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PUBLIC MEETING

before

ASSEMBLY ENVIRONMENTAL QUALITY COMMITTEE

Status of Civilian and Military Cleanup  
of Hazardous Discharge Sites

May 11, 1987  
Room 418  
State House Annex  
Trenton, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Assemblyman John O. Bennett, Chairman  
Assemblyman Robert W. Singer, Vice Chairman  
Assemblyman Robert C. Shinn, Jr.  
Assemblyman Frank J. Gargiulo  
Assemblyman Byron M. Baer

ALSO PRESENT:

Mark O. Smith  
Office of Legislative Services  
Aide, Assembly Environmental Quality Committee

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## New Jersey State Legislature

ASSEMBLY ENVIRONMENTAL QUALITY COMMITTEE  
STATE HOUSE ANNEX, CN-068  
TRENTON, NEW JERSEY 08625  
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### MEMORANDUM

May 5, 1987

TO: ASSEMBLY COMMITTEE ON ENVIRONMENTAL QUALITY  
FROM: ASSEMBLYMAN JOHN O. BENNETT  
SUBJECT: COMMITTEE MEETING - MONDAY, MAY 11, 1987

(Address comments and questions to Mark O. Smith, Aide to the Committee at (609) 292-7676.)

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The Assembly Committee on Environmental Quality will meet on Monday, May 11, 1987, beginning at 10:00 A.M. in Room 418, State House Annex, Fourth Floor, Trenton. The subject of the meeting will be twofold. First the committee will be briefed by the Commissioner of Environmental Protection on the status of the cleanup of civilian hazardous discharge sites, as well as the status of the cleanup of hazardous discharges at military facilities. In addition please be prepared to consider the following bills:

A-2340 Provides for a separate assessment for the  
Ogden regulation of solid waste collection and disposal.

A-2949 Designated the "Urban Area Wastewater Treatment  
Charles Bond Act"; authorizes a \$200,000,000 bond issue.

A-3812 Appropriates \$32,000,000 to the Wastewater  
Rafferty Treatment Fund.

A-3813 Authorizes the Wastewater Treatment Trust to  
Bennett expend up to \$160,000,000.

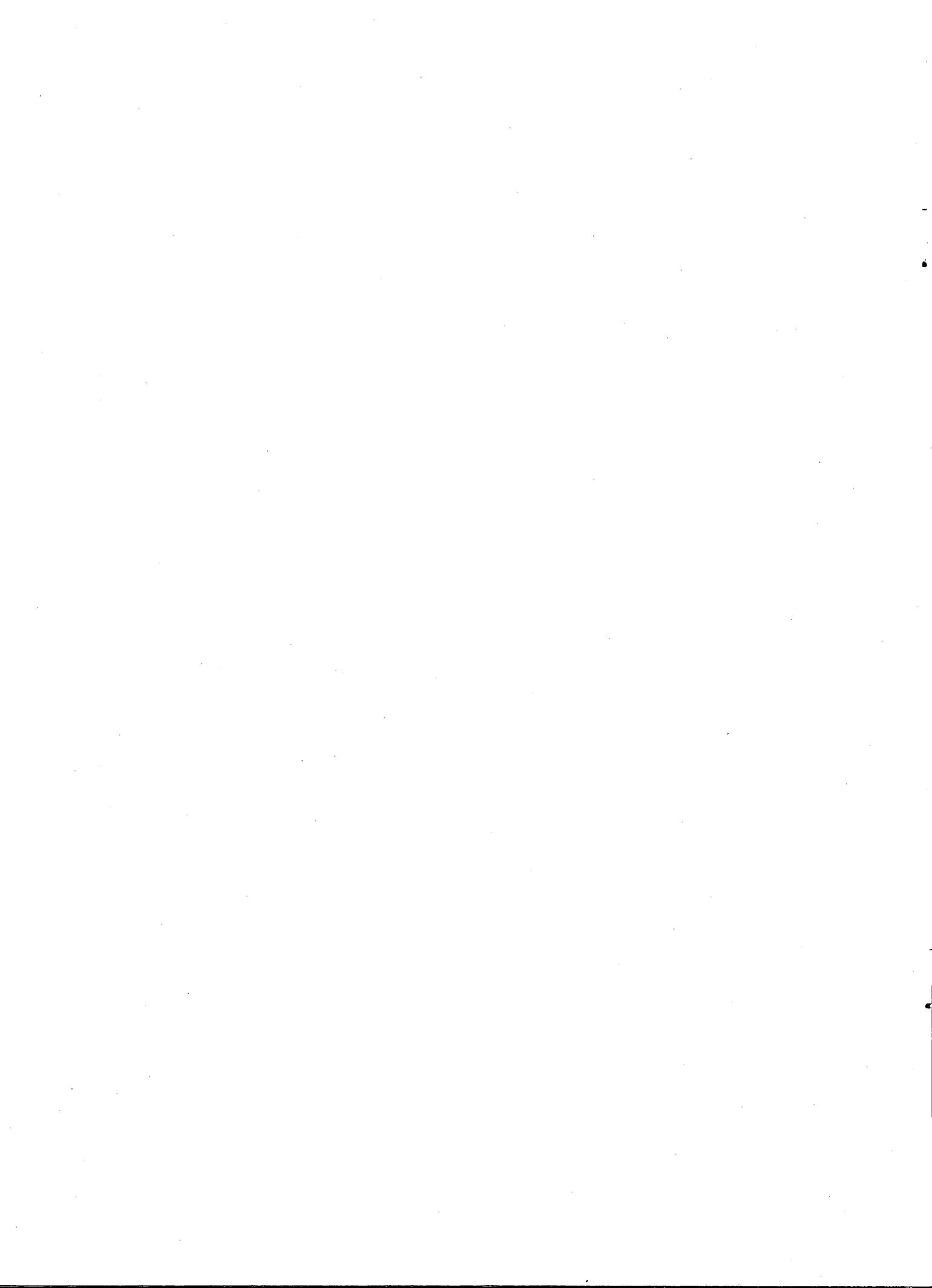
A-3814 Appropriates \$150,000,000 to the DEP from the  
Gargiulo Wastewater Treatment Fund.



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<b>APPENDIX:</b>	
The following materials were submitted by the New Jersey Department of Environmental Protection:	
"Hazardous Waste Program Briefing Exhibits"	1x
"Hazardous Discharge Site Cleanup Status Report Summary"	28x
"Status Report on the Hazardous Waste Management Program in New Jersey - Update"	39x
A statement submitted by Marlene Lynch Ford, Chairwoman Assembly Special Committee to Investigate Hazardous Waste Practices at Military Installations	96x
Letter addressed to Assemblyman John O. Bennett, plus attachments, from Richard T. Dewling Commissioner, New Jersey Department of Environmental Protection	109x

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**ASSEMBLYMAN JOHN O. BENNETT (Chairman):** I am going to call the meeting to order so we can get started. It is a rather ambitious agenda we are attempting to do today. The order we will be going in today is, we will have an update from the Department with respect to the hazardous discharge site cleanup status -- the six-month report. We will then go from the six-month report with respect to the Superfund sites, and the other private sites in the State, to an update from the Department with respect to the cleanup progress and communications between the Department, EPA, and the Federal military facilities. Hopefully that will conclude the morning.

In the afternoon, we will commence the several miscellaneous bills, together with the wastewater treatment. The Committee meeting is going to terminate at three o'clock this afternoon. So, whatever is done by three is done; whatever is not done by three will have to be for another day. I just tell you that up-front so there are no misunderstandings.

At one o'clock there will be a quorum present, in an effort to be able to move the bills. Some of the Committee members will not be able to be here until this afternoon, but if everything goes well, we will have more than a quorum available at one o'clock.

At this point, I would like to turn to the Department. This is the third of the updating reports with respect to the private sites in the State. We will allow the Department to make their presentation. There may be some questions asked, unless they are all answered in the presentation. I think perhaps the easiest way would be to split it in half -- do the private sites, and then do the questions before we go to the military. I think it might be easier that way.

So, Mike, I will call on you. You can introduce yourself, and then introduce the staff people you have with you.

D E P U T Y   C O M M .   M I C H A E L   F .   C A T A N I A :  
Thank you, Mr. Chairman. We are glad to have the opportunity to come and give you a status report on the cleanup program. As you know, this is part of our biannual report to your Committee. We have a number of documents here for you today.

But, let me start off by introducing the staff from DEP who are here -- the people who will be making the presentations and answering your questions today. By the way, I would like to point out that our Hazardous Waste Reorganization Program is now official. As you know, the Governor submitted an Executive Reorganization Plan to the Legislature just over 60 days ago. The same changes had been the subject of legislation, which your Committee was gracious enough to move through. Unfortunately, the legislation did not receive final approval in the Assembly. The Governor submitted the Executive Reorganization Plan, so it now has the effect of law. We now officially have the Hazardous Waste Mitigation Division and the Hazardous Waste Management Division, both of which report to Assistant Commissioner John Gaston, who is to my left.

To Mr. Gaston's left is Director John Trela, Division of Hazardous Waste Management, and Michele Mateo, Assistant Director of that Division for Hazardous Waste Planning. Those are the principal people who will be involved in the presentation today.

We have given you a number of things to look at in a packet. The first is just a copy of the overhead slides which John Trela is going to be walking you through. So, it is really just a briefing program. It is a blue package. That is the one you really want to be looking at while John is making his presentation in a few minutes.

We have also given you a copy of the Status Report on the Hazardous Waste Management Program, with a date of March, 1987 on it. That is with the tan cover. We have given you a

copy of our testimony before Senator Dalton's committee in April of this year on the same subject, as well as a copy of our testimony before Senator Lautenberg's Superfund Oversight Committee, also in April. In your package, also, is a copy of the recent letter and package we sent you, Assemblyman Bennett, on the status of the Federal facilities. I think we have also recently included a copy of the Department of Justice opinion on Federal facilities, as well.

What we would like to do is take this opportunity to walk you through where we are in the overall cleanup program, in terms of funding, in terms of progress, in terms of needs for the future -- and just revisit a lot of the issues we have discussed with you in the past. Some of the issues are going to be familiar; some of them are going to be a little bit new. I mentioned our reorganization. One of the big issues in the coming year -- particularly the coming fiscal year -- is going to be the need for hazardous waste fees, to really make the program, particularly the enforcement part of the program, work as we envision.

As you look through the numbers we will present to you today, you will see that the projections we have made in the past on the share that would come from privately funded cleanups from responsible parties, is something that we have not been able to attain our goals on thus far. We have identified a couple of things that we need to do to make sure that we can meet those goals in the coming year, and in the coming years.

One is a resolution which we have already requested that both of the Appropriation Committees consider. That is to allow us to use \$700,000 out of the Spill Compensation Fund for operating expenses, particularly in the enforcement area. The other is the fee bill which, Assemblyman Bennett, as you know, we have discussed the need for with you. We will be going into a little bit of detail on the breakdown of moneys there.

Also something that will be coming up in the next several months hopefully, is a bill that we have discussed with the Governor's office and with you and with Senator Dalton, which would allow us to have access to certain hazardous waste sites that we do not have legal authority to enter on now. That problem really centers not so much on the area that is owned by the responsible party where the discharge actually occurred, but on adjacent properties that are affected by it, where a third party owns land that we need either access to or that we actually need to construct some physical improvement on as a part of the cleanup work.

To date, we have been very successful in going to court and getting orders to show cause, getting access to the sites of the discharge itself. With respect to sites owned by third parties, we really do not have an adequate legal basis to enter on those lands or, if necessary, to condemn an easement to construct some type of facility on the land. So, we will be asking the Legislature for that authority in the coming months.

With that, we would like to start the presentation. John, do you have anything you want to add? (no response) John Trela is going to walk you through the overheads that are in that blue package there, to really present the data. John?

D R. J O H N J. T R E L A: Good morning. I appreciate the opportunity to be here this morning. Our presentation this morning focuses upon our Comprehensive Hazardous Waste Management Program, and in that context we are going to look, first of all, at the remediation of hazardous waste sites -- in other words, past problems. (Dr. Trela using slides to demonstrate) We are going to look at a second portion that deals with the regulation and enforcement of existing sites; in that sense, something that we are focusing on to prevent the creation of new sites in the future. What we are trying to accomplish here is essentially a balance between the attention we pay to fixing things from the past, and the significance we are applying to preventing future problems.

In the fall of this year, we had the Legislature enact a \$1.6 billion funding program; \$640 million of that program being the State share, and \$497 million being the portion we expect to receive from the USEPA and the Superfund program at the Federal level, over the next five years. The final portion -- the \$519 million -- being that portion we expect to obtain from responsible parties through our enforcement program. So, in this sense, there is pretty much a guarantee through the action of the Legislature that the \$640 million will appear. Superfund was, in fact, reauthorized, and we are doing very well in that area, as I will explain in a moment. We do anticipate receiving the \$500 million from that. However, there is currently a shortfall in the enforcement area, and I will expand upon this later on in the presentation.

Following up on our presentation last time, this gives a breakdown of accumulative funds available. We can see that we have experienced increases since our last report to this Committee in the area of the Spill Fund -- the \$4 million; the Hazardous Discharge Bond Fund, again approved last fall as part of the funding package -- \$200 million; and the Federal Superfund \$2 million, for a total of \$206 million.

Authorizations have been concentrated out of the Spill Fund at \$8 million, the General State Fund at \$20 million, and the Federal Superfund at \$2.4 million, for a total of about \$31 million.

Expenditures -- again, those same three areas: The Spill Fund at \$4.2 million, the General State Fund at \$13 million, and the Federal Superfund at \$4.3, for a total of about \$21 million.

New Jersey is a national leader. It ranks number one in both FY '86 and FY '87 in Federal Superfund dollars we have been able to obtain. We have, for the average of those two years, obtained 20% of the Federal money. I would point out further that this specific year, we have attained the same

level of funding as the entire nation received last year -- approximately \$82 million to \$83 million.

