. While the numerous potentially responsible parties at landfill sites will indeed lead to higher transaction costs, it is important to address the well-publicized and largely incorrect assertions that the vast majority of Spill Act and Superfund dollars are going to pay lawyers rather than to actual cleanup. A report published by the Rand Corporation in the spring of 1992 is the source of many

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of these disturbing accounts. A thorough reading of the 80-page analysis reveals that transaction costs have come down and will continue to drop in the future.

What does the Rand Report on Superfund transaction costs say?

The Rand report compares Superfund transaction costs with total cleanup expenditures and casts serious doubts about critics' claims that the Superfund's unique liability approach has caused excessively high transaction costs.

What are transaction costs?

Transaction costs are defined in the body of the report as costs which "do not contribute directly to the cleanup process; instead, they are concerned with the assignment of financial burden and legal issues. Legal costs are clearly transaction costs, but engineering and other non-legal expenses incurred at a cite can sometimes be transaction costs and sometimes I & R costs (p. 46)." I & R (investigation and remediation) costs are defined as costs "that contribute to the technical understanding or actual cleanup of a site (p. 45)."

What do "transaction costs share" or "percentage share" mean?

The term "transaction cost share," or "percentage share," is not defined in the report. This is curious because the report's central issue -- what percentage of Superfund resources are "wasted" on non-cleanup related activities -- turns upon this crucial percentage.

Analysis suggests the following definition: Transaction cost share is calculated by dividing total expenditures to date (investigation and remediation costs plus transaction costs) by the amount spent on transaction costs. If transaction cost share is high, then too many Superfund dollars are being diverted away from actual cleanup. If transaction cost share is low, then the Superfund program is using its resources efficiently (i.e., primarily on site remediation).

Size of site significantly effects transaction costs share

At large cleanup sites (sites with expenditures over $100,000), transaction cost share is significantly lower than at smaller sites. Private firms spend more than 90

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percent of all cleanup dollars at such large sites (p. 50). Transaction cost share at these sites is only 13 percent, which is considerably lower than the 21 percent average for all private firm sites (p. 51).

Timing is crucial to transaction cost share calculations.

Timing is an important factor in determining true transaction cost share. Transaction costs occur at the beginning of the remediation process, when liability is disputed and parties negotiate the allocation of cleanup costs (p. 55, 64). In simple terms, transaction costs are frontloaded. Conversely, investigation and remediation costs occur towards the end of the remediation process, when insurance claims are closed and/or sites are cleaned up (p. 55, 64). In simple terms, cleanup costs are backloaded.

The majority of cases, both insurance claims and site cleanups, are still in their early stages (p. 9, table 1; p. 26, table 2; p. 35, table 12; p. 36, table 13). Accordingly, as the report acknowledges, transaction cost shares, which are based on present expenditures, are high and should come down considerably as the life cycle of the cases reach maturity (p. 35; p. 64, table 27). This is true for both private firm transaction costs and for insurance company indemnity claims.

Conclusions about private firm transaction costs share.

In the case of private firms, average transaction costs to date are only 21 percent of total spending on hazardous waste cleanup (p. 66). This figure is expected to drop as the majority of cleanup sites funded by private firms reach maturity (p. 67). Therefore, we should think of transaction costs, the report states, as necessary "set up" costs (p. 65, 67). After an average initial $53,000 outlay in transaction costs spent before any investigation and remediation costs are incurred, additional transaction costs should drop sharply to 8 percent and to 3 percent when investigation and remediation costs reach $100,000 (p. 65, table 27). The report cautions that these figures may not be accurate if the present mature sites are not representative of the whole.

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How do insurance companies differ from private firms?

In the case of insurance companies, because the vast majority of insurance claims are still tied up in state court, transaction costs are currently the great bulk of total costs (p. 34). Not surprisingly, they account for 88 percent of the insurance industry's total expenditures. What this figure really means if that insurance companies have successfully defended themselves against their policyholders, or are in the process of defending themselves, and have, to date, rarely been forced to pay actual cleanup costs (p. 69).

As with private firms, the report states, transaction costs for insurance companies should be thought of as "set up" costs (p. 65). This is because "[i]ndemnity payments occur close to claim closure dates in the insurance company analysis (p. 64)" In simple terms, indemnity payments are frontloaded. Accordingly, the 88 percent insurance transaction cost figure is also expected to drop, perhaps to 69 percent of total expenditures, when claims are finally closed (p. 35 - 37).

Unfortunately, due to troublesome legal issues embedded in private insurance contracts, lack of consistency in state court rulings, and the tenacity with which insurance companies have sought to escape payment of actual cleanup costs, costly litigation over insurance coverage is likely to continue (p. 18 - 25).

General Conclusions

It is not the Superfund's unique liability scheme, but a host of outside factors which have contributed to the insurance industry's high transaction costs. The Superfund law cannot close loopholes found in private insurance contracts, such as Comprehensive General Liability (CGL) policies (p. 19). It cannot eliminate forum shopping which is a direct result of states courts' varied rulings. Short of "federal legislative intervention" (p. vi), insurance companies will continue to drive up transaction costs by refusing to reimburse their policyholders for hazardous waste site cleanup expenditures.

Interestingly enough, the opposite result was found with corporations. Private firms "initially contested the liability provisions of CERCLA and similar state laws, but these cases were widely decided in favor of the government (p. 69)."

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Faced with liability, these large corporations began participating in the cleanup process. As a result, their transaction costs dropped and will probably continue to drop in the future.

CONCLUSION

It is clear that New Jersey's major polluters are attempting to distort the Spill Act and attack its strict, joint and several liability standard. They are doing so by blackmailing small businesses, school boards and municipalities in New Jersey and, through the Superfund, all across America.

The Lautenberg approach, by preventing contribution action by these big polluters, would recapture the original intent of the Spill Act to make polluters pay. NJPIRG looks forward to working with this panel to protect the legitimate interests of municipal governments without jeopardizing the progress that those governments have already made toward reducing the amount of toxics in the municipal waste stream.

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[1] Discussion Paper on Landfill Closure and Remediation Issues, Department of Environmental Protection and Energy, 1993.

[2] Polluters try legal tactic to dump cleanup cost on local governments, Star-Ledger, December 12, 1990, A1. More than 50 municipalities were sued by industrial parties in the GEMS landfill case. See also, Pollution Ploy: Big Corporations Hit By Superfund Cases Find Way to Share Bill, The Wall Street Journal, April 5, 1991, A1. Included in the third-party contribution suits were many small quantity generator businesses, such as an Elks Club, an exercise gym, a donut shop, and a pair of nursing homes.

[3] EPA Interim Municipal Settlement Policy, 1989.

[4] United States v. Kramer, 757 F. Supp. 397, 433-36 (D.N.J. 1991).

[5] New Jersey Department of Environmental Protection v. Gloucester Environmental Management Servs., No. Civ. 84-0152 (B), 1991 WL 179974 (D.N.J. Apr. 14, 1988) (amended third-party complaint).

[6] H.R 2767 1H. The Smith bill's introductory statement reads: "To amend the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund) to provide that municipalities and other persons shall not be liable under that Act for the generation or transportation of municipal solid waste.

[7] A.539, amending P.L.1976, c.141 (C.58:10-23.11 et seq.).

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[8] For example, municipalities use industrial solvents to clean their road-painting trucks. Also, large quantities of waste oil are generated by municipal police cars, garbage trucks and other service vehicles.

[9] Interim Settlement Guidance for Generators and Transporters of Municipal Solid Waste, OSWER Directive 9834.12-1a. Presented for notice and comment in 1991.

[10] S. 1557, H.R. 3026. The Torricelli bill's introductory statement reads: "To amend the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 to protect citizens, municipalities, and other generators and transporters of municipal solid waste and sewage sludge from lawsuits equating these substances with industrial hazardous wastes."

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NEW JERSEY BUSINESS & INDUSTRY ASSOCIATION

TESTIMONY

Assembly Task Force for the Review of Site Remediation Programs
April 30, 1993

I am Philip Kirschner, Vice President of Legal Affairs, of the New Jersey Business and Industry Association. I would like to address just one issue on site remediation, which is, the allocation of liability. We all agree that the current system results in too much litigation and not enough remediation. We ask you however, to oppose any plan which unfairly shifts the liability of public entities to employers for dumping hazardous substances at a landfill. This is the incorrect solution.

We believe that a policy of exempting public entities is unfair and will result in a great shift of liability to employers from public entities that routinely dispose of such items as solvents, cleaners, pesticides, fertilizers, batteries, waste oil, paint, anti-freeze and other hazardous substances. Many of these items are either flammable liquids, acidic corrosives or alkaline corrosives.

Furthermore, all reasonable people recognize that some key portion of municipal waste is toxic and that the volume of waste is an important factor. Exempting public entities from liability and shifting their liability to employers or arbitrarily capping their liability is simply unjust and sends a terrible message to business. It will result in even more litigation as employers resist shouldering an even greater burden of cleanup costs.