-On our progress on the sites, currently we have 94 out of 100 RI/FSs initiated, 18 designs, 11 construction projects, and we have taken 53 interim actions. These things include such things as drum removal, and also the placement of water supplies to protect the public near these sites. This is a listing of the water supplies that have been placed at this point in time, accounting for \$15 million, and serving over 1500 residents.

In terms of advancing the projects since we last reported to the Committee, we have initiated 14 RI/FS starts. We have completed two RI/FSs. We have started three designs; we completed one. We have begun two constructions, and we have completed one. They are all listed on that overhead.

The next major occurrence that we want to emphasize is the passage of Superfund. Since the last time we met, Superfund was enacted, and there are some key components of that we would like to report on today. As you know, there is an \$8.5 billion funding package over five years, and there are stronger provisions in Superfund for State oversight of the Federal program. The new legislation has given the states a stronger role in decision-making relative to the program.

Title III, which is a major new program-- I am not going to discuss it in detail today; I just want to mention it in passing relative to emergency planning and community Right-to-Know. Large portions of this, as you know, were modeled after New Jersey's program.

The Underground Storage Tank Program is a \$500 million nationwide program to remove and abate leaking underground tanks and the pollution that results from them.

Another key component is the cleanup standards which Congress has established, an acronym for Applicable Relevant Appropriate Requirements -- ARARs. These numerical criteria

will be very important in the future in establishing how clean is clean at Superfund sites, specifically relative to integrating Federal standards and State standards. Under this provision, the Federal EPA will have to use New Jersey standards when cleaning up a site in New Jersey.

There is a greater emphasis by the Congress on permanent onsite solutions. We expect that this will have a very high degree of impact on public participation, since it will foster great controversy. Most of our technical approaches in the past have been focused upon picking up the waste and moving it from one site to another. Congress has changed the impetus under Superfund, and is now requiring that all on-site treatment technologies in the form of innovative technologies be utilized before off-site disposal is considered.

Finally, under Community Relations, there is a key provision in the statute that establishes technical assistance grants for local communities, so they can hire their own consultants. It provides for grants up to \$50,000. In addition, there has been a great expansion of the citizen's right to sue under the statute. The results of all of this are shown on the bottom. Basically, it will take longer; it will cost more. However, the process will result in technically better solutions. In the past, it has taken approximately on the order of four to six years to go through the entire Superfund process at a typical site. Because of the technical changes in the statute, this may be as long as six to eight years, and possibly as long as 10 years.

Now, what are some of the issues that have arisen as a result of the enactment of Superfund? Right now, EPA is interpreting the statute according to the draft National Contingency Plan to limit the credit to states which have moved along their projects, and limit that credit in two forms: One, to actions that have only taken place after the enactment of the statute, and two, to remedial actions only. So, at this

point in time, the documents indicate they are not willing to pay for studies or any other evaluations; only the actual cleanup itself.

Another point that is of great concern to New Jersey is relative to the reimbursement for monitoring at sites after the sites are cleaned up. At the present time, EPA is not considering monitoring to be a part of the operation and maintenance, and under that scenario the states would be 100% responsible to fund this activity.

The Management Assistance Grant is another area of special concern for New Jersey, because the present EPA proposal is to give \$250,000 across-the-board to every state, independent of how many sites they have; independent of how far along they are with the sites. Currently, in New Jersey, it costs us about \$10 million to run the entire Superfund program. Obviously, the \$250,000 is totally inadequate for that purpose.

The funding delays with the implementation of the statute last year-- As you know, we authorized for advancement to EPA \$37.8 million. Most of this money was not used; however, it has taken EPA a long time to get moving with their funding under the new program. Just last month, as you saw, I'm sure, in the newspapers, we found out that the (indiscernible) was finalized, and that the EPA state plan for distributing their money was approved, and our share became apparent.

Another important provision is what we call the "site inspection hammers." Congress has mandated, in the statute, that all preliminary assessments of all sites listed on the surplus list -- which is the comprehensive Superfund list -- must be completed by January 1, 1988. I am happy to report that in New Jersey we will complete all of our preliminary assessments by October of this year, and will be three months ahead of schedule. That will be for 1249 sites. We are in the

top, I think, four or five states in that area. However, the issue of these comprehensive site investigations is another matter. At this point in time, we have about 400 completed. That leaves over 800 to do. We have done an analysis of what it would take, and we have corresponded with EPA relative to this issue. We estimated that it would cost over \$20 million to accomplish what EPA has considered to be a site inspection for these remaining 800 sites.

Title III again-- I'll pass over this today. The interface between RCRA and CERCLA-- There are key issues relative to the implementation of RCRA and CERCLA, one of those being the concept that these two statutes were supposed to be administered harmoniously, and are supposed to be integrated functionally. In certain of the cases I have listed here for illustrative purposes, that is not the case at all. First is with POTWs. As you know, POTWs were classically regulated by the Clean Water Act. When RCRA was enacted, they were exempted from RCRA by the Congress of the United States, provided they were in compliance with the Clean Water Act. Now that we have CERCLA and SARA, the POTWs are not exempt. This creates a very unusual circumstance. The unusual circumstance is the fact that through the fear of liability -- the joint and several liability under CERCLA -- the Federal funds must be used in the Superfund program to build wastewater treatment plants in the service area of publicly funded wastewater treatment plants that have plenty of available capacity to treat wastewater. This is like spending the Federal dollars and also State dollars twice for no real productive purpose.

The implementation of the land bans under RCRA have tightened the circle, you might say, upon solvents, dioxin waste, and other types of wastes, and limited the forms available -- or the techniques that could be used for disposal. This creates a special problem for New Jersey, because currently New Jersey is accelerating the rate at which

cleanups are occurring, while at the same time RCRA is decreasing the options that we have available to us for disposing of waste. At the same time, EPA has, under their administrative powers, developed what is referred to as the "off-site disposal policy." Actually, probably, this is more appropriately the "out-of-site" disposal policy. Administratively it requires that all waste from a Superfund site go to either a RCRA or a TOSCA facility, independent of whether or not that waste is hazardous. For example, contaminated soil that is not hazardous waste under the off-site policy EPA has, would have to go to a RCRA landfill. This we feel is totally inappropriate, because it not only wastes money, it wastes the valuable capacity -- the limited capacity we have for the disposal of hazardous waste.

The second point is, facilities must be in compliance or under a corrective action program. We think this is a good idea in concept, but the way it is applied is a little flawed. For example, if we had a large industrial facility that had a RCRA approval to operate, that had, take for example, a dozen units at that facility, if one of the units was out of compliance with RCRA, you could not use any of the other 11 units, even though those other 11 units were in compliance. So, we feel that is inappropriate. It really doesn't make too much sense.

The final thing is, considering the foregoing statements, EPA, at this point in time, has no national system for identifying the acceptable facilities. So, when we do a cleanup and we are seeking to find an approved disposal site, there is no real way to find one. The facilities move in and out of compliance on a very frequent basis, and this has resulted in numerous problems with our cleanups. It has halted cleanups, and unreasonably delayed others, for that reason.

The final point is on research centers. As you know, we have the consortium of universities in New Jersey that--

ASSEMBLYMAN BENNETT: John, excuse me. I really don't want to interrupt you, but it is something I am afraid I am going to lose. The facilities must be in compliance or under a corrective action program. What impact does that have with respect to our wastewater treatment facilities and the funding there? Are you saying that if one part is not in compliance -- for instance, with a sludge disposer, or something -- they have to close down?

DR. TRELA: No. This is relative to hazardous waste facilities -- RCRA facilities. POTWs are not RCRA facilities under a statutory exemption in RCRA.

ASSEMBLYMAN BENNETT: Oh, okay. I just thought because we talked about them before-- I'm sorry, that is where I was confused.

DR. TRELA: Let me give you another example that might clarify this. For example, we might have an industrial facility that has a lagoon, a landfill, an incinerator, and, let's say, a land farm. Okay? If the land farm was out of compliance with RCRA, and the incinerator was in compliance with RCRA, the landfill was in compliance with RCRA, and the lagoon was in compliance with RCRA, if you wanted to send Superfund waste to the lagoon, which was in compliance with RCRA, under the off-site policy of EPA, you could not send it there because the land farm was out of compliance with RCRA.

ASSEMBLYMAN BENNETT: Okay, thank you. I understand. I just needed--

DR. TRELA: In other words, if part is out of compliance, the whole facility is out of compliance.

DEPUTY COMMISSIONER CATANIA: And the problem becomes -- on a day-to-day basis -- as our cleanup contractors are trying to dispose of waste properly-- A facility can be out of compliance when part of that facility is out of compliance, and there is no place to take that particular waste stream at that particular time. So, it starts to back up the whole process.

We have tried to work with EPA to establish at least an information system to find out, on a regular basis -- whether it is weekly or whatever -- who is in compliance. Otherwise, we have our contractors sometimes sitting around wondering where they can take the stuff, while we find out from EPA whether a facility is in compliance or not. It is not going to make the cleanup program work any better having to deal with this as well.

DR. TRELIA: The final point on this is the research centers. As we know, under CERCLA, sections 209 and 311 require that there be established research centers to study innovative technologies to figure out what to do with this cleanup waste. When you compare that to RCRA, there are no provisions in RCRA for these types of facilities. Therefore, our universities -- Rutgers, NJIT, or whichever -- that would be willing to take an initiative to help us to solve some of these very difficult problems, would have to go through a full RCRA permit to be able to handle the waste on site.

We have been in contact with EPA relative to this problem, and they are currently drafting regulations to deal with it. But, it essentially stagnates the innovative technology approach to solving the hazardous waste problem, because the universities are not going to bring waste onto sites without legal approvals.

Moving to the second major portion of the presentation, looking at the current practices, we have in New Jersey some 9700 facilities which notified under RCRA. Currently, there are about 4200 facilities that are active handlers of hazardous waste; by that we mean generators, treaters, transporters, and disposal facilities. Most significant among those are the 260 active treatment, storage, disposal facilities. Of those, about 164 require full RCRA permits, and there are another 640 -- which are part of the larger 4000 universe -- that are going to require some form of

corrective action, or cleanup, under the provisions of RCRA. These facilities in aggregate in 1985 generated over nine million metric tons of hazardous waste.

If we focus for a minute back on the funding plan, we can see that the enforcement program is targeted to develop \$519 million over the next five years. And, looking quickly at the status of how we are doing, between January 1, 1986 and -- there is a typo on there; it should be September '86, not '87 -- and we didn't need the extra day in September either -- we have gotten \$17 million through that period. Since the funding package was, in fact, approved, however, we have gotten \$12.6 million. If you compare that to what we were supposed to get for the first year -- and we are about halfway through the first year now-- The target for the first year was \$66 million. We are far short of attaining that target, and I will talk about this a little later in a little more detail.

In response to a request from the Committee, we have compiled our enforcement documents issued between January '86 and March '87, and we have listed here the different types of documents, the numbers issued, and the amounts assessed and collected. What we can see is that we have issued 463 documents, for a total of \$1.7 -- or almost \$1.8 million. At this point in time, we have collected about 38% of that, or about \$687,000. The remaining 156 documents are still being contested at this point in time.

Looking quickly at ECRA, the current status on that is, during the last six months we have collected \$120 million in financial assurance under the ECRA program. This brings our 12-month total to \$244 million. The total now for the program since its inception is approaching \$400 million.

In looking finally at the prevention issue, in terms of the prevention of new sites, we have an initiative relative to the hazardous waste fee schedule, which the Governor called for in his State of the State Address. I think the key point

here -- and if I want to emphasize any point today, I think this is it -- is that currently we have committed to spend billions for cleanup, but we are only literally spending, on a relative basis, pennies for defense. In other words, pennies to prevent future problems; to prevent Superfund sites; to prevent future liability to the State, in terms of creating new sites. I think we have to strike a balance between the effort we are expending relative to the corrective action or remediation of old sites and the amount of effort we are applying to remedy new sites.

The next point is relative to the waste audits. We are very much in favor of those as well. We think they should be a multi-media program, and that it should be non-regulatory in nature. We hope that NJIT or Rutgers could become involved in the training and certification through this program, to provide on-site regulatory and technical assistance to industry, as appropriate.

The third component is research in innovative technology. Assemblywoman Crecco's bill -- A-2536 -- is critical, as I discussed earlier, considering the RCRA land ban and the need for looking at new technologies to clean up sites as mandated by the Congress under the SARA amendments.

The financial evaluation component we think is very critical as well. However, we feel it needs to be carefully evaluated relative to the financial impacts of these incentives, and we are very concerned about the potential of rewarding polluters who have not, in fact, done what they were supposed to do in the past, while penalizing those who have complied with the law.

We also seek to establish a technical advisement, or technical assistance program to expand knowledge in the area of hazardous waste and hazardous waste minimization. Further, we hope to initiate a regulatory review of our rules, so that we can make the process more efficient.

In looking at our differential between our hazardous waste enforcement program, between what we have now and what we should have, this slide emphasizes the difference between the \$66 million we should have in FY '87 and the \$12.6 we have at the midway point. What we think is needed is about \$3 million a year for five years in enforcement program support. The basic leverage there would be about 100 to three, whether calculated on a yearly basis or annualized over the five-year program.

In the short term, as Mr. Catania indicated earlier, we are asking for a resolution for \$700,000 for operating costs. We plan to establish 40 site specific positions under the Spill Fund to expand the resources available to us and to expand our activity in this area. In the long term, we are looking for legislation in four specific areas: the Hazardous Waste Fee Program, as Michael indicated earlier; legislation to place penalties in the Hazardous Discharge Cleanup Fund, and this, I believe, has already been introduced by Assemblywoman Donovan as A--3907; legislation to provide oversight costs for Administrative Consent Orders which involve cleanups under a variety of statutes; and enactment of stiff legislation to increase penalties and criminal liabilities.

What we would do in the fee program, hopefully, would be balance the resources we are applying between past problems relative to cleanup and the future in terms of prevention. We would establish a fee schedule based upon the volume of waste generated, its toxicity, the type of facility, etc., and other technical criteria. The targeted revenue for this program would be about \$8 million to \$10 million annually. This money could also be used to support waste audits or the substitization (sic) of waste audits, technical assistance to the regulated community, some research and, most importantly, the regulatory enforcement and planning components that will regulate facilities that we have today, to prevent future problems.

To summarize the whole presentation, we have basically the funding package, and we have the minimization initiatives -- six of them. The basic concept there is that waste that isn't generated doesn't have to be treated, doesn't have to be stored, and obviously cannot cause pollution.

The Regulatory Control Program is the key prevention program. That is what we are trying to emphasize today. The siting requirement of SARA-- There is a hammer in SARA, which says that in three years each state must develop capacity assurance for disposing of its waste, or treating its waste, and if it doesn't, then it will not receive any Superfund funding. Finally, the fee schedule is based on the "polluter pays" principle. These initiatives would make our program whole, and New Jersey again would be, I think, one of the first states to be in a position to minimize the wastes that are being generated today, effectively regulating the ones that we can't eliminate through minimization, while simultaneously addressing problems of the past. I think that kind of an approach is what we really need to close the circle or make the program whole. It focuses in on all three levels with an equal degree of vigor.

Thank you.

ASSEMBLYMAN BENNETT: John, with respect to the enforcement and the lagging behind, I know you gave us the figures, but in an effort to make our entire cleanup work, it is obviously necessary that we have those moneys brought closer to the tune where we were projecting \$66 million in this year. I believe you have, like, \$16 million or \$17 million in at this point. What steps, if any, do you feel it would be necessary to implement in an effort to bring those figures closer to what we had anticipated?

DR. TRELA: We have two recommendations: One a short-term recommendation, which would be to give us a \$700,000 resolution out of the Spill Fund for operating costs. That

operating money would allow us to establish 40 site specific positions, which then could be dedicated as either attorneys, case managers, geologists, or whatever, to work specifically on enforcement cases. Each would be assigned a case, and under the Spill Fund protocol, we would establish those positions from that funding source.

The second and longer term issue, and I realize this would take a longer period of time, would be the Hazardous Waste Fee Program, which we discussed earlier; legislation to place penalties into the Hazardous Discharge Cleanup Fund -- which is A-3907; legislation to provide oversight costs, which again would be a revenue source for the Department to support the staff that would be overseeing the cleanup and the corrective action at these sites; and enactment of fines to increase penalties and criminal liabilities for polluters. So, these are our recommendations.

ASSEMBLYMAN BENNETT: Well, we did pass legislation that increased the penalties. In fact, I believe we doubled the penalties.

Did you ask for the money in the appropriation process? Is it in the budgetary request for this year, for the short-term solution?

DEPUTY COMMISSIONER CATANIA: The resolution that John Trela is talking about has been requested of both Appropriation Committees. I believe the response was to put a resolution in both houses.

ASSEMBLYMAN BENNETT: In other words, the answer to my question then is, no, it wasn't in the budget, and you are seeking a resolution to have it added to the budget.

DEPUTY COMMISSIONER CATANIA: That is correct. It was not in the normal budget process because at the time the budget was put together, we were not aware of the need at that point. When we became aware, we prepared the resolution. It was in our testimony before each of the Appropriation Committees, and

a resolution was prepared, supported by the Governor's office. Sponsors have been found.

ASSEMBLYMAN BENNETT: In the presentation, you said the cost of administering the Superfund in New Jersey is presently running at -- at least I thought I understood this -- \$10 million a year. Why are the administrative costs \$10 million for simply the Superfund program at this point in time? It would appear to be somewhat disproportionate -- out of range of the real dollars that are being expended for cleanup, if we are spending \$10 million -- Superfund dollars -- on Superfund administration.

A S S I S T A N T C O M M. J O H N W. G A S T O N J R.: The \$10 million refers to the total program costs we have associated with Superfund. The moneys are coming from a variety of sources. As you know, most of the pie chart shows that most of the efforts we are making now are in the study phase and the design phase. They are fairly intensive with respect to the kind of effort you have to put forward. Only this year, at the national level, are we seeing the first dividends to come back to New Jersey. Some \$50 million of the \$82 million or \$83 million we are scheduled to get in FY '87 is going to be for construction. So, we are beginning to see the up-front efforts we are putting forward returned in the form of larger construction dollars and a larger actual capital commitment, to deal with problems out in the environment.

ASSEMBLYMAN BENNETT: I did not mean the question as criticism of the program. Obviously, the mere fact that we are receiving more moneys than any other state in the Union speaks very highly of the program. Don't misunderstand my question.

My question, however, is, there appears to be, administratively, a great deal of money being expended, when we are not expending it, percentage-wise, that much on the cleanup. Are you telling me it is necessary to spend that amount of money in order to file the papers to get them? I mean, I don't know, but I am not knocking the program.

ASSISTANT COMMISSIONER GASTON: These are not administrative costs in an administrative sense. These are the costs to pay for the people who put the plans together or oversee the contractors who put the plans together. So, they are administrative in a budgetary sense, but they are the real costs which have to be built into any project to get it successfully implemented on the outside.

DEPUTY COMMISSIONER CATANIA: To give you an example, we are talking about the people who do the preliminary assessments and the site inspections; the people who prepare the applications that go to EPA; the people who sit down to negotiate the cooperative agreements; the people to monitor the contracts, both through the State system, as well as through the Federal system; the people who supervise the efforts of the contractors and subcontractors of both EPA and the State, in terms of reviewing that work product, commenting on it, making sure that the reports are revised to meet the standards that will allow the State to be reimbursed with Superfund dollars. We are talking about a fairly intensive effort.

Unfortunately, we are in the phase where a lot of it takes place before actual cleanup, because we are talking about going through the Superfund process, and that is a very intricate process.

ASSEMBLYMAN BENNETT: In the eventuality that we have a hazardous waste disposal site located that we are able to use, under the SARA amendments would we be able to exclude out-of-state waste to assure that we would have capacity for New Jersey-generated waste?

ASSISTANT COMMISSIONER GASTON: The way SARA is structured, Congress made it very clear that individual states were going to have to take the lead in producing new capacity to deal with waste problems. John referred to the capacity assurance hammer that was put in the law, which said that three years from the date of enactment, or October, 1989, states, in

order to receive Superfund money, would have to be able to assure that they had capacity available to treat and handle 20 years' worth of hazardous waste produced in the entire state -- in the entire state, not just the Superfund waste. So, states -- I can tell you from meetings I have attended with my colleagues -- have heard the intent of Congress, and all of us are very much paying attention to the process of developing capacity to properly handle hazardous waste, so that when 1989 comes around and Lee Thomas, or his successor, asks us, "Do you have the capacity to handle the waste?" we hope to be able to say, "Yes," to keep the financial flow of money moving.

So, there is a strong incentive that has been built into the new Superfund for states to perform.

DEPUTY COMMISSIONER CATANIA: John, I think the real answer to your question is, we don't, I think, at this point, assume that we are going to be able to ban other states from coming here. It is working a little more from the other direction. Other states will have the same requirement that we have, that they have to provide capacity for their own waste. The penalty, though, is not necessarily that they don't get to use a facility in another state; in fact, they can negotiate for that and make agreements for that.

I think the penalty, though, is that they can lose Superfund dollars, not that they under any circumstances can't use it. You get into some legal issues, some interstate commerce issues, and it is not clear with the SARA amendments now how those are going to be affected with the new policy change there.

I would love to be able to give you a more specific answer.

ASSEMBLYMAN BENNETT: No, that's fair.

ASSISTANT COMMISSIONER GASTON: One other thing, John. The law, as it was enacted, provided for interstate agreements between states, you know, in much the same way that

some of our counties have entered into agreements with those that bring garbage within the county, and use that very effectively to control the flow of garbage. I would expect that our State: a) would understand very well what kind of capacity it had available to it; and b), would be looking to make arrangements to complementarily share capacity, if you will, with other states that might have capacity for items that we don't have on our agenda. The law specifically puts us in a position to have those kinds of discussions and to provide those kinds of agreements.

ASSEMBLYMAN BENNETT: I think legislative staff gave you earlier a package that would have a Hazardous Discharge Site Cleanup Status Report Summary as the top sheet. If you could put that in front of you-- You gave us, prior to today's meeting, a very thorough listing of the status of the sites in the State, together with the amounts of moneys that had been authorized and the amounts of moneys that had been expended.

As a result of a review of that list, certain questions arise. I understand that we may not have all of those answers specifically today, but I would like to raise the questions. If they can be answered, obviously they have been disposed of. If they cannot be answered today, I would like us to be able to get the answers in the future.

We start off in general areas, but as a practical matter we have to point to the individual sites specifically. In dealing, for instance, with the-- Many of the sites have multiple authorizations. I think Burnt Fly Bog is on every single list, so it makes it a little difficult to track and to follow exactly what is happening. But, why, number one, do we make the multiple authorizations, and two, who keeps track of them? I mean, how do you track a specific authorization on one site when there are multiple authorizations? I guess maybe that is my question.

DEPUTY COMMISSIONER CATANIA: Well, let me try to shed a little bit of light on that. Each of what we call a "cleanup" is broken down into a number of components. We have term contracts that cover very specific activities, so some of this is because of the procurement process the State and the Federal government uses. So, you will see a lot of specific authorizations and you will see, in some cases like Burnt Fly Bog, maybe 10 or 12 for a particular project, one that we would think of as one project.

It may be a contract for someone to install a fence that comes off of one of our term contracts. There is an authorization made for that. That money is obligated and ultimately expended. There could be a transportation contract for someone to haul materials in or out of the site. There could be a contract for someone to do the remedial investigation on the feasibility study, or even components of that. So, we are talking about very discrete activities that are the subject of some of these contracts, and, because of that, for the authorizations, you will see very distinct authorizations, and a number of them on a particular project.

We track them internally, both through the Superfund program and also through our Fiscal Division. We have separate obligation and authorization of funds from the program, and the sign-offs that are required involve the individuals at this table, as well as the Commissioner, the Spill Fund Administrator -- if the Spill Fund is involved as a funding source -- as well as our Financial Section, both our Assistant Commissioner and our Division Director for Financial Management. We have what is called a Fiscal Integrity Unit in that Division of Financial Management separate from the program, that reviews all proposed authorizations and contracts, to make sure that the funding source is available, and to make sure that the State procedures are being followed.

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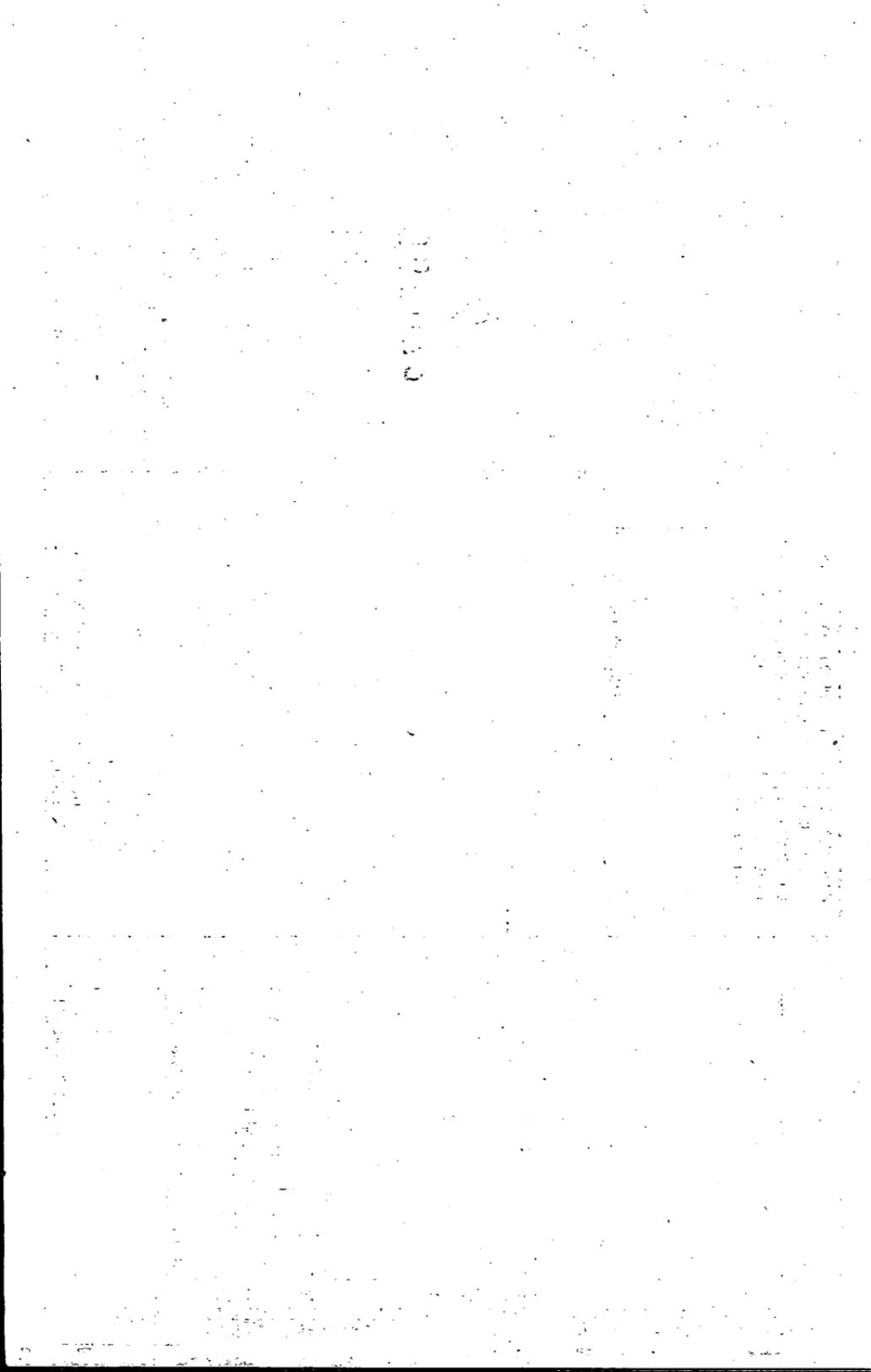
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That was one of the things that happened as a result of the recommendations of Coopers and Lybrand and the State Auditor, after the concern about the expenditures of Chemical Control years ago. So, that is a long answer as to why you are seeing that pop up in a number of places.