It would be outrageous, as proposed under pending legislation, if companies that are sued under joint and several liability are made to pay for the public entities' share of liability, but these same employers are prohibited from receiving reimbursement from the public entity for the damage the public entity caused.

Employers are willing to pay for the share of liability they cause, but not that of the public entities. The problem is strict, joint and several liability, which potentially permits all parties, including employers, to pay more in damages than they caused. The solution is to modify joint and several liability, not to arbitrarily shift liability from public entities to employers.

We are happy to see that the DEPE Discussion Paper on Landfill Closure and Remediation Issues states that "the issue of whether strict, joint and several liability is an appropriate mechanism to clean up municipal landfills needs to

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be debated with the Legislature to arrive at a consistent policy that will make effective use of scarce resources."

We should work together to modify or eliminate the environmental torts exemption to New Jersey's current joint and several liability law. Currently, where liability is involved in other types of cases, those parties that are 20% or less responsible are made to pay only their share. While the threshold number could be less than 20%, some de minimis exception to joint and several liability in these cleanup cases would limit the liability of marginal contributors and bring equity to all parties.

Finally, the Superfund Reauthorization bill in Congress is dealing with the issue of public entity liability. We must ask, why New Jersey must once again take action before the other forty-nine states and stand out like a "sore thumb" to business in New Jersey and around the country? This is a problem that should be handled uniformly across the states.

If we are to act in this area, let us all work for an exception to joint and several liability, to limit the liability of all marginal contributors, rather than solve the problems of public entities at the expense of employers.

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Passed June 8, 1991 by Delegate Assembly of New Jersey School Boards Associati

School District Liability for
Waste Site Cleanup Costs

RESOLUTION NO. 1

NEW JERSEY SCHOOL BOARDS ASSOCIATION

P. O. Box 909
609-695-7600

413 West State Street
Trenton, N.J. 08605-0909

ANNUAL DELEGATE ASSEMBLY

June 8, 1991

The following resolution was received from the Freehold Township Board of Education (Monmouth County):

WHEREAS, Boards of Education throughout the State of New Jersey, are being subjected to demands from industrial polluters for substantial financial contributions for environmental cleanups under the purported authority of The Comprehensive Response, Cleanup and Liability Act (hereinafter "Superfund") and the Spill Compensation and Control Act (hereinafter "Spill Act"); and

WHEREAS, contribution actions have been commenced against Boards of Education and local governmental entities throughout the nation and in the State of New Jersey, including more than fifty New Jersey Boards of Education joined in litigation relative to the (GEMS) Landfill, in Gloucester County; and

WHEREAS, by virtue of such actions, industrial polluters are attempting to shift a substantial amount of cleanup costs to Boards of Education and other local governmental entities; and

WHEREAS, the claims against the Board of Education and local governmental entities are principally predicated upon their disposal of household waste and municipal solid waste; and

WHEREAS, the Superfund Law and the Spill Act were not motivated by the trace amounts of hazardous waste allegedly found in household waste and municipal solid waste, but rather were enacted to redress the very real dangers posed by hazardous waste generated and disposed of by industry; and

WHEREAS, the contributions demanded from School Boards and local governmental entities are greatly disproportionate to the trace amounts of hazardous substances allegedly contained in household waste and municipal solid waste; and

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WHEREAS, the costs of defending contribution actions alone can prove devastating to Boards of Education and other local governmental entities; and

WHEREAS, School boards and local governmental entities should not and cannot afford to sustain substantial financial burdens threatened by contribution actions brought under Superfund and the Spill Act; and

WHEREAS, industrial polluters have used this threat of substantial liability in attempts to coerce school boards and local governmental entities to assist the industrial polluters in efforts which would have the effect of compromising the thoroughness and integrity of environmental cleanups; now, therefore, be it

RESOLVED, that the New Jersey School Boards Association seek amendments to the Federal Superfund Law and the New Jersey Spill Act to:

(a) specify that liability under Superfund and the Spill Act may not be predicated upon the generation or disposal of household waste or municipal solid waste;

(b) subject School Boards and local governmental entities to suit only by the Federal and State governments.

RESOLVED, that the New Jersey School Boards Association seek the assistance and support of the National School Boards Association for the achievement of these legislative goals in the United States Congress.

Adopted at a regular meeting of the Freehold Township Board of Education on March 12, 1991.

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W. Mark Horvath
Board Secretary/Business Administrator

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New Jersey
School Boards Association

Headquarters: 413 West State Street, P.O. Box 909, Trenton, New Jersey 08605
Telephone (609) 695-7600 Fax 609-695-0413

POSITION STATEMENT

A-539/S-95 (Farragher/Inverso)

EXEMPTS MUNICIPAL SOLID WASTE FROM SPILL ACT LIABILITY AND PROTECTS SCHOOL BOARDS FROM PRIVATE CONTRIBUTION ACTIONS

The New Jersey School Boards Association strongly supports A-539/S-95 which amends the New Jersey Spill Compensation and Control Act to prevent industrial polluters from suing any person, including school districts, for its disposal of ordinary garbage. The amendment also provides that only the state may sue school districts under the Spill Act under all other circumstances.

The amendments are a response to efforts by industrial polluters to shift responsibility for cleanup costs to the taxpayer and to erode public support for the Spill Act by entangling as many public entities as possible. In fact, at least 57 school districts and 217 public entities have already been sued or threatened with suit under the Spill Act and/or its Federal analogue, CERCLA or Superfund. As a result of these suits, school districts and other public entities are already spending substantial sums of taxpayer dollars defending contribution action against those whose disposal practices created the hazardous conditions at the Spill Act/Superfund sites. Thus, we need to put an end to such costly litigation practice and restore the Spill Act to its original purposes.

The New Jersey Spill Compensation and Control Act (Spill Act) was enacted by the New Jersey Legislature in 1977 and empowers the New Jersey Department of Environmental Protection and Energy (DEPE) to address the harmful effects of hazardous substances released into the environment. The legislation specifically empowers the DEPE to take actions to abate any such release, to recover the costs of such actions from responsible parties, and to compel such parties to undertake cleanups of contaminated sites. Liability under the Spill Act is triggered as a result of the mere generation or transportation of hazardous substances and allows the original polluter being sued to sue third party defendants who contributed to the site.

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January 14, 1993

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The definition of "hazardous substances" is extremely broad and encompasses substances contained in household products commonly found in the municipal waste stream such as household cleaners, cosmetics, batteries, lawn fertilizers, consumer pesticides and paint products. The presence of trace amounts of hazardous substances in household garbage is the principal excuse industry has seized upon to sue local governments for contribution under the Spill Act, because the law does not expressly exempt household garbage and municipal solid waste from the definition of "hazardous substance."

It is important to note that A-539/S-95 does not create an "immunity" for local governments and school districts. Rather, the bill provides that only the State of New Jersey may sue any person, public or private, for the generation or transportation of household waste and establishes a formula for the calculation of any such liability if the state chooses to sue a person for the generation or transportation of household waste. If a school district has disposed of a truly hazardous substance, the bill prohibits contribution action and allows only the state to sue the district.

Currently, 53 local school districts are contribution defendants in litigation relating to the GEMS Landfill in Gloucester Township because waste oil removed by a contractor from heating units in school buildings "may" have been sent to GEMS. Although specific dollar amounts have not yet been demanded from the GEMS school districts, experience at other sites involving municipalities illustrate that the amounts demanded by industrial parties are greatly disproportionate to local governments' contribution, if any, to the contamination at a particular site. Such "shakedowns" will be eliminated if the abusers no longer have the ability to sue local governments directly. By eliminating the right of contribution, local governments remain in the liability scheme, where appropriate, but are given the opportunity of resolving their liability at the hands of the state, which should lead to more equitable and realistic results.

Absent passage of this critical amendment to the Spill Act, industry will continue the process of draining the already limited financial resources of local governments and their citizens by extorting disproportionate settlements, continuing expensive defense costs, and prolonging the clean-up process of the sites.

At a time when school districts are struggling to provide vital educational services, this catastrophic liability poses an unforeseen and unjustified threat to scarce fiscal resources.

NJSBA URGES YOU TO SUPPORT A-539/S-95.

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GENERAL ASSEMBLY OF THE STATE OF NEW JERSEY

- COMMITTEE ON ENERGY AND HAZARDOUS WASTE -
PUBLIC MEETING ON THE MUNICIPAL LIABILITY ISSUE

Meeting Date: Friday, April 30, 1993

Personal Statement of John F. Lynch, Jr.,
as an Individual, not in a Representative Capacity

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NJ Muni Testimony -- JFL -- 4/30/93

This State and this nation are founded on certain constitutional principles. One of these is the idea that, with minor exceptions, private property should not be taken for a public purpose except in one of two ways: direct individual taking for a public purpose through condemnation with a payment of just compensation; and, general taking through taxation fairly and evenly applied. Nowhere are these principles more clearly stated than in the New Jersey Constitution where the right to property is dignified as early as Article 1, Section 1.