ASSEMBLYMAN BENNETT: I appreciate that. For instance, under Part 1 here, under Burnt Fly Bog, obviously we have quite a number of areas. Some are from the New Jersey Spill Fund. I guess that is the authorization number. Some are from the General State Fund and Capital Appropriations. Some are from the actual Superfund. Then, in the summary you gave us, some of those -- in fact, at Burnt Fly Bog, during the last six-month period -- had money spent, and there is still some money left over. How, if at all, are we able to know what was spent for what in that period?

DEPUTY COMMISSIONER CATANIA: Let me give you a general answer, and if you want, we can go to specific ones. Tony Farro, who is our Director of the Division of Hazardous Site Mitigation, is here, and he can try to answer some specific questions. What we will offer is, we will prepare a detailed response on all of the sites you have listed here, and get those back to you. We are not going to be able today to go through all of them individually.

ASSEMBLYMAN BENNETT: Obviously not.

DEPUTY COMMISSIONER CATANIA: Tony may be familiar enough with Burnt Fly Bog to shed some light on what appears to be a mystery here.

ASSEMBLYMAN BENNETT: There are just a couple I want to touch on. If the answer is easy, fine; if it is not, you can get it back to me.

DEPUTY COMMISSIONER CATANIA: The one thing you have to keep in mind here -- not one thing -- but one of the things to keep in mind, because it is a complicated process, is, when we do our authorizations, we do the authorizations for

basically an estimated amount. Then the contracts will come in. Contracts can be subject to change orders in either direction as the real world becomes apparent and the contractor is out there doing the work. Either you need to do less of a particular unit that is called for in the contract, or more. So, in a lot of cases, when you match up the authorizations with the expenditures, you will see that either we haven't spent all of the money authorized, or, more often the case, through change orders, you will see a second authorization to increase the original amount.

ASSEMBLYMAN BENNETT: Yeah, we saw that.

DEPUTY COMMISSIONER CATANIA: That will cover a change order or, in some cases, an additional contract, either because of a change in the unit price -- you have to drill more feet -- or because there are different circumstances than you expected to find, and you need different machinery, or a different lab analysis, which will cost you additional funds.

With respect to the Burnt Fly Bog, you were asking in particular--

ASSEMBLYMAN BENNETT: Yeah. There were two projects. One is EPA, and one is Spill Fund -- 177A. They were two of the authorization numbers that, in fact, had dollars expended from them. There is still money left over in those two particular ones. I was just curious as to what--

DEPUTY COMMISSIONER CATANIA: We are going to have to match up the authorizations; in other words, the particular contracts, and get back to you.

ASSEMBLYMAN BENNETT: That's fine. While we are just on that site, and before we leave, this is obviously something that I feel very strongly about, since I have been living with it for the eight years I have been in the Legislature.

UNIDENTIFIED MEMBER OF COMMITTEE: Do you own that property?

ASSEMBLYMAN BENNETT: No, I don't own it, and I don't want to own it either. The westerly wetland region-- We had that study done, and there was an estimate as to the cleanup there. My understanding was that there were additional studies being done on the westerly wetlands. I would have to guess that maybe some of that money expended was on that. Do we know when the final study of alternative methods of remediation are going to be concluded on the westerly wetlands in Burnt Fly Bog?

A N T H O N Y F A R R O: The study itself started, I guess, about a month and a half ago. The money was obligated; maybe that is one of the reasons why you don't see a change.

ASSEMBLYMAN BENNETT: It might be.

MR. FARRO: The money was obligated, I guess, about maybe three and a half months ago -- four months ago. Part of the problem was the prime contractor had to go out and solicit bids for his subcontractors. So, there was a period of maybe two to three months where, although they awarded the contract, there was a lot of paperwork that the contractor had to go through before he could even get the subcontractors on board.

As far as the schedule, I think we are looking somewhere on the order of November to have the study on the westerly wetlands complete, which will come out with the alternatives we are looking at to remediate that portion of Burnt Fly Bog.

ASSEMBLYMAN BENNETT: November?

DEPUTY COMMISSIONER CATANIA: That is when we will receive the study from the contractor, Assemblyman.

MR. FARRO: Right.

DEPUTY COMMISSIONER CATANIA: So, there will be an EPA and a DEP review period before action is taken on the alternative recommended in that study.

MR. FARRO: And, again, this would follow the normal process. We would have to go through a ROD -- a Record of Decision -- with EPA for that portion of the site.

ASSEMBLYMAN BENNETT: The last time the wells in that area were sampled -- the residential wells in that area -- was back in October, 1986. Is there a time frame for when the wells will be sampled again? How is that process done? That is true basically on any of our sites, I would have to say. Residential wells in the immediate area-- How often do we do a check on them?

MR. FARRO: Well, generally speaking-- We have talked to the EPA, and it is a point that we brought up. You know, you go through a RFS, and it is going to be four or four and a half years down the road prior to implementation. EPA and the State have agreed that between those two periods of time we are going to start doing more monitoring, not only of potable wells, but also the monitoring wells--

ASSEMBLYMAN BENNETT: Correct.

MR. FARRO: --to make sure that the problem hasn't changed, and here you are designing for something that really doesn't exist. The potable wells at Burnt Fly Bog, I know for a fact, we are scheduled to resample within the next couple of weeks. We had a meeting on the status of Burnt Fly Bog about two weeks ago.

DEPUTY COMMISSIONER CATANIA: We will be happy to prepare a detailed response breaking down the authorizations, and letting you know what the work was for, plus whatever other details you want.

ASSEMBLYMAN BENNETT: Okay. The same is true on Lone Pine, which is another rather significant site in the State, the county, and even in the Twelfth District. But, we have been hearing now for quite some time that it was imperative to be able to continue to move the work ahead. We have listed under Lone Pine, again under account numbers, that there was money spent and there is some money left over. That appears to be the only Lone Pine one that has any additional money spent. We even lent, if I understand correctly, the Federal government

certain moneys because we didn't want any delay. It was almost a year ago, I think, that we lent them the money, prior to the reauthorization of Superfund.

DEPUTY COMMISSIONER CATANIA: Assemblyman, no money actually changed hands. The State was prepared to advance the Federal government money. Superfund was reauthorized, and the Federal funds came through. Actually, we did not-- We worked out a very complicated arrangement to set up an escrow account and advance the money in large chunks for phases of the Lone Pine work, up to, I think, a total of \$14 million. But that never actually happened.

ASSISTANT COMMISSIONER GASTON: What it did was, it permitted them to keep moving. Last year they were closing the program down. By us having the ability to make the money available to do the project, they continued the design work at a point in time when they would not have otherwise done that. So, the moneys were ready and poised to be utilized, but they weren't utilized and, in fact, Lone Pine has been funded in this year's SCF, I believe. Is that not true? Lone Pine is one of the-- (consults with colleagues) Oh, it will be funded in the first quarter of '89.

ASSEMBLYMAN BENNETT: So, our money never left our hands -- our control?

ASSISTANT COMMISSIONER GASTON: It is still sticking to our hands.

ASSEMBLYMAN BENNETT: That isn't what I was told.

DEPUTY COMMISSIONER CATANIA: We authorized it.

ASSEMBLYMAN BENNETT: No, I thought we gave it, because there was an argument on interest. The Feds said that if we lent them the money -- if the State lent the money -- we wouldn't get the interest. I said, "Well, under the circumstances, if we are faced with the loss of interest, or shutdown of the program--" I mean, it was discussed with me, and I said that as far as I was concerned we would lose the interest in order to avoid the shutdown.

DEPUTY COMMISSIONER CATANIA: That was the exact conclusion we came to also. We had obligated the money internally through an authorization and were prepared to transfer it. I think we worked out two or three phases, the first phase being about \$3 million or \$4 million worth of work. We were prepared to lose the interest on that.

ASSEMBLYMAN BENNETT: Right. So, we never lost any interest?

DEPUTY COMMISSIONER CATANIA: No, we did not.

ASSEMBLYMAN BENNETT: I was told a year ago that we were waiting for spring for work to start there.

ASSISTANT COMMISSIONER GASTON: Let us get to the question: Why haven't we moved ahead on Lone Pine? One of the points that John made in his presentation was the POTW issue. What do you do with the leachate from a landfill facility such as Lone Pine? There is to be a leachate collection system installed, full pre-treatment provided. We were looking to--

ASSEMBLYMAN BENNETT: On-site?

ASSISTANT COMMISSIONER GASTON: On-site. We were looking to discharge the wastewater into the sewer system that extends from Freehold Township and Manasquan on to the sewer system in Ocean County. We were looking to use the Ocean County publicly owned system. We went through exhaustive studies.

ASSEMBLYMAN BENNETT: We own the system. They ripped us off. The Department had something to do with that.

ASSISTANT COMMISSIONER GASTON: You own a good share of it.

ASSEMBLYMAN BENNETT: They own the facility, but it is our pipes. But we pay for everything.

ASSEMBLYMAN SINGER: We are just country people in Ocean County. We couldn't rip anybody off.

ASSEMBLYMAN BENNETT: No, the Department helped you.

ASSISTANT COMMISSIONER GASTON: It is good to have both views on this question represented at the table. We tried like hell to work with Ocean County to get them to accept the wastewater in their system. We went through two technical treatable studies to demonstrate that there wasn't any harm from a scientific/engineering standpoint to have that material in the system. It would have been treated for the parameters that were of concern at an on-site system for pre-treatment.

ASSEMBLYMAN BENNETT: Right, that is my understanding.

ASSISTANT COMMISSIONER GASTON: When we went through that, at the very end of the conversation, Ocean County, in effect, said to us, "This is Superfund waste. If you put it in our system, we have Superfund liability under SARA that says that third parties can sue. We don't want it."

So, at that point in time, you know, our hands went up in the air and we said, "We went through the line and verse of the technical justification, the engineering justification," and the Ocean Authority switched the conversation at the end to say, "We don't want Superfund waste in their system," which is why we are highlighting the POTW issue as a very serious concern. As you move around New Jersey, there are going to be lots of places where you produce liquid waste, and even though you pre-treat it, you need to put it into a wastewater system for ultimate polishing prior to disposal. And we were closed off in that conversation.

We pursued two options to deal with the problem as a result of being closed off at the end of the system. We have had direct conversations with both Freehold Township and Manasquan to see whether or not they feel the same way that Ocean does. There have been situations in the past where the two authorities and several communities have not exactly agreed.

ASSEMBLYMAN BENNETT: Yes, several of those occasions.

ASSISTANT COMMISSIONER GASTON: So, we are asking the communities if they feel the same way.

ASSEMBLYMAN BENNETT: But, they can't treat.

ASSISTANT COMMISSIONER GASTON: Pardon me?

ASSEMBLYMAN BENNETT: They can't treat it.

ASSISTANT COMMISSIONER GASTON: But they can accept wastewater into their systems.

ASSEMBLYMAN BENNETT: But it ends up going to Ocean.

ASSISTANT COMMISSIONER GASTON: Right.

ASSEMBLYMAN SINGER: If we block the system, it will be very funny coming out of the sewer pipes, won't it?

ASSEMBLYMAN BENNETT: Just build us a facility, and they don't have to take any of our waste.

ASSISTANT COMMISSIONER GASTON: Okay, so that's one thing. The second option that is being pursued is that we are looking at the parameters that have to go into building an on-site system for discharge into the Manasquan. Quite frankly, we are not looking to having any more discharges into the Manasquan.

DEPUTY COMMISSIONER CATANIA: Particularly because we are building a reservoir on the Manasquan for potable--

ASSEMBLYMAN BENNETT: Are they?

ASSEMBLYMAN SINGER: Have you considered maybe if you spoke to Ocean about it, if maybe you could do something with their sludge dumping in the landfill, they might be more receptive to your conversation?

ASSISTANT COMMISSIONER GASTON: We try to have separate conversations about issues that are separate.

ASSEMBLYMAN BENNETT: All right. The bottom line is, until there is a method of disposing of the water, Lone Pine sits with poisons just festering in there, leaching out to the Manasquan for all of us to drink.

DEPUTY COMMISSIONER CATANIA: I am not sure we would explain it, or describe it exactly that way.

ASSEMBLYMAN BENNETT: But, in the meantime, nothing gets done until we know where the waste is going to be treated.

DEPUTY COMMISSIONER CATANIA: We need to resolve that issue. That is not just an issue for Lone Pine.

ASSEMBLYMAN BENNETT: I think maybe we should take some of the \$10 million and put it right there, and say we are going to decide how we are going to do it. I mean, this is a real serious problem now.

DEPUTY COMMISSIONER CATANIA: We agree.

ASSEMBLYMAN BENNETT: Order Ocean County to do it.

ASSEMBLYMAN SINGER: Mr. Chairman, I think if you would like to build a treatment plant for the State in your area, I would be willing to support that bill.

ASSEMBLYMAN BENNETT: Not for the State; for my own district. I am paying for yours.

ASSEMBLYMAN SINGER: I am willing to support that bill if you want to take the \$10 million to build a wastewater treatment for hazardous waste.

ASSEMBLYMAN BENNETT: No, no, no, not for hazardous waste. For my hazardous waste, not yours.

ASSEMBLYMAN SINGER: I will support the bill.

ASSISTANT COMMISSIONER GASTON: Assemblymen, your frustration at us not performing is shared by us, in the sense that we see a lot of other situations where this scenario is going to repeat itself, and things that could be done aren't going to be done. We really do need help. We need help, setting aside for a moment the beggar thy neighbor principle, because this is something where a quarter of a billion dollars of Federal moneys has been spent in Ocean County to put in infrastructure. It just doesn't make sense that that kind of an investment isn't available to perform a public service when, in fact, it--

ASSEMBLYMAN BENNETT: Tell him, not me.

ASSISTANT COMMISSIONER GASTON: I am addressing Mr. Singer through the chair. It just doesn't make sense--

DEPUTY COMMISSIONER CATANIA: Particularly because the waste we are talking about is basically identical to the wastes that the plant is already handling, but for the Superfund label.

ASSEMBLYMAN BENNETT: There is a man over in the Department who ordered Monmouth County to send all of their waste down there. I am sure that that same man, who still works over there, who still has a high rank, would be able to order Ocean County -- and I am sure he could take care of the boys there -- and they would take it. Just you guys pursue it, that's all.

DEPUTY COMMISSIONER CATANIA: In fact, that is one of the things we are pursuing.

ASSEMBLYMAN SINGER: What do you mean take care of the boys there?

ASSEMBLYMAN BENNETT: Talk to them; talk to them.

DEPUTY COMMISSIONER CATANIA: So that people don't think we are picking on Ocean County, this has become a generic problem.

ASSEMBLYMAN BENNETT: All over the State it would be the case.

DEPUTY COMMISSIONER CATANIA: It is going on in the Price's Pit area in Atlantic County; it is going on for GEMS in Gloucester County. In fact, we think we may have one agreement for it anyway to take it away so that we do not have to construct an on-site plant. The stakes are very important, because even with the changes to SARA, we are still looking at the State picking up the lion's share of operations and maintenance. So, the difference between discharging to an existing MUA that has been constructed largely with Federal and State funds, as opposed to building an on-site treatment facility and operating that for 20 or 30 years can be very substantial; can exceed the cleanup costs themselves, in some cases. It is a very big issue.

We are exploring ways of either persuading or requiring MUAs to take this waste if it is within their service area. Unfortunately, they are not regulated as utilities; they are regulated under the Utilities Authorities Law. We have limited jurisdiction over them. This is becoming a familiar refrain. You find out in the Superfund process that you get to deal with lots of things that you don't have terribly much control over, and you have to make sure that they all fit into the puzzle at the right time so that the work progresses.

ASSEMBLYMAN SINGER: Excuse me, Mr. Chairman. Except there is one exception, too. You are planning to treat waste from a Superfund site in Ocean County, and not even use our pipe line, but pump it through their own pipe line of Ciba-Geigy. Is that not correct?

DEPUTY COMMISSIONER CATANIA: I am not talking about Ciba-Geigy at all. I am talking about--

ASSEMBLYMAN SINGER: I know, but he is. I am talking about a hazardous waste cleanup site -- that you are planning to treat on-site, and pump through their own pipe line, not coming through our sewer system. Right?

DEPUTY COMMISSIONER CATANIA: Does that mean that Ocean County would prefer that it go to a treatment plant -- the waste coming from the Ciba-Geigy site?

ASSEMBLYMAN SINGER: Do you mean to say that Ciba-Geigy is going to pay for that to come that way? See, right now, if they pump it through their own lines, it's free, folks. It's a free ride.

ASSISTANT COMMISSIONER GASTON: I really don't think that Ciba-Geigy is going to be able to represent that there is a free ride for the cleanup program they are going to implement. They have already set aside \$50 to \$75 million, and they will probably set aside more before they get finished. So, there are big tickets they are going to pay.

ASSEMBLYMAN BENNETT: Well, there is big damage done to the environment.

DEPUTY COMMISSIONER CATANIA: There is also a big difference between making a viable entity that is responsible for a problem bear the costs of treating that. They don't run that treatment facility free. It costs. They have O&M costs just like the State would have; just like the Ocean County Utilities Authority would have. We are talking about the case of Lone Pine, where there is not an operating entity on that site. It is an old landfill; it is an abandoned landfill, and the State has to step in and take care of it. So, our options are to build an on-site facility, or to use an existing treatment plant.

ASSEMBLYMAN SINGER: Well, I think when you start separating problems, and you don't want to discuss everything together, that is when people start to get their backs up a little bit. We had a very big problem and a ticket of \$5 million a year to remove our sludge to Pennsylvania. I feel we received a deaf ear from the Department on that, so I feel very honestly--

DEPUTY COMMISSIONER CATANIA: We have reached an agreement with you on that issue.

ASSEMBLYMAN SINGER: Yeah, but once we start the construction of the plant.

DEPUTY COMMISSIONER CATANIA: That's right, and we think that is a reasonable agreement. Obviously, Ocean County does too, because they concurred with us and signed it.

ASSEMBLYMAN SINGER: We had no choice.

DEPUTY COMMISSIONER CATANIA: You had a lot of choices. In the 10 years that you knew that deadline was coming, you could have made alternate provisions; you didn't. You put us in the position of brinkmanship, where when the end was near we had to try to reach some accommodation with you, which we did.

ASSEMBLYMAN SINGER: There are two sides to the argument; you gentlemen both know that. Meanwhile, it is

costing the taxpayers \$5 million a year to truck sludge to Pennsylvania to the same type of landfill that is exactly in Ocean County -- the Double Line Landfill -- which could easily be continued up there, but that is another story.

ASSEMBLYMAN BENNETT: I would like to move along. I am going to try to go a little bit faster. It is my fault, and I apologize to you, but it is just that Burnt Fly Bog and Lone Pine are very important statewide. That is why I spent the time. But, if we can get some of those questions that are written down in here answered, I think that will be helpful.

There is a list of the status where there is no change and all of the money is spent. That is for certain authorization numbers. Obviously, on sites such as Burnt Fly Bog and Bridgeport Rental, all of the work is not done, but since the moneys that appear to be authorized to date have been expended, will we be deleting these that are completed, and just putting on the new ones, or will we be writing down completed and putting down new authorization numbers?

ASSISTANT COMMISSIONER GASTON: We can work with you in terms of getting a refinement of the information that we are furnishing you that would be more of an assist in overseeing what we are doing. What you have in the two printouts we furnished you in March, and then again--

ASSEMBLYMAN BENNETT: Correct.

ASSISTANT COMMISSIONER GASTON: --in October of last year, are all the authorizations that we have entered into since 1978. So, all the laundry is out on the line. We can refine this; you know, we can take out the ones that are closed out in any way that would be helpful in improving your ability to overview what we are accomplishing.

ASSEMBLYMAN BENNETT: Right. The whole point is to try to be able to track what is being done. Table 2 is random. There is nothing except random on that. Now, what we were trying to look at, though, was, since there had been no

change in the moneys that had been expended, there were certain moneys left over. Now, in those few projects there, there were \$32,795 of authorized dollars still available.

The question is, if that is the case, and you took it all the way through, it may be in excess of a million dollars that is remaining. Obviously, we should probably want to clean that money out and get it so it can be expended on another project.

DEPUTY COMMISSIONER CATANIA: One of the things that is not readily apparent from here is that in that situation you are describing, we do a deauthorization. After the work is completed, if there is a difference, if there is a balance remaining from what was authorized and what was actually expended, we deauthorize that money and it goes back into the pool.

ASSEMBLYMAN BENNETT: But I would think that would have to show somewhere in this report. We haven't seen it yet.

DEPUTY COMMISSIONER CATANIA: It does, but only through code, the way the list is presented here.

ASSEMBLYMAN BENNETT: Well, we need a copy of your code, so we can figure it out, I guess.

DEPUTY COMMISSIONER CATANIA: Then you wouldn't need us, though, John.

ASSEMBLYMAN BENNETT: Oh, no, no. Who would I have to sit over there for me to pick on?

On Table 3, the funds were expended during July to December -- period -- but there still remains additional dollars available. I would assume then that in this next six-month period we will be expending those additional dollars on those projects, or is that not the case?

DEPUTY COMMISSIONER CATANIA: Some portion of those dollars. You are looking at an authorization which will, in some cases, take several years for the expenditures to catch up with the authorization. You can expect to see -- absent some

serious problem that brings things to a halt temporarily -- continued expenditures and those numbers going down in each report you see.

MR. FARRO: The other thing you may find out is-- You may find a job that we show as completed. Although the job is completed prior to-- If the audit is not complete, or all of the invoices are not in, we still won't be authorized the money. So, a lot of times, although the work is actually done in the field, it might take three to four months for the audit to go through, and at that point we will be authorized. So you have a lot of open accounts, even though we show that the work is completed.

ASSEMBLYMAN BENNETT: Right. The same way on number four. Again, all of these lists are random. They are not to be interpreted as being inclusive of all of these sites. We just tried to see a pattern. There was no remediation during the six months, but there were moneys available to do work. So, obviously, it is not a funding problem with respect to these projects, or these authorization numbers. Why would we have moneys available and not do work? Again, I can't expect an answer immediately on each of these, but, in general, why would there be such a case?

MR. FARRO: Well, just looking through real quick, you know, the Friedman Property-- Mike mentioned that you might have an account that is open for a few years. That is a five-year monitoring account -- O&M. It is sampled once every four months and, therefore, you might not see a change over a four-month period. Kearny Drum Dump #3--

ASSEMBLYMAN BENNETT: But wouldn't you spend money?

DEPUTY COMMISSIONER CATANIA: Not necessarily.

MR. FARRO: I could go out and sample, say, in January, and the next sampling might not occur until April or May, but the bills won't come in until June. So, I mean, there is a six-month period right there. So, if I do work in January, the analysis does not come in until March--

ASSEMBLYMAN BENNETT: Okay.

MR. FARRO: --so there are six months open right there. At one of the sights, Kearny Drum Dump #3, we are having an access problem. We have been trying to work on that for six or seven months now. So, again, it is a lot of the accounting type issues. At Chemical Control, the gas cylinders-- We are still struggling with that. Hopefully, EPA has an answer to that, and we are going to be going out with that in the next couple of months.

A lot of them are not just financial issues; it is more access, you know, and getting rid of material. We have one site up in Somerville where we have been trying to get rid of material for a year and a half. It is almost impossible. There is no place to take it.

ASSEMBLYMAN BENNETT: The problem is -- and I am sure you get asked the questions, maybe not as frequently as we do, but with respect to some of these-- When we, as legislators, say we have worked and gotten moneys available to do a project, or a cleanup, and the Department then has money and we have done specific authorizations, and there continues to be a problem so that a cleanup cannot be pursued, it becomes difficult to answer that question unless we know the answer. That is kind of what I am trying to raise to you.

If someone says, "I thought you did these appropriations," or "You did this authorization for certain moneys, and it is now nine months later. What has happened?" and we don't know that you have an access problem on a particular site, then we are unable to answer the question, and we have to turn to you to find that out. What I have been trying to get to with these status reports is that the questions become minimal and we can move along together as we do this progress.

DEPUTY COMMISSIONER CATANIA: Assemblyman, that is one of the reasons we prepared this. With any chart you prepare, there is a limit as to how much information you can put on it--

ASSEMBLYMAN BENNETT: I agree.

DEPUTY COMMISSIONER CATANIA: --even if you code it, or whatever. That is why the site descriptions here are probably more helpful, because they give you a narrative on any problems we have been encountering on that site.

ASSISTANT COMMISSIONER GASTON: John, pages 7 through, I don't know, 13 or 14 -- 13 -- in the Manila report, describe generic type problems we are dealing with. We should have -- if we didn't -- listed the POTW problem, the land ban problem, the off-site problem -- the things that are sticking us and causing more than one of the projects-- Do you have that page?

ASSEMBLYMAN BENNETT: Thirteen?

ASSISTANT COMMISSIONER GASTON: Seven through 13.

ASSEMBLYMAN BENNETT: Okay, yes.

ASSISTANT COMMISSIONER GASTON: Describing the issues affecting the cleanup program. Some of them we have discussed today, you know, in a little bit different terms, but the funding delays, when we wrote the report, were important.

ASSEMBLYMAN BENNETT: That's Ocean County.

ASSISTANT COMMISSIONER GASTON: The funding delays-- The final SCF had not been put out at that time; now we know we are going to get \$83 million.

DEPUTY COMMISSIONER CATANIA: One of the things I think might be helpful in our next reporting to you is if we identify in the site descriptions-- Maybe we can include a couple of pages on the types of problems, and then indicate which sites are experiencing those types of problems, so you will have some explanation of why there is money at a particular site and the work has not progressed as far as you might have expected. Would that be helpful if we were to do the next report that way?

ASSEMBLYMAN BENNETT: Yes.

ASSISTANT COMMISSIONER GASTON: We are going to do the big site description report.

ASSEMBLYMAN BENNETT: I know; I understand that.

ASSISTANT COMMISSIONER GASTON: For the fall.

ASSEMBLYMAN BENNETT: I understand that.

ASSISTANT COMMISSIONER GASTON: Everybody knows we are going to do it in the fall, including the people who have to input to it. I am sure we can add more in terms of the stickler issues that exist that would be helpful to you, and it would be helpful to us.

ASSEMBLYMAN BENNETT: As we go through them, I think what we are both doing is seeing what is more helpful to both of us, so we can get to the goal we want, so we do, or are able to help.

I've got to move along quickly here. On Table 5, there were some projects that were not listed in either July or December reports with the EPA lead. Is that because it is an EPA lead agency? Is that why we wouldn't be having-- Then, of course, the question was the authorization numbers, however, were General Fund moneys. We didn't spend any, but those are the authorization numbers.