Make no mistake, the collection and proper disposition of ordinary garbage by municipalities is a public purpose. I am sure you know in your soul that you could not, consistent with your oath to serve under the Constitution of this State and nation, pass a law to fund the garbage collection of say, Jersey City, through a tax on a single company chosen virtually at random from among the list of those with sufficient assets to meet the bill.

Yet, that is the effect of bills, such as A-539, which exempt municipalities from responsibility for the household hazardous waste they dumped at landfills they chose. They would allow DEPE officials the right to place the cost of cleaning up any 60-acre, 100-foot-high municipal dump created anywhere in this State at any time in this century (or earlier) on any single company. DEPE only need show that the company sent at least one container with the something like a few scraps of copper wire, a

couple of wipe rags once wet with solvent, or a not-totally-empty paint can. The Spill Act already is being read to have given DEPE that power, but it left the company contribution rights against those who made the mess. Those bills would take away many of those rights. They authorize and encourage DEPE functionaries to impose the tax which you could not, and would not, pass.

Fundamentally, you are dealing here with a use of public power to clean up old municipal garbage dumps.

In the New Jersey of my youth, in the years before current environmental consciousness, New Jersey municipal garbage and a whole lot of New York and Pennsylvania municipal garbage was dumped on New Jersey acreage that seemed not otherwise useful. Sometimes cities and towns dumped in pits where sand had been removed down to, and often below, the top of the groundwater. In New Jersey, such places have names such as GEMS, Lipari, Price's Pit, and Jackson Township. Otherwise, cities and towns dumped into what were then called swamps, the same places we now call wetlands. In New Jersey, such places have names like Sharkey's Farm, Sayreville III, or Lone Pine. Those swamp site dumps which burned up-wind of the Jersey City neighborhood where I grew up were turning hundreds of truckloads of New York City garbage a week into mountains we now see in the Meadowlands or around the footings of the Pulaski Skyway.

As my youth wore on, the cities and towns which collected and dumped the garbage, and the contractors which did it

77 X

for them, told the public they were not just dumping; oh no, they were being constructive; they were "landfilling."

Most of these dumps from the 40's, 50's, 60's, and early 70's took both municipal and industrial materials. For that reason, today we say these old dumps were "mixed use landfills."

I don't really recall what went to my parent's curb in Jersey City in the 40's except for the smoldering residues of our coal furnace that I rolled there every Sunday evening in God-awfully heavy ash cans. Even less do I recall their back door garbage service in Chatham in the 50's.

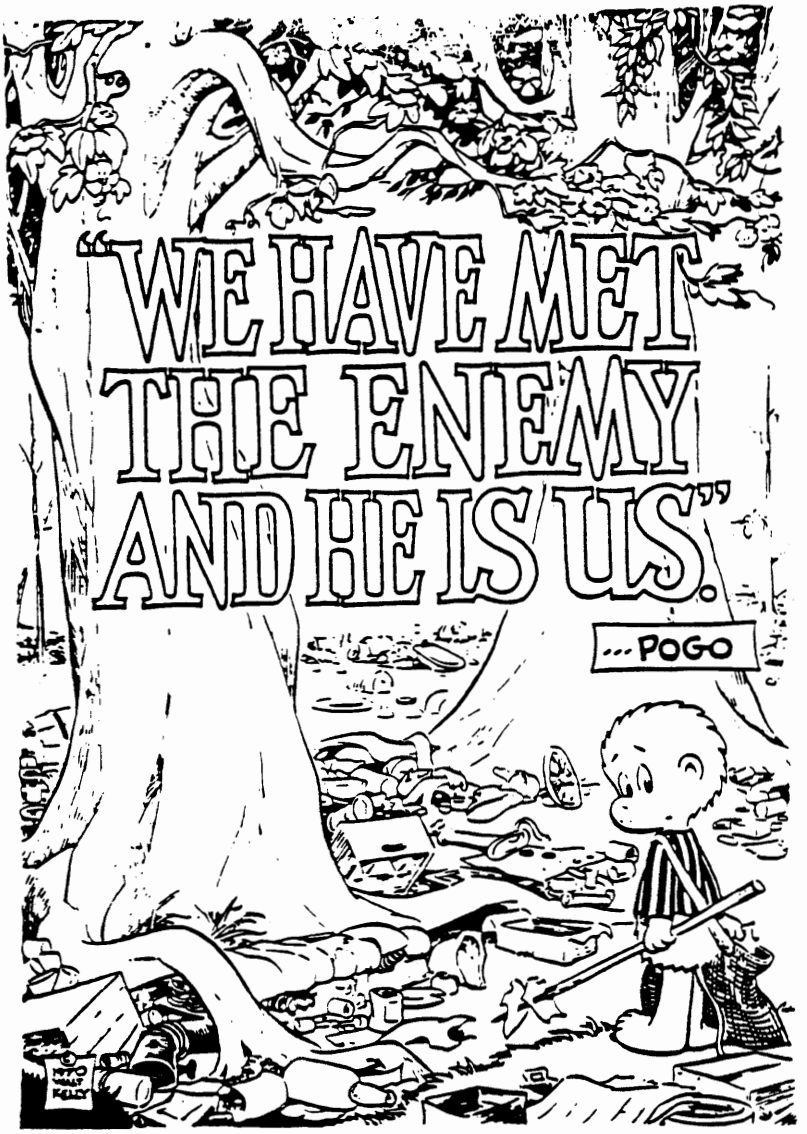
But I do remember what I took to the curb in the late 60's and early 70's when, as part of a "young married" couple, I bought an old Victorian house in Morristown. We stripped woodwork with tens of gallons of paint stripper, all of which (together with the lead-based paint it removed) reached the curb in soggy paper towels. We painted all the rooms and the large porch more than once and, ultimately, discarded more rollers, brushes, turpentine, and half-empty paint cans than I could count. We had wasps in the eaves, squirrels in the attic, and carpenter ants at the foundation; we bought, and discarded half of, innumerable gallons of special poisons for each. We, and millions like us, used copper-top batteries in chrome-plated flashlights and mercury batteries in every discardable pack of instant film we aimed at our kids. Scraps of copper wire and pipe, and asbestos

78X

from ceiling work, filled my garbage bags after every home repair project.

And my neighbors' garbage was the same or worse. For example, while I would discard my lawnmower's oil yearly, they would discard their cars' oil monthly.

What was true of me and all of us then, and is true of all of us today, is so plain that it could be summed up in a single cartoon panel by Walt Kelly,



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When the New Jersey Legislature first approached the problems of pollution of the lands and waters of our State, it did a pretty good job. It passed the Spill Act which basically says, "Don't spill hazardous materials on the land or waters of New Jersey; if you do, report it; then, clean it up. If you don't clean it up, we will; and, we will then make you pay for it."

And when the New Jersey Legislature first approached the problems presented by municipal dumps, it also did a pretty good job. It passed the Sanitary Landfill Closure and Contingency Fund Act. That Act basically says, "The costs of closure of a landfill should be borne by its users. So, part of the rates the users are charged should go to a fund for the closure. And, as to closed landfills or those without enough remaining life to fund proper closure, those costs should be borne by landfill users also; part of the rate they are charged should go to a State Fund."

These Acts recognized a fact that anyone with common sense knows: those old dumps pose an environmental problem.

These Acts were also crafted in a way that was consistent with respected themes of sound public policy: distribute the costs widely and proportionately among all those who caused the problem, distribute the costs so that they provide an incentive to those who will act in the future to do so prudently. These acts recognized that the incentives of the State should be directed at those whose actions pose the threat.

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From that good legislative beginning, things have gotten out of hand. The New Jersey program to remedy these ancient dumps is a case study of the worst possibilities when the intrinsic zealotry of a cause-oriented bureaucracy operates in a total absence of checks and balances. Here, the lack of restraint derives from the total absence of legislative budgetary constraints and a parallel lack of judicial willingness to stand in front of the perceived force of environmental instincts in the body politic.

What is going on in this program is madness.

One can argue, and I have, that when the Spill Act imposes State power on a "discharger", it is only speaking to the person that puts or pours the hazardous material on the ground or into the water or permits it to be poured upon his land or into his water. But, while the issue is still open, the prevailing interpretation within DEPE expands the law to parallel the later federal Superfund program without bothering to ask the legislature to consider the matter. DEPE now reads "discharger" to include the persons who generated or arranged for the disposal of the material even though they may have used independent State-licensed contractors who, in turn, dumped at State-permitted facilities.

State officials involved in the case have told us that the $70 million+ GEMS landfill remedy is a model for what the State intends to do to remedy over 2,000 closed dumps throughout

81X

the State. The groundwater contamination there is typical of that under municipal dumps throughout the country.

At a Congressional hearing, I suggested that the State had added the cost of an extra foot thickness of clay on GEMS' 63 acres compared to a municipal dump closure, simply because the State had decided to treat the place as an industrial site in order to get industry to pay for it. The State felt a need to be intellectually consistent and industrial site regulations called for the extra foot. The State official on the panel admitted my suggestion was correct and said that decision could, indeed, add $10-$20 million to the cost of a site.