DEPUTY COMMISSIONER CATANIA: Are you talking about Bog Creek, Bros, and Burnt Fly Bog?

ASSEMBLYMAN BENNETT: Yes. Well, Burnt Fly Bog is not an EPA lead. It is just that that particular authorization number wasn't listed in July or December.

MR. FARRO: But we claimed work had started. Is that what you're saying?

ASSEMBLYMAN BENNETT: No, no. It was just listed, and there wasn't anything with it. No, you didn't claim-- There is no money.

DEPUTY COMMISSIONER CATANIA: I am not sure I understand the question.

ASSEMBLYMAN BENNETT: You listed the project, and it has an authorization number, but it doesn't have any money. So, obviously, there wouldn't be anything being done. The

question is -- on Bog Creek and Bros Tank -- since there aren't any authorized funds, is that because they are both EPA leads? If so, why is the authorization number for State funds? I mean, that is basically-- (brief dicussion among witnesses)

You can give me that-- You don't have to give me that today.

There were certain projects which appeared. Now, not the site names necessarily. You have to deal with the authorization number -- okay? -- because-- They were projects that appeared on the December, 1986 update from the Department, but they are not on the July, 1986 status report. So, the questions are, were there new entries, and has either money been spent or not been spent? Some of them-- We even have asterisks on the ones that are Superfund sites, and, of course, the three Superfund sites don't have any moneys authorized for those particular projects. The question is, why haven't we been able to allocate any of our resources to those particular projects? Again, you have to go back and look at what the individual projects are, in order to be able to answer that.

With respect to the Imperial Oil site in Marlboro Township, which is a Superfund site-- Fortunately, we have a very aggressive county prosecutor who has brought in indictments -- 22 counts -- with respect to that company, which has been in violation of a consent order since 1981 -- with the Department that was concerned-- We recently had a seminar down in--

DEPUTY COMMISSIONER CATANIA: The investigation was with the Department, sir.

ASSEMBLYMAN BENNETT: Yeah, I know, but the indictment came from the county, not the State. We were in Washington, and found out that under the new-- Which law was it that allowed the Governor to recommend that you be taken off a bid list? (consults with aide) A criminal violation can result in removal from a bidding list. Now, Assemblyman Singer and

myself have that bill pending before the Senate -- the full Senate -- for a vote now. However, I did not realize that there was already a Federal law that either the Federal agency can remove -- or blacklist -- one in violation, or the Governor of the state where the violation occurs may make a recommendation for removal.

I would like to ask the Department to join in my request to this Governor that Imperial Oil, which makes 75% of their contracts with the Department of Defense-- I would like you to look into the possibility of seeing if that recommendation can't be made to the Governor until this company brings itself into compliance, that they should not profit from taxpayers' dollars while they continue to pollute the environment, which is going to result in taxpayers' dollars being utilized to do a cleanup.

DEPUTY COMMISSIONER CATANIA: We would be more than happy to look into that. That sounds like something we should explore.

ASSEMBLYMAN BENNETT: It is under the new Clean Water Act that that is allowed to take place.

DEPUTY COMMISSIONER CATANIA: Does it have a threshold for indictment, or what could trigger the Department?

ASSEMBLYMAN BENNETT: Really, it has nothing to do with you; it has to be the Governor. But, obviously, the Governor is going to take a recommendation. So, if you will look into that, I will certainly appreciate it.

DEPUTY COMMISSIONER CATANIA: We would be happy to.

MR. FARRO: Can we contact you for the details?

ASSEMBLYMAN BENNETT: Commencement of action.

MR. SMITH (Committee Aide): All they have to do is commence action.

DEPUTY COMMISSIONER CATANIA: All right. As you know, we have supported those bills very strongly. We think it is very important to get that tool -- that hammer.

ASSEMBLYMAN BENNETT: That tool which hopefully we are going to be giving to the Department will only deal with State contracts. This is the Department of Defense -- Federal -- so I didn't think we had any authority until I recently learned about these changes. It might be that we could make a recommendation together to the Governor, in order to see to it that those steps would be taken.

Table 6 says what happens to the balance of the authorized funds which were not expended. Again, you will be able to give us that information, I think.

DEPUTY COMMISSIONER CATANIA: Yes.

ASSEMBLYMAN BENNETT: More importantly, though, I would like you to look this over and perhaps-- With Radon and Wheeler -- those two sites -- you have an authorization amount in July and how much was spent as of July. That is clear. But then when you come back to December -- come up to December -- the authorized amount is different than what it was in July. The spent amount on Radon stayed the same, but on Wheeler the authorized amount became the amount that had been expended, but then they expended more. It may be a bookkeeping error, it may be an accounting error, or maybe a typo, or maybe I don't know what I am reading. But, in any case, pick one of those, and hopefully you can get back and see if that would be the case.

I don't know if this is done with audits or not, and I think at this point we are just trying to streamline and get it a little bit better. There are some additional questions, all under that Table 6, which perhaps we can get the answers to.

Table 7 says that more moneys were expended for certain site cleanups than had originally been authorized -- which is what you talked about -- and that we have the amounts that are in excess. Do we, at some point in time, redo the authorized amount?

DEPUTY COMMISSIONER CATANIA: Yes.

ASSEMBLYMAN BENNETT: Okay. That is because of change work orders, as you set forth?

DEPUTY COMMISSIONER CATANIA: Yes.

ASSEMBLYMAN BENNETT: Okay. Well, there is rather a substantial list on there. Hopefully, some of those questions we will be able to deal with. If we can't, just tell me why we can't, and maybe we will be able to understand that.

In this year's budget, as presented by the Governor to the Legislature, on page F-21 there is a footnote that is of concern to me -- and I understand it has been raised by the Appropriations Committee -- since this Committee spent quite some time dealing with the funding for cleanup sites in this State. A footnote under capital construction says: "Inclusive of the recommendations to the Department of Corrections and the Department of Transportation for the Transportation Trust Fund, shall first be charged to revenue anticipated from the windfall profits under corporation business tax collections." And, "The expenditures" -- and this is underneath all the capital expenditures -- "shall be subject to the approval of the Director of the Division of Budget and Accounting."

Now, what I am concerned with is, what does that mean to the \$40 million we have been talking about for capital construction and capital cleanup projects in this State over the next five years, and in particular, the \$40 million for next year?

DEPUTY COMMISSIONER CATANIA: Assemblyman, I am familiar with that footnote and with this issue. This came up in the Assembly Appropriations Committee. I believe it was Assemblyman Smith who asked us the same question. That language was put in there by the Office of Management and Budget, I think, to protect against the possibility that the receipts they would get under what we are calling the "windfall tax" would not equal the projections, and so that the Director of OMB would retain some control over whether or not there was money available in those accounts to take the \$40 million from.

Since that time, I think the receipts are ahead of the projections, so the problem has been mooted. We took the position that-- We were concerned about the same thing you were, too, that if they didn't get the money from the corporate tax, were we still going to have that money in our capital account? Was it going to have to come back for any other kinds of approvals? Was it going to come out of the General Fund? What if there was no money in the General Fund? Did the appropriations language really mean anything with that footnote in it?

We have been assured by Owen Bate that the money is going to be in our account. Since that time, the receipts have been ahead of schedule, so I think the footnote will never be triggered.

ASSEMBLYMAN BENNETT: Well, then, have you recommended that the footnote be deleted?

DEPUTY COMMISSIONER CATANIA: We have questioned whether there was a need for the footnote. They said they wanted to make sure they could track the money coming in. They assured us that the money would come either from the General Fund or from the corporate tax, and that there was no cause to be concerned.

ASSEMBLYMAN BENNETT: See, I was under the impression, quite frankly, that that windfall profit had nothing to actually specifically do with the changes in the corporate tax, but rather dealt with the -- I think it was the Exxon case, and that lawsuit under the windfall profits tax, as far as different than this. That is what I was under the impression it was. My concern-- I have discussed this with Assemblyman Villane as to whether or not it would be appropriate to have that footnote in at all. That would be my feeling.

On the Spill Fund, is it anticipated, in 1988, dealing with another part of the cleanup program-- We have talked about enforcement; we have talked about our \$40 million. On

the Spill Fund, are there projections that with the increased tax we have added on-- I am not a budget expert, but could someone tell me exactly what we are projecting in revenues for 1988 under the Spill Fund? Does that match the figures we had anticipated at the time we did the hazardous waste cleanup package? If you don't know now, that's fine. I will accept that information later. But, I would like us to be certain that we are projecting-- We are off on enforcement, as we know. We are ahead on our Federal dollars for this year. I am concerned about the \$40 million, and I don't want to be concerned about the Spill Fund.

DEPUTY COMMISSIONER CATANIA: But, other than that, we are in great financial shape, is what you're saying.

ASSEMBLYMAN BENNETT: Yeah. Well, there's nothing left.

DEPUTY COMMISSIONER CATANIA: At this point, I think we are relatively comfortable with the Spill Fund dollars that will come in. We will check that and confirm that with you in writing.

There is something I would ask you to remain aware of. There is on remand back to our State Supreme Court, Exxon vs. Hunt. The issue of potential liability to make refunds for that period of time that certain uses were preempted has not been resolved. The State has made its oral arguments. We are awaiting a decision back again from our Supreme Court whether or not we have any liability for retroactive refunds.

ASSEMBLYMAN BENNETT: Well, I hope we are not going to put ourselves in the position that we are going to wait another five years. I mean, we have won five times in court, I think.

DEPUTY COMMISSIONER CATANIA: That's true. We have taken the position that we relied, in good-faith, on a stream of State court decisions, and that there should be no retroactive payments made. I am relatively comfortable that that argument will be adopted by our State Supreme Court, but

until we see it in writing, we can't give you any guarantee of that. That would be one--

ASSEMBLYMAN BENNETT: No, but I think it would be incumbent upon you to operate within the law as the law is.

DEPUTY COMMISSIONER CATANIA: And that is what we believe we did.

ASSEMBLYMAN BENNETT: Speculation is not how we operate government, but we operate under the law. And until the law is changed, we will continue to do what the lawmakers of the State have adopted as policy and promulgated as policy. I would not-- I am afraid that in the past -- and I am not taking shots at any people in particular -- but in the past there perhaps has been a reluctance of some expenditures, based on speculation as to what a court order could be. I have always been troubled by that, and will continue to be troubled by that type of action. So, I would hope that we are not going to fall into that again.

DEPUTY COMMISSIONER CATANIA: No. That is not going to be a part of the expenditure situation in the next coming year. There may be a possible liability, so that would affect the amount we would have in the Spill Fund.

ASSEMBLYMAN BENNETT: I understand.

DEPUTY COMMISSIONER CATANIA: What would really happen in that case would be that the State would likely have to transfer money from the remaining balance in the capital account that came out of the FY '86 budget surplus, to cover any expenditures the court tells us were inappropriately made from the Spill Compensation Fund. Certainly, we hope that that does not happen. I think sometime in the fall we should know that for sure.

ASSEMBLYMAN BENNETT: I have received from you -- or actually from Commissioner Dewling -- a letter dated April 15, with respect to the waste management practices presently being conducted at the military installations in the State of New

Jersey. Some of those military installations have, in fact, been listed as Superfund sites. I think one of the issues which has consistently been a source of debate among Federal agencies and State environmental agencies, has been the issue as to which agency has the jurisdiction to enforce environmental compliance on Federally owned facilities. The issue has recently been the subject of a hearing of the Environmental Committee in the House of Representatives, chaired by Congressman Dingell, and states like Minnesota, Ohio, and Washington -- in front of the Congressmen -- expressed, in the strongest terms possible, their concern that EPA oversight over Federal facility cleanup with state opportunities to consult and participate, are not adequate.

I believe the argument that the Department of Justice is making with respect to the enforcement of environmental laws at Federal facilities relies on the theory of unitary executive, which means, essentially, that the Federal government is not going to sue itself. The EPA can't sue the Department of Defense or any of the service agencies for failure to clean up discharges at military facilities, because they are one and the same person, as expressed in the Constitution.

Following this theory, Justice argues that Federal facilities will not clean up a discharge under a consent order, because to do so would imply that one agency of the Federal government had the ability to order another to do something. Rather, the way to expedite the cleanup is to enter into an Interagency Agreement. Justice does, however, suggest that these agreements contain citizen suit provisions which would allow citizens of the nation to go to court to compel the Federal government to carry out its responsibilities under the law. I believe it is interesting to note that under SARA, for the purposes of definition, a state is, and meets, the definition of citizen.

So, I believe we certainly have the rights now to be raising these issues, because only in that capacity-- Obviously, it is not an issue that is being raised uniquely to the State of New Jersey, but rather one that is being raised on the national level.

Does the Department have any supervisory role with respect to the remedial investigation feasibility studies? I don't know the answer to that question, so I think what we need to do is perhaps get an overview as to what the Department's feelings are with respect to-- You have given us status reports on each of those facilities. I think we need to see what questions, if any, may arise as a result of that discussion.

DEPUTY COMMISSIONER CATANIA: Let me just give you some general comments, and then we will get a little more specific.

As you know, for both of us this has been a frustrating issue in terms of a state trying to deal with the Federal government and with Federal facilities, particularly when you are dealing with the military and you get into areas such as national security, and things like that. We have been aware of some problems at the Federal facilities for quite some time now. We have had a number of meetings with the different agencies within the Department of Defense, and with EPA about them, and it has not yet been satisfactorily resolved.

We have taken a look legally at some of the tools the State has to deal with that, and it falls into a couple of different categories. We have gotten advice from the Attorney General's office. I have not yet received the signed opinion that you and I have discussed on a number of occasions. I guess if I could describe it in brief, it is that the State faces a problem because, absent some specific waiver of sovereign immunity by the Federal government through the enactment of a very specific law providing the states with

jurisdiction either to regulate or to sue the Federal government, the State is really powerless. It is very much the same position that municipalities find themselves in with respect to the State, when we preempt an area or when we have not waived sovereign immunity under the State Tort Claims Act. It is really the same position the State occupies vis-a-vis the Federal government.

So, for example, what that means is, for the permit programs we run on behalf of the Federal government -- whether it is the NJDPES program or the RCRA program or the Air Pollution Control Program -- we regulate Federal facilities as we do private facilities. In that case, when we set parameters within those permits, we clearly, under the statutes that Congress has enacted, have the right to enforce those, as permit conditions.

The difference between private parties and the Federal government, however, is that while the Federal government has waived its immunity from regulation in that respect, they have not waived their immunity for penalties, and things like that. So, in some cases, our relief is to seek injunctive relief to enforce a permit condition. The case law suggests that the conditions we can enforce in that manner have to do with substantive standards; in other words, how many parts per billion of a particular pollutant can be in a discharge, and things of that nature. There are some very specific requirements, rather than policy requirements. It varies from law to law whether or not Congress says waive sovereign immunity. We will shortly be getting, and sharing with you, the Attorney General's opinion that goes through a multitude of Federal statutes under which we have some parallel regulatory programs here in New Jersey.

So, it is a complicated question when somebody says, "Do you have jurisdiction over Federal facilities?" The real answer is, in some cases we do through a permit program, which

Congress has specifically directed that Federal facilities comply with, which has now been delegated down to the State level, or if Congress has specifically directed that Federal facilities comply with State regulatory programs.

With respect to things like hazardous waste problems, we find ourselves in a, I guess, worse situation to deal with it, particularly because under the new RCRA amendments, the State has not received final authorization and final delegation under that. So, in terms of RCRA corrective action, which would be a potential handle for that, we are not yet in a position to treat them the same as we would other RCRA-regulated facilities.

Under the SARA amendments, it gets even more complicated still, because the State is a partner, albeit a somewhat silent partner, in a program that Congress has directed that EPA undertake, where basically they will go out and do an assessment of the nature of CERCLA type problems at Federal facilities. The State gets to be involved in those studies; the State gets to commend on them; the State gets to play an oversight role. But the original verb you used earlier -- does the State supervise these cleanups? -- no, the State does not supervise these cleanups. EPA supervises these cleanups, and you run into the problem of one Federal agency regulating another Federal agency, as you mentioned earlier.

The State's real role here is to screen, to be perfectly honest; is to use the tools we have to regulate the units within those Federal facilities that have to get our permits; to try and coerce and cajole the Federal government into doing what we all believe is the right thing. But, in terms of specific legal rights and regulatory programs, we are in a much different situation than we are with private parties. We have phenomenal legal control over private parties in New Jersey, who engage in the same types of practices. We have a much lesser handle over Federal facilities that do the same types of things and can cause the same types of problems.

We are not sure how the SARA amendments are going to work in terms of how this partnership between EPA and the states is really going to work out. We have some idea of the scope of the problem at some of the facilities. We need more data on some of the other facilities, and we need to make sure that the Federal government commits itself to a schedule to fully identify the scope of the problem and to remediate the problem. We are going to have to work with you on that, almost on a case-by-case basis, as we kind of pick and choose and see what strategy is the best. But we do not have the ability just to say, "We can order the Federal government to do that." In some cases we can go to court and try to enforce a particular permit standard. In some cases we can go to court -- as Assemblyman Bennett suggested -- to try to enforce some of the new statutory provisions, much like a citizen would, to make the Federal facility comply with Federal and State law. We are really going to have to look at it on a case-by-case basis.

We can get into some of the specific facilities if you like, but those are the general comments I wanted to really try to open with. I would also like to add that we share the sense of frustration that you have over not being able to just sit down as we would with any other responsible party and issue them a directive, or just move in and take the place of the Federal government. That is not the nature of the game, unfortunately, with Federal facilities. For those of you who have dealt with Federal facilities in your district, you know it is a different kind of animal. But, we do want to work with you and try to come up with a strategy that will help us to really learn the nature of the problem we are dealing with here, prioritize it in terms of the other environmental problems we are dealing with, and get on with the work that needs to be done to clean it up.

So, why don't I stop at this point, and we can get specific, or answer questions, whatever your preference is.

ASSEMBLYMAN BENNETT: I am not raising this question, nor am I starting on a journey that is going to mean a magnitude of work and research for this Committee and its staff, because a particular Federal facility located in my district has decided they feel they are above the law. That is not the reason or the purpose.

DEPUTY COMMISSIONER CATANIA: I understand that.

ASSEMBLYMAN BENNETT: Okay. In fact, a year ago there was the conclusion of an investigation which discovered there were some significant problems at some of our Federal installations. As a result of that, there were statements by EPA and DEP and by the Federal government that there would be an attempt at a greater spirit of cooperation and an exchange of information. We have the SARA amendments and an interim to encourage this partnership, which may, in fact, diminish certain specific controls over those exact facilities, but certainly does nothing to hurt RCRA or the obvious authorities in certain areas.

What I want to do at this point is to start to see if, in fact, those promises and assurances that were given over a year ago and better communication are happening. To that end, in January this Committee wrote to every one of the Federal facilities located within the State of New Jersey; we wrote to Region II, Chris Daggett; and we wrote to the Commissioner, for an updating of the status. We have received the reply of the EPA and the DEP, and many -- I am not sure if all -- but most of the Federal facilities have responded with an updating of their reports.

However, I think the reports, in and of themselves-- Of course, the Committee members have some idea as to the volumes, because each one of these packages -- which are this thick (demonstrates) -- contains that information that has been received to date. But, when you cut all through it, when you get through all of that information, I believe, at the very least, there is a genuine showing that there is still a problem.

For instance, on the BOMARC missile site, the Air Force won't even let EPA, let alone DEP, see the test results of the monitoring wells -- the six monitoring wells -- around the BOMARC facility, until February, 1988. That is in the information you gave me. To me, that does not speak very highly of a cooperative effort to determine what the problems are.

When does the Department have access to the documents and the results of any studies conducted by the military? Upon final review by base personnel, or, in fact, in many cases, is it longer than after the base personnel review it?

DEPUTY COMMISSIONER CATANIA: In many cases, it is longer than that. The real answer is, when the military decides it is appropriate to share it. That is when the State gets it.

ASSEMBLYMAN BENNETT: I would view that that could be-- For instance, the data from the monitoring well samples. The longer the period of time from when they are sampled until you are able to determine their assessment, or what remedial actions you are supposed to be a partner in, becomes increasingly difficult with that passage of time. How can you, as a Department, comment on the results of these tests in order to give input on remedial action if there is a longer than normal period of time? How do you become a party to the Interagency Agreements with respect to any military facility in the State, or have you become one yet? Have you become a part to any Interagency Agreement to date?

DEPUTY COMMISSIONER CATANIA: We have a consent order with Fort Dix concerning the landfill at Fort Dix. To my knowledge, that is the only--

ASSEMBLYMAN BENNETT: Okay. But there you have monitoring test results, I think, given to you.

DEPUTY COMMISSIONER CATANIA: Yes.

ASSEMBLYMAN BENNETT: Which you have given to me. That would be the only example? (no response)

ASSEMBLYMAN SHINN: Mr. Chairman?

ASSEMBLYMAN BENNETT: Yes.

ASSEMBLYMAN SHINN: While you are on Fort Dix, I would like to comment. One of the positive things-- We don't have that much positive information in our overall efforts, but I think the Fort Dix discussion points up one thing that really resulted in a lot of cooperation and a very positive result.

Fort Dix, initially, when their landfill problems came in for an expansion, essentially took the early position that this was part of their defense mission and they could do this whether we were involved or not. With some local pressure, and with some cooperation from the Department, and a lot of help from General Kelly, ultimately we got them off that scenario, and more into the scenario, "If you can't drink the water, why win the war?" That resulted, I guess, in the State's first major trash-to-steam plant. They got money from the Pentagon to build it. They signed a consent order for closure of the landfill. They still have monthly meetings with a group that involves the Department, the county, and the military base.

So now they have gone from a waste generator to an energy generator, and have gotten, I know, their fuel tanks out of the ground, in a very positive effort, across-the-board, I feel. So, there are some -- with a lot of cooperation both at the local level and the State level -- success stories out there, but it has to be a coordinated effort, with some pressure involved in the process.

I think that was a good story that really resulted in positive conclusions.

DEPUTY COMMISSIONER CATANIA: Would that that could be the model for all of our relations with the Federal government on these facilities. That was a very cooperative effort, and a very successful effort. But, again, as the Army's lawyers would be quick to point out, that was not something that the Army had to do. It was an Administrative Consent Order in the

true sense of the word. They consented to work with us and to follow the State procedures and to enter into an agreement with us.

ASSEMBLYMAN SHINN: Right.

ASSISTANT COMMISSIONER GASTON: Yeah. The general principle is that on a facility specific, and really a commander specific basis, we have better or worse relationships. That is the predominant variable as you move from facility to facility.

ASSEMBLYMAN SHINN: I think the bases just overall, particularly today, are becoming less of an isolated situation, and more of a community-involved situation. By virtue of that, in some cases, are dependent on outside landfills, some which are in the county's domain, for either ash disposal or backup for their resource recovery facility. So, there is becoming more of an interdependency in waste disposal overall. I think, as we are seeing with Fort Dix, much more of an open dialogue in their activities. That is the type of relationship, I think, that we have to spread, particularly with its close neighbor.

ASSEMBLYMAN BENNETT: I agree with the Assemblyman. When you look at the facilities, obviously with respect to Fort Dix, there has been a very large effort made. Unfortunately, with their next-door neighbor, McGuire, I don't think we have the same esprit de corps. In fact, I believe there were some tests done -- samplings done -- at McGuire in February and March of this year. Do you have the results that were given to you for the February and March testings?

DEPUTY COMMISSIONER CATANIA: I am not aware that we have those.

ASSEMBLYMAN BENNETT: Do you know if those results were referred to the Assurance Quality Control? Is that why they haven't given them to you yet, or are they just not going to give them to you?

DEPUTY COMMISSIONER CATANIA: I would have to check on those specific results.

ASSEMBLYMAN BENNETT: Okay. Your status report indicated that in June, 1986, the radioactive contamination was confined to near-surface soils, and that monitoring wells were installed in December of '86. We don't have the results of any of those samples either.

DEPUTY COMMISSIONER CATANIA: My understanding is that we do not.

ASSEMBLYMAN BENNETT: Okay. The reason is -- why?

DEPUTY COMMISSIONER CATANIA: What reason have they given for refusing to turn over the-- (witness consults with his colleagues at the witness table)

ASSEMBLYMAN BENNETT: I know this is a little hard. That's okay.

DEPUTY COMMISSIONER CATANIA: They have not yet released them to us. I am not sure of the particular reason they have given us.

ASSEMBLYMAN BENNETT: Okay. Your report indicated that Stage Two, Phase Two work was conducted without consideration of any comments by DEP. What action do you believe we, as a State, can take to assure that the provisions of SARA are upheld?

DEPUTY COMMISSIONER CATANIA: I think the main way we can do that is by working through EPA at this point, particularly through the region.

ASSEMBLYMAN BENNETT: Chris Daggett is scheduled to appear here with his staff on the twenty-first, I believe, when we will go into the next stage. What I am trying to do at this meeting -- the initial one -- is learn where the Department feels there are specific problems, and where the Department feels those problems exist, how we can best address ourselves to them. I think that is kind of the initial groundwork I am trying to lay here.

DEPUTY COMMISSIONER CATANIA: I think the answer to substituting for that cooperation where it doesn't exist and getting the information so that the State is aware of the problem and makes sure that the Federal facility takes remedial action, is to work through the Region, but also through the congressional delegation. We are dealing with a sovereign here. We are the subject, not the sovereign, so we have to deal with people who occupy a different place, vis-a-vis the Federal facility. I think our congressional delegation can be helpful there.

ASSEMBLYMAN BENNETT: Do you anticipate that McGuire will be recommended for inclusion on the NPL list?

ASSISTANT COMMISSIONER GASTON: To answer your question generally, and the way in which we intend to use the NPL, is to pick things that we can't control, or we don't have the finances to deal with, and recommend them for nominating. So, given what we have said about the Federal facilities here, any Federal facility that we have a problem with would be a primary candidate for the NPL, because it puts them in a position to deal with another tool that the government has put in place, to positively remedy environmental problems. So, the answer is yes on the general; I am not sure about the specific.

ASSEMBLYMAN BENNETT: My only problem is, my understanding is that in order to be qualified and become listed on the NPL list-- One of the factors is the potential threat, or real threat, to groundwater contamination. Different sites are reviewed, and recommendations are made for inclusion based on a point-scoring category. If you don't have the information, how is that done? The Department then would not be making that recommendation.

DEPUTY COMMISSIONER CATANIA: No, that would be an EPA recommendation, hopefully with the involvement and consent of the State. The hazard ranking system you are talking about--

ASSEMBLYMAN BENNETT: Yes?

DEPUTY COMMISSIONER CATANIA: --looks at a number of things. It is heavily weighted toward groundwater contamination; it is heavily weighted toward people exposure.

ASSEMBLYMAN BENNETT: Correct.

DEPUTY COMMISSIONER CATANIA: So, in some of these cases you are not going to score heavily because the areas of the base are somewhat isolated in terms of the people exposure points that are given in that ranking system. The groundwater contamination issue could be somewhat different. We have some serious groundwater contamination concerns. EPA, under SARA, would be performing those assessments. They have a deadline, I think, of April, 1988 to do the assessments and find out which sites should be considered for inclusion on the NPL. We are supposed to be involved in that process, but to be honest, we are not sure how that process is going to work, and EPA has the lead on it. We are not the horse here; we are the cart that is kind of coming along with EPA and being involved, hopefully, in those studies they are doing.