This is a program where policy makers gleefully ask, "How clean is clean?" and nobody asks, "How clean is appropriate?" or, "How clean can we afford?"

This is a program where New Jersey administrators are rushing to adopt clean-up standards of general applicability so they don't have to take the trouble to make reasoned judgments on the site-by-site basis which the federal program's risk assessment process would require. And they hasten to choose and defend standards so stringent that no one will ever accuse them of being "soft on polluters." The Governor's recent comments to the contrary notwithstanding, their mind-set is such that industrial areas near the docks in our centuries-old cities will have to be cleaned up to pristinity, not because of any threat to the intrinsically brackish groundwater, but because "After all, people live nearby and may eat the dirt." And woodlots, miles

from the nearest souls, will have to be cleansed to pristinity because "After all, it is wilderness and the heritage we pass on."

Concerning this program, a State official told me that he and his colleagues aren't worried about industrial flight from the costs of cleaning up the messes of others. They reason that, while some industries may go, the State is really targeting the petrochemical industry. The way they figure, that industry has to be near large populations and on a coast with harbors and supporting facilities. So it has no place to go. Then, I see that Exxon, the old Standard Oil of New Jersey, recently sold its Bayway refinery, and I wonder whether he's right. But worse than that I wonder how a person participating in constitutional government can harbor such logic.

Permit another example of how out of control this program is.

Dumps burn. Foodstuffs rot, sewage decomposes, and both give off natural gas; household garbage contains embers. Not surprisingly, at the dump to which my Jersey City table scraps went to rot and where those furnace ashes I mentioned went to smolder, a fire burned for 30 years. It took $25 million to put out the fire. DEPE is suing 25 industrial companies for that $25 million (and how much future work we do not know) because their New Jersey based facilities had liquid wastes taken there by a hauler so legitimate it kept records for 20 years. Despite the reputed mob involvement in the permitted operation of the

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site, the site's heavy use by local municipalities and New York carters, DEPE sued no municipalities - "exercise of discretion", don't you know. Why did the State choose these 25 companies, some with only 2 $20 gate fee receipts to connect them to this enormous site? DEPE reasoned that, when a company has its liquids hauled away instead of putting them in the sewer, those liquids are probably hazardous. And, if they are hazardous, the company is a "discharger" and the full power of the Spill Act can be used against it. No matter that the liquid neither caused the fire nor burned in it or that thousands of others sent equal or worse material there. "Make the polluter pay!"

Do State officials really think, as the Sunday Star Ledger in early February suggested, that a State-sponsored $60 million training program can induce industrial America to merge with or rescue foundering New Jersey companies, when such actions expose them to joint and several liability for the likes of a Helen Kramer ($180 million), GEMS ($70 million), Sharkey's Farms ($66 million), Lipari ($90+ million), PJP ($25+ million), Sayreville III ($16? million), Lone Pine ($40 million), and a thousand other landfills yet to come?

Notice, I am not protesting the use of the Spill Act against industry or the State and Federal governments at such clearly governmental or industrial sites such as SCP-Newark, or SCP-Carlstadt, or Renora, or Duane Marine, or Bridgeport Rental and Oil Services.

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Nor am I mentioning the 100s of millions of dollars companies are spending to clean up their own sites under ECRA, or fencepost-to-fencepost RCRA orders that DEPE has promised the Federal government to extract from New Jersey industry.

Nor am I mentioning what New Jersey facilities are spending to meet state and national standards for the water which leaves their processes or even the rainwater which falls upon their ground. Much less have I mentioned the money industry is spending to meet national air emission standards which are more stringent in polluted areas, such as New Jersey, which are designated as "non-attainment areas."

Any 10-year-old can figure out that you can't spend the entire Gross National Product cleaning up the environment (people have to have clothes, food, and shelter even if we don't employ people to make cars, police streets, and pass laws). It follows that there are economic limits to the environmental effort.

Yet, the originally well-conceived program this Legislature established is being developed by DEPE action and special interest amendments such as this into a program that knows no such limits. By that I mean it does not direct resources within the bounds of a legislative budget because it is spending private money. Neither does it direct resources within the bounds of an industrial budget with its competing tugs of market forces of supply and demand both for the products and the human and financial capital by which those products are produced. There is nothing in these laws to stop a DEPE official from ordering

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industry to spend the entire Gross National Product to clean up New Jersey's municipal dumps. This is a program blind to cost.

So, this program is clearly out of hand, out of all balance, totally off budget, and with no budgetary or marketplace driven balancing forces of wisdom or restraint.

No wonder the municipalities want to get out of its way. But letting them get out of its way while leaving industry to carry their load (while industry meanwhile is carrying heavy but appropriate loads of its own) is morally wrong. From the point of view of the interest of the more than one million who daily leave New Jersey homes and journey with brown bag lunches to places where they make, service, or sell things, this program is just plain harmful.

One Bill you have considered, A-539, was particularly extreme in that it exempted, not only municipalities which generated or arranged for the disposal of the waste, but to some extent, municipalities which owned or operated the dumps as well. Even in State and Federal lawsuits where clearly liable municipal generators are omitted, I have never seen a municipality which owned or operated the dump left out.

If, as municipalities are telling you, the pain of this program is too much to bear - fine, exempt municipal landfills from the Spill Act (and don't limit the exemption to the "Sanitary Landfills" as defined under the legislation of 1970). If you have to have a program for ancient mixed use sites, then design a program for ancient mixed use sites that fits the

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problems presented by those sites. But visit the costs of the remediation of those problems on all those who caused them.

You couldn't, in good conscience, design a new program which looks at the typical groundwater under a typical 10 million cubic yard municipal dump filled with 20 years of material, including cities' curbside garbage, sewage sludge, and the motor oil of thousands of public vehicles, and say that a one-drum customer should be liable for the entire remedy. If you accept that as so, the rest of the argument is simply a matter of degree.

If these sites reflect the sins of all our fathers, or even the sins of each of us in an earlier day, you should decide that we should solve them together in such proportion as shall seem equitable to the facts of each site. Or you should decide to admit that we don't have the resources to devote to these messes of the past and leave the guilt of those problems on those who caused them, not on the present generation for simply not cleaning up.

There is another point that should be particularly relevant to your consideration. As you know, the issue of municipal liability is under study at the national level. Last year, one bill passed the Senate; two others were active in the House. Three Federal Courts ruled on the issue under the present Federal statute and two others - one here in New Jersey - have it before them. If Federal legislation grants the exemption, New

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Jersey's echo of it after the fact would probably not be noteworthy.

On the other hand, if New Jersey, at this time of 9% unemployment and a seriously decreasing manufacturing base, chooses to get out in front of this issue, the anti-industry signal that would be sent will remain in memory long after the ultimate action on the Federal level, whatever it is.

Also, please do not overlook the unfairness to industry of exempting municipalities by crediting the false righteous argument that the industries that are stuck by such a law are those which made the products which consumers ultimately discarded and now poison the dump. By such logic, the remedial cost of a mountain of discarded foreign-made tires, batteries, butane cigarette lighters, TV sets, and out-of-state fluorescent tubes, pesticides, and household chemicals could fall to a New Jersey based company which may not even produce consumer products whose dumpster contained a few feet of copper wire, a couple of solvent-dampened wipe rags, and a nearly empty paint can. (The post-script to this statement deals with this issue further.)

Please understand that such an exemption would do nothing to encourage towns to act in a way which protects the environment such as adopting, encouraging, and enforcing separation of household waste streams and choosing properly sited, constructed, and operated landfills.

There is already rank unfairness in the degree to which large industry is burdened with the cost of these sites. I see

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it every time we gather in a large hotel conference room to allocate the remedial cost of one of these sites. Midnight dumpers are not there. Companies which bribed gatekeepers to take materials too toxic for permitted dumping are not there. Businesses which are long since closed are not there. Even your local furniture stripper whose all-consuming vat of God-only-knows-what was taken to the local dump by the septic tank cleaner is not there. Large businesses which have gone bankrupt are not there. Businesses which used mob haulers are not there because there were few records (and such of their records as ever existed rest in the vaults or dumps of the Organized Crime Strike Forces and are unavailable to DEPE or the companies it sues). Septic tank cleaners and sewer plants are not there because they are exempt. Ongoing small businesses are not there (or, if they are, they soon disappear) because the mere existence of a Spill Act claim on their balance sheet can kill the line of credit they need to meet the next payroll.

And so it goes on until this program, both on the State and national level, has become one which puts the problems we all caused on the shoulders of the small percentage of our economy represented by the Fortune 500. And policy makers scarcely pause to think that this is the same segment of the economy to which we look to balance our international payments so we can buy more oil, cars, and electronics from places without such laws.

Yes, for reasons of fairness, the industrial sector wants the municipal and other governmental sectors in each of

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those conference rooms negotiating their equitable share of the cost of the remedy.

But, more than that, the industrial sector believes that having the municipalities and other governmental agencies involved is equally important at the table where we work out the scope of each remedy with DEPE. Remember, in early February, the EPA Director said that second-hand cigarette smoke is at least 10 times more of a hazard than any other environmental exposure EPA deals with. That should suggest that some limits on the costs of dealing with other exposures, such as those at old municipal dumps, are appropriate.

If a municipality argues for such a limit at an ancient mixed use site, DEPE will have to listen or suffer the political consequences of its excesses. So, if a DEPE official decides on a remedy for a site that costs $25 million more than it should, and a municipality has to pay for all or part of it, common sense will win the day. If only industry has to pay for it, the official will call a press conference, crow about how he is making the polluters pay more than they should, and then send industry the bill for the press conference (as a "past response" or "oversight" cost).

Please, do not for a moment be persuaded by an assertion that industry are the "polluters", persons below contempt, but municipalities are not polluters, they are "public servants." Such an argument infers a claim that somehow the waste of industry is qualitatively different than that of municipalities. To

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be sure, sometimes it is; both for better and for worse. But it is not always different. And as long as both are hazardous materials, liability under this statute does not, and ought not, depend on implied differences.

At the outset, I spoke of a hypothetical single company tax to pay, retroactively, for disposing of decades of municipal garbage properly. And I said you would not pass such a tax because it would violate the words of our State and national constitutions and your sense of what the constitutions permit.

Actually, I think your reaction to such a tax would be even more blunt. I am sure you would not pass such a tax because it would be simply wrong. And, if you put on your academic policy hat and toyed with the idea any longer, you would know that such a tax would strongly signal industries to locate somewhere else, a signal which would hurt those whom you serve. Even if those you serve told you they didn't want to pay the 100s of millions the single company tax would raise, your first well-founded instinct would probably be to reconcile both desires. You would ask, "Do we really need that money?"

Those are the issues behind the efforts to exempt municipalities from bearing the costs of polluting the public and its water supply from the risks associated with old municipal dumps. Bills such as A-539 which attempt such an exemption violate constitutional and common sense limits on taxation, and, in turn, put in focus serious questions about the need for the massive discretionary expenditures which result from the applica-

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tion of the Spill Act to all the New Jersey municipal dumps the last hundred years.

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POST SCRIPT

"NEW JERSEY INDUSTRY AS SURROGATE..."

The preceding parts of this statement were originally drafted for a hearing on A-539. The hearing was adjourned and put back on in such a manner that I could not attend. I understand that, at it, members if the Assembly asked questions which implied they held this view, "Sure, municipal garbage is hazardous. But industry should still pay because they made the products which, once used, went into the dump as that municipal garbage."

This is what I've come to call the "New Jersey industry as surrogate for all those who manufactured hazardous household products" argument. There are serious faults with this argument when it lays all the problems of dumps at the door of industry: the argument is contrary to legal tradition, it is unsupported by the facts, and, to the extent it contains any grain of truth, it only deals with part of the problem.

I. THE ARGUMENT DEPARTS FROM LEGAL TRADITION.

First, the liability which you propose is beyond the bounds of our legal tradition.

It is not the tradition of our law to impose upon a manufacturer of socially acceptable products the liability for the misuse of those products. To be sure, manufacturers are held liable when their products are defective. And there are circumstances where they can be liable for selling their products to

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the wrong people (e.g., prescription drugs sold other than through pharmaceutical channels). But even the manufacturers of dynamite are not held liable if a purchaser makes a mistake with its use; gun manufacturers are not held responsible for every hunting accident or, perhaps more analogously, for everyone injured by the use of the weapon by a government employee in the military or law enforcement; and automobile manufacturers are not held liable for every injury resulting from an accident involving a car driven by private citizens or, again more analogously, by government employees.

No, the legal and the commercial tradition of our country is to put responsibility for the misuse of a product on the person who misuses it. So, our legal tradition teaches us that the problems created by the improper disposal of waste from hazardous household products should fall on the shoulders of those who did the disposal.

II. THE ARGUMENT IS NOT SUPPORTED BY THE FACTS.

There are flaws when the argument bears down on domestic U.S. industry. And flaws with this argument when it singles out New Jersey industry are overwhelming. The flaws are that the facts don't support the reasoning and the reasoning, to the extent it has validity, only goes part way to the solution it suggests.

Facts don't support industry as the cause of all the problems in these dumps: e.g., foodstuffs and sewage sludge rot, they give off methane that these clean-ups treat; and, rotting

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garbage burns in fires which at least one of these clean-ups extinguished. Moreover, the little anaerobic organisms that give off the methane also create an acid which leaches all manner of metals into liquid forms from otherwise non-hazardous products in the pile, thereby causing another part of the problem. Domestic industry did not produce the food, or the sewage, or the microbes.

Facts don't support domestic industry as the cause of all the environmental problems with hazardous household materials: e.g., foreign-made tires, batteries, toys, foreign oil and other minerals, cigarette lighters, etc.

Facts don't support New Jersey industry as the cause of domestic garbage: e.g., let's look at the stuff that went into my garbage -- Liquid Wrench from Toronto, Canada; paint stripper from Somerset, Massachusetts; batteries from Bethel, Connecticut; insecticide from Racine, Wisconsin.

On the other hand, we have New Jersey companies that produce products solely for export, others which produce such products solely for other industries. One example is our machine tool makers. In PJP, one company which does nothing more than put precise holes in other companies' industrial machinery is being sued to reimburse the State's expenses in putting out a garbage fire. Other New Jersey industries which are being told to pay for municipal waste clean-ups are those which manufactured munitions which were consumed in Iraq, or made pesticides for export, or made toys. These companies are sent the bill for

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cleaning up household hazardous waste at municipal dumps, not because of the hazard of their products found there, but the fact they discarded empty cans or containers with residual amounts of their production materials and paint. Some companies even made electricity but, occasionally, discarded asbestos from their steam pipes and turbines (asbestos is hazardous to breathe but is not much of a threat to the groundwater which the cap, pump, and treat remedies at these dumps seek to protect).

III. THE ARGUMENT ONLY APPROACHES PART OF THE PROBLEM.

Even if these facts about New Jersey's complex industry were not true, when you set out to hold responsible parties other than the homeowner for hazardous household garbage in poorly built or poorly closed dumps located in environmentally sensitive places, you find that the people who made the products are only part of the problem:

Part of the problem was caused by somebody in a position to decide whether to dispose of all household garbage in one place rather than segregate it and send hazardous material to a place appropriate to its risks and send other materials somewhere appropriate for it.

Part of the problem was caused by somebody in a position to decide whether to dump the garbage in the groundwater of a sand pit or swamp rather than dump it in a properly prepared, lined landfill at a geologically appropriate location (e.g., a dry clay pit).

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And, part of the problem was caused by somebody in a position to decide that whether there would be adequate funding for proper closure of ancient mixed use dumps. In the 70's, dumps were regulated by the PUC. The company that operated GEMS argued for the inclusion in its rate base of a fund for proper closure; that is, it asked to be allowed to charge enough money to properly close the dump. That petition was denied by an earlier generation of State officials which apparently thought they should make the operator or somebody else (other than the users) pay.

IV. POSSIBLE APPROPRIATE APPROACHES TO THE PROBLEM OF GARBAGE IN THE GROUNDWATER.

If, in approaching legislation on this issue, you are not motivated by short-sighted angry thoughts, you may well believe that you should put the cost on those with the ability to control conduct in a beneficial way. That is a traditional, valid approach to the handling of a public policy problem like this. Such an approach is most effective in dealing with conduct that has not yet occurred. But, it does have some lesser utility in retroactive applications, primarily to affect future conduct by impressing actors with the lesson that environmentally harmful consequences of their actions will have cost to them.

If you were to approach the problem of pollution from garbage dumps with a well-thought-out "reduce pollution or pay" mind-set, you would put the cost on those who make hazardous household products in the form of a sales tax based on a pro-

duct's degree of hazard and likelihood of winding up in a dump. That would put the burden on the product regardless of where it was made as long as it was sold in New Jersey. And, it would give the consumer an incentive to chose environmentally responsible products not burdened with the tax. Granted, however, the bureaucracy of such a tax probably wouldn't work any better than most bureaucracies.

With such a "reduce pollution or pay" approach, you should properly also leave some liability on the towns which made the disposition decisions so that the citizens of those towns which sent their garbage to dumps that do not require clean-up will be spared the costs (as through a tax, or increased product costs, or fewer jobs) which would fall to citizens of towns which acted irresponsibly. At the same time, those towns which acted irresponsibly will not avoid the consequences of their actions through legislative forgiveness that the equities of the other towns may have earned.

With such an approach, you should also leave some liability for proper closure on the owners and operators so they will have an incentive to conduct their operations in a proper manner. And, you should leave liability on industrial generators and transporters so that their disposal decisions would be influenced in the same way as the towns' decisions would be: toward the reduction of hazard, mobility, and volume.

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GENERAL ASSEMBLY OF THE STATE OF NEW JERSEY

- COMMITTEE ON ENERGY AND HAZARDOUS WASTE -
PUBLIC MEETING ON THE MUNICIPAL LIABILITY ISSUE

Meeting Date: Friday, April 30, 1993
- SUPPLEMENT REGARDING A-2264 -

Personal Statement of John F. Lynch, Jr., as an Individual, not in a Representative Capacity

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COMMENTS REGARDING A-2264

First, let me tell two stories that illuminate the problem in this Bill.

At the Naval Academy, plebes are indoctrinated into the Navy way in part by being asked questions for which there are standard answers that they must recite. Sparing you all the nautical terminology, one of those questions is, "On a sailboat, how do you get a rat out of a cupboard on the leeward side?" The standard answer is, "Turn the boat around." If the plebe, after he is told the pat answer, is nervy enough to ask, "Why did that solve the problem?", he is told, "Well, then the rat would be in the windward cupboard." He is left with a thought that the fundamental problem hasn't been resolved but he is told, "There is the right way, the wrong way, and the Navy way." Sometimes, the Navy way involves supercilious answers to real problems.

In the Army, the answers are more stark. They tell of a young Confederate lieutenant marching toward Cemetery Ridge with Picketts charge at Gettysburg. When he waivers, the sergeant asks him what the problem is. He responds, "I can't stand the sight of all this carnage", and the sergeant replies, "So, close your eyes." In this instance, the answer is not only supercilious because the carnage continues but it is harmful because the lieutenant's ability to do his job is impaired by the supercilious remedy.

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Statutory Background

First, some background. As I hope you know, Superfund and the Spill Act are statutes out of control. They start out as statutes which call upon parties to pay for past acts without regard to fault; that is, pay now for acts that may have been legal or even required when performed decades ago. But the administration of the statutes is fanned by flaming rhetoric which brands those liable for that legal conduct as "polluters!". Once the body politic and those administering these laws have that rhetorical branding iron in their hands, common sense departs from the scene. People start thinking about clean-ups, not in terms of "how clean is appropriate?" but in terms of the unanswerable, overly cute question "how clean is clean?" Statutes designed to address Love Canal are seen as a source of funds and power to clean-up the average old municipal dump. Those representing the public turn up the heat. They cry, "Make the polluter pay!" and try to say it loud enough that they can avoid the issues of who is the polluter and how much should be paid.

The New Jersey Spill Act is different than Superfund but the differences which could make it more sensible are being ignored and the differences which can make it worse are being pushed to their limit. Unlike Superfund, the Spill Act's liability is limited to "dischargers" of hazardous materials. You would think that meant those who poured the stuff on the ground or allowed it to be poured on their ground. But it is being interpreted to mean people much more remote. For example, it is

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interpreted to parallel Superfund and to reach those who generated the waste even though they paid legitimate, State-licensed disposal contractors to dispose of it properly. On the downside, unlike Superfund, the Spill Act has no requirement that the cost of a remedy need enter into the picture. Also unlike Superfund, the Spill Act does not require any finding (such as a finding of the existence of an imminent and substantial endangerment to human health, etc.) before a treble-damage order can be issued.

The GEMS Case

Against that background, we come to the events that led to this proposed piece of legislation. GEMS is a municipal landfill with ordinary landfill groundwater contamination beneath it. Its inadequately funded closure happened at just about the time Superfund came along. The State put it on the national list, apparently in the hope of getting federal money. Meanwhile, the State went about suing the owners and operators as dischargers under the Spill Act. It also sued them under the Sanitary Landfill Contingency and Closure Act.

Several years later, the DEP decided to reinterpret the term "discharger" to mean waste generators. So at GEMS, it issued directives to generators and amended its complaint to sue generators. Most of the alleged connections to the landfill are very tenuous. A typical one is that waste went to a company: Jonas. Jonas took it to his place and then sent it to different landfills depending on such factors as the distance and price but also depending on time of day (i.e., were the guards off duty?)

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and the weather (were the slope roads too muddy?). So, the State sued every Jonas customer during two years in which, according to no records but the recollection of one driver, 60% of the stuff went to GEMS.

That action brought enough companies to the table where the State could threaten with treble damages and hope to get the companies to pay for the $52 million Phase I remedy the State contemplated performing. (Actually, the private sector, together with the municipal owner, was able to agree to do the work instead of the State at a remedy cost $32.5 million instead of $52 million.)

In preparing for the $30 million Phase II (the pump and treat remedy and collection of past costs phase), the State followed a similar course. It went looking for a new Jonas-like theory. It found that theory in the records of one of the defendants that recycled oil, Almo Tank Cleaning.

Apparently, the story goes Almo would clean out oil tanks and sell the more useable part of the oil it removed to be burned as heating fuel. It disposed of the rest by oiling dirt roads to suppress the dust.

It turns out that, in our times, one type of place that has dirt roads with year-round dust problems is municipal dumps.

And it appeared that the operator of GEMS said Almo oiled the roads at GEMS. (The operators of Almo have sworn they never went to GEMS.) Anyhow, the State developed a theory that,

if a company had its tanks cleaned by Almo, that company, not just Almo, was a discharger at GEMS.

The State issued a Spill Act directive threatening treble damages against a pack of Almo customers. That directive, no. 5 at the GEMS Site, included as one of its targets a municipality which had its tanks Almo-ed, the City of Vineland. Then, the State amended its complaint in the lawsuit to bring all the directive recipients into the case. All, that is, except the City of Vineland. As an evidentiary basis for its pleading, the State pointed to the Almo customer records.

On behalf of industry, we looked at those records, the same records which the State said made industries liable as polluters for cleaning up this municipal dump. Those same pages were filled with municipal customers. The State said those customers were below the dollar threshold the State, in its discretion, had used to decide who to sue. But in some instances that simply was not true. In others, school districts had many schools each of whose tanks were cleaned. In some of those cases, the district's the total bill was way above the supposed standard and closer to the amount for which the State was suing industry. And how, we asked, did the City of Vineland warrant a treble damage directive but not warrant joinder in the suit? Just an oversight, we were told.

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The Larger Picture

Industrial companies are routinely told that a single spoonful of hazardous material is enough to hold them liable by themselves for the entire cost of cleaning up the site at which they discharged. There is no de minimis amount of pollution, the State says. Well, the force of that argument, perhaps I should say the pain of it, together with the falsehood of the reasons given to exempt munis, caused industries to file pleadings to claim contribution from governmental entities for their Almo oil on the same Almo ledger cards.

Is there something wrong in that claim? Probably so - let me list some of the things wrong. None of the Almo customers which had their tanks cleaned should be branded dischargers; 65-acre dumps shouldn't cost $65 million (or, as at Kramer, $185 million) to close; people who once owned oil which later owners decided to use to hold down dust should not have to bear the cost of cleaning up a municipal dump groundwater polluted by rotting foodstuffs, human sewage sludge, decaying batteries, and assorted other hazardous materials; enterprises in our society which have assembled money for other good purposes shouldn't have it diverted to a public purpose being managed totally off budget without the checks and balances implicit in normal taxation. All those things may be wrong. But I suggest to you what is not wrong: namely, equal treatment.

You have already decided that the cost of treating mentally ill patients is going to be burdened with cleaning up

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dumps due to the remote use of oil gathered in a psychiatric hospital tank cleaning. That determined, there is no reason why such payment should depend on whether those people are treated at the private hospital, Carrier Clinic, or at the public hospital, Trenton State. You have determined that the cost of providing vocational training is to be burdened with payment of landfill closure costs because tanks at training centers have been cleaned. There is no reason why such payment should be different when the training is done at the private Lincoln Technical Training Institute in Pennsauken than when it is done at the Gloucester County Vocational Technical High School.

These examples illustrate that, by this statute, you will not remedy the problems; you will just close the citizenry's eyes to the carnage which the Spill Act, as administered, is causing. What you are doing is not merely as irrelevant to the real problem as changing the cupboard from leeward to windward. It is probably as harmful as a soldier closing his eyes on the battlefield; the carnage will continue; the harm to local employers of runaway costs in pursuit of "how clean is clean" righteousness.

Oh, and let me add one more thing. This statute probably does not apply to the GEMS case.

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April 20, 1993

Mr. Kevil D. Duhon
Committee Aide
New Jersey State Legislature
Assembly Energy and Hazardous Waste Committee
Legislative Office Building
CN 068
Trenton, New Jersey 08625-0068

Re: Assembly Task Force on Site Remediation
April 30, 1993 Meeting

Dear Mr. Duhon:

The following written comments are being submitted on behalf of the New Jersey Association of School Business officials. Moreover, the NJASBO requests the opportunity to discuss its position and answer questions at the meeting scheduled for April 30, 1993.

There is one thing upon which all participants in the Task Force proceedings should agree: that is, the Spill Compensation and Control Act is in need of repair. As in the case of the Spill Act's Federal analogue, the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund") the Act's original objectives are being subverted to the detriment of the people of the State of New Jersey.

It is when the competing interest groups purport to identify the Spill Act's infirmities and propose corrective action, that paths diverge significantly.

However, as this Task Force's deliberations proceed, NJASBO requests that it remain focused on the issue that precipitated this meeting: that is, whether and to what extent school districts, local governments, businesses and the average person should be required to pay for the remediation of Spillfund sites where their only involvement with a site is through the disposal of household garbage?

As the members of this Task Force are well aware, school districts, local governments, businesses and private individuals are being sued under the Spill Act for their disposal of ordinary garbage. These claims are being brought in the form of contribution actions by the entities whom the New Jersey Department

of Environmental Protection and Energy has identified as responsible for the contamination at the various sites. Even though all too many initially concluded that these claims would not succeed, the courts have since determined that the law permits the maintenance of these claims.

The courts' message was clear: if people were to be protected against being sued under the Spill Act or the Federal Superfund law for the mere act of throwing out ordinary garbage, the legislature would have to act.

In response to this message, in April of 1991, the Assembly saw the introduction of legislation which would specifically provide that Spillfund liability could not be based upon the disposal of household garbage.[1] While the legislature has failed to pass legislation addressing the "household garbage" issue, it did pass legislation which clarified and strengthened the ability of industrial polluters to bring contribution actions.[2]

In the interim, suits against school districts and other local governmental entities have proliferated and will continue to proliferate because they remain attractive, easily accessible and solvent targets. If something is not done to stop these suits, vital services will suffer and/or local taxpayers will be required to dig deeper into their pockets to subsidize the Spillfund and the sites that it was designed to cleanup.

The New Jersey Association of School Business Officials asks this task force to recognize that as long as the practice outlined above is allowed to continue, the legislature is consenting to the above-referenced diversion of resources and imposition of a "de facto" garbage tax upon the taxpayers of the this State. While NJASBO will remain available to provide input into other issues relating to the Spill Act which this Task Force may attempt to address, we consider it vital that the issues identified herein be addressed meaningfully and promptly.

Very truly yours,

John J. Ross

JJR/af
cc: Edward Meglis, CAE
Executive Director

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[1] Assembly Bill 539 which was originally introduced in April of 1991 as Assembly Bill 4675.

[2] P.L.1991, Chapter 372, approved January 10, 1992.

SCHOOL DISTRICT SPILL LIABILITY AND S-95

BY SENATOR PETER INVERSO, R-MERCER

September 23, 1992

GOOD MORNING. THANK YOU FOR GIVING ME THE OPPORTUNITY TO SPEAK TO YOU ABOUT MY INITIATIVE, S-95,WHICH WOULD PROTECT SCHOOL DISTRICTS FROM UNWARRANTED AND COSTLY ENVIRONMENTAL LITIGATION UNDER THE NJ SPILL COMPENSATION AND CONTROL ACT.

AS ALL OF YOU ARE AWARE, THE COMPLEX ISSUE OF EDUCATION FUNDING HAS BEEN IN THE FOREFRONT OF LEGISLATIVE DISCUSSIONS FOR MANY YEARS. THE SUBJECT IS SUCH AN IMPORTANT ONE THAT BOTH HOUSES OF THE LEGISLATURE CONSIDER EDUCATION FUNDING ONE OF THE MOST PRESSING CHALLENGES OF THIS DECADE.

EACH OF YOU MUST PARTICIPATE IN THE ENSUING DIALOGUE - THE GOAL OF WHICH IS TO ACHIEVE A FAIR AND BALANCED EDUCATIONAL FUNDING PROGRAM THAT DOES NOT POLARIZE THE EDUCATION COMMUNITY, SCHOOL DISTRICTS AND THE TAXPAYERS.

LOOMING AS A DAMACLE'S SWORD WHICH CAN POTENTIALLY SIPHON MILLIONS OF DOLLARS FROM EDUCATION ARE FINANCIAL PENALTIES IN ENVIRONMENTAL LAWSUITS THAT HAVE NOTHING TO DO WITH EDUCATING OUR CHILDREN.

MORE THAN EVER IN THESE DAYS OF DWINDLING RESOURCES SCHOOL DISTRICTS MUST NOT BE DRAWN INTO UNFOUNDED AND ABUSIVE LITIGATION STEMMING FROM WASTE DISPOSAL UNDER THE FEDERAL SUPERFUND AND NEW JERSEY SPILL ACTS.

UNDER THOSE LAWS, CORPORATE DEFENDANTS ARE TRYING TO EQUATE A TON OF HOUSEHOLD GARBAGE THAT A SCHOOL DISTRICT WOULD GENERATE WITH A TON OF TOXIC CHEMICALS THAT AN INDUSTRIAL COMPANY WOULD PRODUCE. THESE CORPORATE DEFENDANTS ARE BECOMIMG PLAINTIFFS, SEEKING TO SHIFT A DISPROPORTIONATE SHARE OF THEIR CLEANUP COSTS BY SUING LOCAL GOVERNMENTS AND SCHOOL DISTRICTS.

FOR EXAMPLE, IN OUR STATE, 53 SCHOOL DISTRICTS HAVE BEEN NAMED BY INDUSTRIAL POLLUTERS AS "THIRD PARTY DEFENDANTS" IN LITIGATION INVOLVING A NEW JERSEY SPILL SITE IN GLOUCESTER COUNTY.

IN MY OWN DISTRICT AND SURROUNDING COUNTIES, THE SCHOOL BOARDS OF HAMILTON, LAWRENCE, TRENTON, PLAINSBORO, BORDENTOWN REGIONAL, EAST WINDSOR REGIONAL, PRINCETON REGIONAL AND WEST WINDSOR HAVE BEEN DRAGGED INTO LITIGATION SURROUNDING THE NEW JERSEY GEMS LANDFILL CLEANUP. ALSO NAMED AS DEFENDANTS IN THE EXORBITANT CLEANUP COSTS ARE HAMILTON TOWNSHIP, BURLINGTON COUNTY AND TRENTON STATE COLLEGE.

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IN ALL, 217 LOCAL GOVERNMENTS IN NEW JERSEY HAVE BEEN SUED OR THREATENED WITH A LAWSUIT. IN FACT, REPORTS INDICATE THAT 90 PER CENT OF THE MONEY SPENT UNDER THE SUPERFUND PROGRAM IS BEING SPENT ON LITIGATION RATHER THAN CLEANUPS.

WE MUST CHANGE THE LAW AS IT NOW STANDS SO THAT EDUCATORS IN THESE LOCAL SCHOOL DISTRICTS CAN EDUCATE WITHOUT BEING SUBJECTED TO ABUSIVE LAWSUITS SIMPLY BECAUSE THEY TOOK OUT THEIR GARBAGE AFTER SCHOOL OR HAD THE GARBAGE TRANSPORTED TO A LANDFILL. THE COSTS OF ENVIRONMENTAL CLEANUP MUST NOT BE SHIFTED FROM THE INDUSTRIAL WASTE GENERATORS TO LOCAL GOVERNMENTS AND THEIR TAXPAYERS.

THE OBJECTIVE OF S-95 IS NOT TO UNDO THE SPILL ACT'S LIABILITY PLAN, OR TO GAIN IMMUNITY FOR LOCAL GOVERNMENTS OR ANYONE ELSE THAT HAS IMPROPERLY MANAGED ITS WASTE. THE BILL WOULD PUT AN END TO SUCH LITIGATION AND RESTORE THE SPILL ACT TO ITS ORIGINAL PURPOSE.

THE BILL WOULD EXEMPT MUNICIPAL SOLID WASTE FROM THE DEFINITION OF <u>HAZARDOUS SUBSTANCE</u> IN THE SPILL COMPENSATION AND CONTROL ACT AND ,IN SO DOING, REMOVE HOUSEHOLD GARBAGE AS A PREDICATE FOR LIABILITY UNDER THE SPILL ACT. THIS WOULD ELIMINATE LIABILITY FOR A MUNICIPALITY OR A SCHOOL DISTRICT WHICH DISPOSED ITS SOLID WASTE AT A SPILLFUND SITE. (READ DEFINITION)

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ADDITIONALLY, MY BILL WOULD ALLOW ONLY THE STATE TO SUE A MUNICIPALITY OR SCHOOL DISTRICT, OR SEEK CONTRIBUTIONS FROM THEM PURSUANT TO SPILLFUND. THIS IS WHERE THERE HAS BEEN AN ACTIVITY WHICH INVOLVES HAZARDOUS SUBSTANCES WHICH CANNOT FIT WITHIN ANY CREDIBLE DEFINITION OF MUNICIPAL SOLID WASTE (DISPOSAL OF ASPHALT & ASBESTOS IN SCHOOLS).NO OTHER PERSON COULD TAKE SUCH ACTIONS AGAINST A MUNICIPALITY OR SCHOOL DISTRICT THAT DISPOSED OF HAZARDOUS SUBSTANCES AT A SPILLFUND SITE.

WHY IS THIS IMPORTANT? IN THE GEMS LANDFILL CASE, THE SCHOOL DISTRICTS ARE DEFENDING CONTRIBUTION CLAIMS BECAUSE WASTE OIL REMOVAL BY A CONTRACTOR FROM FUEL STORAGE TANKS "MAY" HAVE BEEN SENT TO GEMS. ALTHOUGH SPECIFIC $ AMOUNTS HAVE NOT YET BEEN DEMANDED, EXPERIENCE INVOLVING MUNICIPALITIES SHOWS THAT THE AMOUNTS DEMANDED BY INDUSTRIAL PARTIES ARE VERY DISPROPORTIONATE TO THE MUNICIPALITIES CONTRIBUTION, IF ANY, TO THE CONTAMINATION AT A PARTICULAR SITE. ELIMINATING THE RIGHT OF CONTRIBUTION DOES NOT ABSOLVE A MUNICIPALITY OR SCHOOL DISTRICT IF THEY ARE CULPABLE, BUT THEY CAN DEAL WITH THE STATE ON A MORE EQUITABLE AND REALISTIC BASIS.

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IT IS OBVIOUS THAT S-95 WOULD AFFORD PROTECTION ULTIMATELY TO THE TAXPAYERS OF NEW JERSEY. UNTIL NOW, MANY MUNICIPALITIES HAVE DECIDED TO SETTLE ENVIRONMENTAL SUITS BROUGHT AGAINST THEM RATHER THAN FIGHT THE FAIRNESS ISSUE AND TO MITIGATE LEGAL EXPENSES.

THERE IS YET ANOTHER REASON WHY S-95 IS SO IMPORTANT, IF INDUSTRY IS ALLOWED TO CONTINUE DRAINING LIMITED FINANCIAL RESOURCES FROM LOCAL GOVERNMENTS THROUGH ENVIRONMENTAL LITIGATION, THE PUBLIC WILL PERCEIVE SUPERFUND AND THE SPILL ACT IN WAYS THAT WERE NEVER INTENDED.

INSTEAD OF RECOGNIZING THESE LAWS AS NECESSARY SOLUTIONS TO SEVERE ENVIRONMENTAL CONDITIONS, THE LAWS WILL BE RESENTED AND VIEWED ONLY AS FINANCIAL HARDSHIPS TO THE TAXPAYERS. ATTEMPTS TO UNRAVEL THEM COULD WELL BE IN THE FUTURE. BY BURDENING LOCAL GOVERNMENTS WITH THESE COSTLY LAWSUITS, INDUSTRY MAY VERY WELL BE ENLISTING THE AVERAGE CITIZEN TO JOIN IN THEIR OPPOSITION TO SUPERFUND AND THE SPILL ACT.

I WILL URGE MY SENATE COLLEAGUES TO SUPPORT S-95, AND HOPE THAT IT WILL RESULT IN PROTECTING THE SCHOOL DISTRICTS SO THAT THEY CAN CONCENTRATE ON EDUCATION AND NOT LITIGATION. I ALSO ENLIST YOUR SUPPORT IN THIS EFFORT. THE OPPOSITION WILL BE SPARING NO COST TO

SCUTTLE THIS BILL. IN A VERY TANGIBLE WAY THE EDUCATIONAL OPPORTUNITIES OF OUR SCHOOL CHILDREN ARE AT STAKE. THANK YOU.

April 30, 1993

I am the Mayor of Lumberton Township, which is a small primarily agricultural community located in Burlington County. We have 6,400 residents and our annual municipal budget is $4,500,000.00. For more than thirty years Lumberton operated a municipal sanitary landfill in cooperation with Hainesport Township. During that time period, the Townships shared the operating costs of the landfill. Since the landfill was located in Lumberton, we provided the minimal facilities and work force needed to operate this landfill. Indeed, for several years before our landfill opened, Hainesport was gracious enough to allow us to share their landfill.

However, in the 1980's the environmental realities of operating a landfill became apparent to us and we asked Hainesport to pay their fair share of the closing costs required by the New Jersey's Department of Environmental Protection.

Hainesport, which is even smaller than Lumberton, has refused to cooperate.

Now our Township is facing a cleanup and closure of this landfill that will cost a minimum of $1,000,000.00. The outer limits of the costs cannot be anticipated at this time.

As I understand the purpose of Assembly Bill No. 539, municipal solid waste will no longer be considered a hazardous substance for the "Spill Compensation and Control Act" and it would eliminate liability for disposing municipal solid waste at a "spill fund" site.

Also, it would give the sole power to seek contribution from municipalities to the State and its Department of Environmental Protection and Energy, a department which is sorely understaffed and overwhelmed by the municipal problems facing our State.

While we sympathize with the view that municipal solid waste is somehow different from other hazardous waste, the fact is municipalities which owned and operated landfills, are required to clean up those landfills, which are predominantly filled with municipal solid waste. If this bill passes, host municipalities will lose an important weapon in fairly allocating the costs of these clean ups. Municipalities which used facilities outside their borders will be able to avoid the liability which they have imposed on their neighbors.

Indeed, by exempting municipal solid waste as a hazardous substance, this bill could effectively bar a municipality from seeking any sort of recovery from municipalities which utilize landfills within its borders, regardless of the statutory or legal theory asserted for the recovery of contribution for closure and cleanup costs. While no municipality wants the burden of cleaning up for its municipal solid waste, the simple fact is that the DEPE is requiring municipalities to do the cleanup. It is simply unfair to say that municipal solid waste is an obligation of communities hosting landfills, and not providing them with the means for obtaining cleanup.

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I understand there is a Municipal Landfill Cleanup and Closure Act which partially covers this area. However, I also understand there are gaps in this Legislation which The Spill Act covers.

New Jersey has been in the forefront of Environmental Legislation and action. We want a clean State, but we don't want to impose an overall tax burden or scheme to deal with this state-wide problem. If Assembly Bill 539 is approved and if it is passed, it will make it difficult for municipalities, both large and small, to deal with their municipal equals in solving this problem.

We do not disagree that there are problems in the enforcement and use of the Spill Act. However, these problems should not result in an exclusion, which on the surface helps municipalities, but upon further reflection will result in serious, if not disastrous, implications to those well-meaning and innocent municipalities who only seek their distribution in the costs of a safe environment.

Thank you.

Very truly yours,

Kathleen K. Uhrman
Mayor, Lumberton Township

116X

NEW JERSEY STATE LEAGUE OF MUNICIPALITIES

407 WEST STATE STREET, TRENTON, N.J. 08618 :: (609) 695-3481

JOHN E. TRAFFORD, *Executive Director* WILLIAM G. DRESSEL, JR., *Asst. Executive Director*

April 20, 1993

Mr. Kevil D. Duhon
Committee Aide
Assembly Energy and
Hazardous Waste Committee
Legislative Office Building
CN-068
Trenton, NJ 08625-0068

Dear Mr. Duhon:

This is in response to your request for League input in advance of the April 30, 1993 meeting of the Assembly Task Force on Site Remediation.

The central issue that must be addressed by this task force is whether and/or to what extent the ordinary person should be required to pay for cleaning up "Spillfund" sites.

This issue has surfaced because more than 200 local governmental entities have been sued or threatened with suit under the Spill Act and its Federal analogue, the Comprehensive Environmental Response, Compensation, and Liability ("CERCLA" or "Superfund"), for doing nothing more than collecting their residents' household garbage.

When these suits first surfaced in the late 1980's, many believed that the claims against local governments, small businesses and private individuals would be summarily dismissed by the courts because the legislature clearly did not intend to make the weekly chore of "taking out the trash" a trigger for Spillfund liability. However, the claims predicated on the collection and disposal of household garbage have not gone away and have already cost local governments hundreds of thousands of dollars in defense costs alone.

The courts have essentially held that the "household waste" claims are not barred and that if the legislature wishes to bar such claims, it must enact legislation to do so.

Members of this Committee have already heard a great deal of debate about whether or not the legislature originally intended the Spill Act to create liability for picking up or throwing out household garbage.

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As a result of the decisions of the courts referenced above, that debate is now irrelevant.

The "household waste" issue has been squarely before this legislature in the form of Assembly Bill 539 and its predecessor, Assembly Bill 4675, since April of 1991. Continuing inaction with (and its residents who ultimately pay the bills) that it is the intention of this legislature that throwing out household garbage remain a basis for Spillfund liability.

The League respectfully requests that you not lose sight of this central issue in your deliberations and that you act to abate the "household garbage" claims being brought against small businesses, local governments and private individuals.

I hope that this satisfies your request. Chris Carew of our office along with John Ross, League Special Counsel on Environmental Issues will be present at your meeting of April 30, 1993 to amplify further on this.

Very truly yours,

William G. Dressel, Jr.
Assistant Executive Director

WGD:sac

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