ASSEMBLYMAN BENNETT: Unfortunately, I have almost the feeling that we are the little guy who comes along after the horse has passed, and just kind of cleans up afterwards. I don't even think we make the cart at this point. I am not faulting you. I think that by the very nature of how the cooperation is, we are almost being ignored. I don't think that we, as a State, should be ignored, particularly because of -- in so many of these areas around the Federal facilities -- the high reliance on the groundwater. Most of your county is even that way, isn't it, or around in that area -- groundwater usage as opposed to city water?

ASSEMBLYMAN SHINN: Say about 90/10. Well, groundwater PRM--

ASSEMBLYMAN BENNETT: Right.

ASSEMBLYMAN SHINN: --included, and a little surface water. But, it is 90% groundwater dependent.

ASSEMBLYMAN BENNETT: I am not saying that is the fault of the Department, but I think why do we, as a State, have to continue to--

DEPUTY COMMISSIONER CATANIA: We agree. Clearly, this situation is not an acceptable way of getting this problem resolved. Hopefully, the SARA amendments will make some difference in that. We don't know that yet. We have to work out that new relationship with EPA. But the way things are going now, we don't have a good enough handle to come here and assure you that the problem is being taken care of.

ASSEMBLYMAN BENNETT: If you receive this data-- I believe with one of the other facilities we were given only June '86 data. Now, there is no earlier data, and there is no later data. So, my understanding is that one set of tests by itself gives you no marker to be able to determine if it is getting better, worse--

DEPUTY COMMISSIONER CATANIA: Or if it is moving.

ASSEMBLYMAN BENNETT: Or if it is moving. Now, when you get data that is so old, can you utilize it to be able to give a response?

DEPUTY COMMISSIONER CATANIA: There are some obvious constraints. If the data is stale, it is difficult to make any kind of intelligent judgments. You would really like to see some periodic data, so you could compare the differences in the results, particularly if you are dealing with groundwater contamination, so you will know that if you are going to design some kind of a remedy, the problem is still going to be there when the remedy is being built.

ASSEMBLYMAN BENNETT: In the series of documents you gave us on Fort Monmouth, you said that EPA indicated they would be receiving a report during the week of March 2, 1987, which would indicate the action the Army would be taking. Do you know if, in fact, EPA received that report, and if so, was it referred to you?

DEPUTY COMMISSIONER CATANIA: It was received. We just received a copy as well, and we are reviewing it.

ASSEMBLYMAN BENNETT: What actions did the Army indicate they would be taking?

DEPUTY COMMISSIONER CATANIA: Assemblyman, none of us here have read the report. It is being reviewed by staff now.

ASSEMBLYMAN BENNETT: Could we have that information available before the twenty-first?

DEPUTY COMMISSIONER CATANIA: Yes, we will be happy to make that available to you.

ASSEMBLYMAN BENNETT: Okay. EPA indicated that five of the sites on the radioactive contamination list-- Four of them have been completely decontaminated, and the last -- the neutron generating facility -- has been released by the NRC for unrestricted use, and has been transferred to the United States Department of the Interior for management as part of the Gateway National Park. Are you satisfied, as the Department, that all of the radioactive sites at the facility have been cleaned up, and that there is no radioactivity contaminated sites in existence at Fort Monmouth?

DEPUTY COMMISSIONER CATANIA: Assemblyman, I am not sure that we have seen the data on which that judgment is based.

ASSEMBLYMAN BENNETT: So, then, the answer is that you are not satisfied, at the present time, that that is, in fact, true, short of having the information available to you.

DEPUTY COMMISSIONER CATANIA: Probably that is addressed in the report we have just recently received. I would have to check on whether or not we feel that report adequately explains the situation, before I could tell you whether we concur on the recommendation.

ASSEMBLYMAN BENNETT: Okay. Again, would that report from Fort Monmouth also give us any indication whether or not there will be a recommendation for inclusion on the NPL list?

DEPUTY COMMISSIONER CATANIA: Let me beg your indulgence, and let us get back to you on that.

ASSEMBLYMAN BENNETT: I understand.

DEPUTY COMMISSIONER CATANIA: Nobody here has read the report, so, I mean--

ASSEMBLYMAN BENNETT: Fair enough. On the twenty-first, we have also asked Fort Monmouth, which has at least been responsive to the degree that they are also willing to come to participate--

DEPUTY COMMISSIONER CATANIA: Well, they sent the report.

ASSEMBLYMAN BENNETT: And they have sent the report that they said they would send. Hopefully, we are going to have them on the twenty-first also. Is that correct?

MR. SMITH: I don't know yet.

ASSEMBLYMAN BENNETT: We are going to try, or they are going to be one of the first ones. So, if we can shoot for the twenty-first and get that reviewed, that would be excellent.

With respect to the Raritan facility-- There was an indication that two of the buildings located there were contaminated -- were radioactive. I am wondering what the status is, if you have that information with you. If you don't, will you also please give me that by the twenty-first?

DEPUTY COMMISSIONER CATANIA: We do have some information on the--

ASSEMBLYMAN BENNETT: The Raritan Arsenal.

ASSISTANT COMMISSIONER GASTON: We participated in the review of the information, and sent comments in to EPA. We have not gotten responses back to our comments concerning the review of the information that was available to us.

ASSEMBLYMAN BENNETT: Approximately when were your comments forwarded to EPA -- approximately?

ASSISTANT COMMISSIONER GASTON: Around October 3.

ASSEMBLYMAN BENNETT: Oh, it's still in the same year then?

ASSISTANT COMMISSIONER GASTON: October '86.

ASSEMBLYMAN BENNETT: October of '86, and you are waiting for a response back.

DEPUTY COMMISSIONER CATANIA: Right. This is a little different situation because EPA, as you know, has its offices there. So, EPA has a slightly higher visibility. The old Raritan Arsenal is now, I think, jointly in the possession among the Federal agencies that remain there, between GSA and EPA. The remainder is in private hands as the Raritan Center.

ASSISTANT COMMISSIONER GASTON: So, we had the radiological survey. We shared our comments with EPA. Later on, we got a scope of work to investigate certain other portions of the facility. We sent comments in in November, and haven't heard from EPA. I'm sorry, we sent comments to the Army, and haven't heard from the Army.

ASSEMBLYMAN BENNETT: What I would like, if you could make it available-- On your request that went to EPA, can you make the date of that reply available? I believe this came up at the hearings in 1985. I believe that at that time it was brought to Chris Daggett's attention. Notwithstanding that you subsequently asked for an inquiry, but it was brought to his attention in October '85. So, about a year before you wrote the letter, he became aware of it. If it still remains that you don't have the information, I would like very much to know that before the twenty-first when he is expected to come, because I am sure he was aware of it back in October of '85, and what the status of it was.

DEPUTY COMMISSIONER CATANIA: Right. We will make sure that we get back to you before the twenty-first on that.

ASSEMBLYMAN BENNETT: So, with Fort Monmouth, I will defer until after the opportunity has come to be able to review that report.

On your report on the Earle Naval Weapons Station at Colts Neck, the second sampling that was to be done of the stream-- You had a sampling done of the stream which indicated an elevated chlorobenzene level, and that was going to be redone with a second sampling. Has that been done? If so, what are the results?

DEPUTY COMMISSIONER CATANIA: It has not yet been done.

ASSEMBLYMAN BENNETT: Do you have a schedule for it to be done?

DEPUTY COMMISSIONER CATANIA: Not that we are aware of.

ASSEMBLYMAN BENNETT: When was the first sampling done?

DEPUTY COMMISSIONER CATANIA: We will have to check that. We will get that information to you.

ASSEMBLYMAN BENNETT: Okay. Could I know why the second one hasn't been done?

DEPUTY COMMISSIONER CATANIA: If we know why, you can know why. I promise you.

ASSEMBLYMAN BENNETT: I understand that. It is my understanding that you do the samples. That is why I am a little confused on this one. It says: "Delays in resampling of the stream by DEP were due to--"

DEPUTY COMMISSIONER CATANIA: Is this the off-site sampling you are talking about? We are not sampling on the base.

ASSEMBLYMAN BENNETT: Then I am misreading your statement, in any event. I'm sorry. I thought you were, but if you're not-- I thought you were doing the stream, but if you're not, I still want to know who is. If there was a problem in it when the first test was done, I would like to know when the first test was done, who did that first test, who is doing the second, and what is the schedule for it to be performed.

The only test results I have from Earle NWS are from June '86, I believe. Are there any updated results from June of '86 of the monitoring wells?

DEPUTY COMMISSIONER CATANIA: No. I think those are the latest results we have

ASSEMBLYMAN BENNETT: Have any additional samples been done in the past year -- or 11 months?

DR. TRELA: Mr. Chairman, it is our understanding that they are in the process of doing a feasibility study, which would mean they were sampling by intervals. But we wouldn't get the data from them until we got the feasibility study report. They might be sampling, like, every three months or four months, but until that was done after a year-- They would give us all of the data at once.

ASSEMBLYMAN BENNETT: Who is doing that, EPA?

DR. TRELA: I think the military has a contract through their Installation Restoration Program. That is usually the way they do it.

ASSEMBLYMAN BENNETT: Then I must be completely missing this whole thing. Maybe all of us are. How can you give-- Do you mean they have to do all of the data, put it all together, and then they give it to you for comments?

DR. TRELA: They don't have to--

DEPUTY COMMISSIONER CATANIA: They don't have to do it that way.

ASSEMBLYMAN BENNETT: I thought this was all part of this new partnership we are supposed to have.

DEPUTY COMMISSIONER CATANIA: We have been telling you for the last 20 or 30 minutes that this new partnership doesn't always work out terribly well.

ASSEMBLYMAN BENNETT: I haven't seen it work yet, except we got something at Fort Dix.

DEPUTY COMMISSIONER CATANIA: We basically get what they feel like giving us, when they feel like giving it to us. Right now, there is not a whole hell of a lot we can do about it.

ASSEMBLYMAN BENNETT: Have we requested the additional data? Maybe we can't criticize someone for not making something available if we don't ask for it. Perhaps we should at least affirmatively-- I have asked for it, and I was told that everything they have is sent to DEP. He said to me--

DEPUTY COMMISSIONER CATANIA: Everything that they have -- meaning that EPA has -- goes to DEP?

ASSEMBLYMAN BENNETT: Everything they have given to me, they said in the letter to me -- which is the June '86 data-- I requested all testing of monitoring wells since January '86. I was forwarded the June '86 data as the only data that had been done. Now, if they, in fact, have acquired additional data, is there a way-- Is there a way we can verify that they have done other tests, and that they are withholding information?

DR. TRELA: We will try to look into that for you and see what we can do.

DEPUTY COMMISSIONER CATANIA: The problem is, we don't necessarily know what they are doing. The reason we are sitting here like bumbling idiots saying we don't know what they've done--

ASSEMBLYMAN BENNETT: I am not trying to do that to you.

DEPUTY COMMISSIONER CATANIA: No, I understand, but it is hard to answer the question. We don't even know whether they have a contractor they have hired to do more sampling, what the schedule is, or whether it has been done, or why we don't have it. Probably the best thing we could do, is just on a very regular and periodic basis, keep writing to them, saying, "We would like to know exactly what you are doing, and have copies of the test results."

ASSEMBLYMAN BENNETT: Not necessarily; not necessarily. I believe we know, at any given time, what has to be done. We know, in fact, that this is on the NPL list

presently. We know that certain work has to be performed there, we know that monitoring wells are done, and that unless we are there doing it differently than any other non-military facility, they are doing regular, periodic tests of those monitoring wells. We should only have to basically ask the one time, and if we are not given the data, then we take it to the next step, in order to find out why.

I have asked for the data, and was basically given the impression that everything they have is given to you. Obviously, what I am finding out is that the only data you have is that one set that has been given to me. I would have to assume that in one year, those monitoring wells-- I understand there are 11 sites that we basically consider to be hot, out of the 24, and that the tests are being done. I will ask the same question to EPA. Someone, somewhere should be receiving that data if we are expected at some point in time to comment on it.

I think perhaps what we have to do is raise the consciousness of our citizens -- the public consciousness -- if there is, in fact, a lack of cooperation. I think Assemblyman Shinn from Burlington County made a point with respect to a military facility where there has been cooperation. It would appear that we are having some cooperation from Fort Monmouth, and we will find out more as we go along. But, where we have problems where we are not getting what certainly can be anticipated or expected, then I think the public consciousness has to be raised.

I can't sit here year after year and pound on the Department for private facilities, and ignore the fact that there are Federal facilities that have groundwater contamination threats caused by them, and be satisfied to have everyone tell me, "It is not in my jurisdiction." I just cannot accept that. If it is not in mine, it has to be in someone's, and it may be possible for us to raise the consciousness to a level high enough that someone else-- Or,

conceivable, gather the information sufficiently to intervene as a citizen under SARA. That is another possibility we need to use to raise the information with.

Back in '85, under the EPA ruling with NWS Earle, for instance, they said: "Migration of the hazardous substances may have occurred, resulting in contamination. Therefore, a work plan is under review to investigate the presence of that contamination." This is EPA's description, and we will take that up with them, but I am going to ask the same question to them that I am asking you, because if it is not your jurisdiction, and it is not their jurisdiction, then we have a real serious problem. I think we probably have a serious problem.

DEPUTY COMMISSIONER CATANIA: I think EPA has been experiencing similar problems to those we have been experiencing in getting information from the military facilities. Even though they are a Federal agency and theoretically have more to say over it than we do, I think there have still been problems with information exchange.

ASSEMBLYMAN BENNETT: That is my understanding.

DEPUTY COMMISSIONER CATANIA: When the military says they have given you all the information they have, they mean all of the information that has been assembled in a form and a time that they feel like giving you. They have taken the position with regard to sampling results that until the feasibility study report is in, they don't have the data. Obviously, somebody has the data. The contractor has performed the work; the laboratory has performed the analysis; the data is sitting somewhere in someone's office. But, when they say they don't have the data, they mean the report is not done which summarizes all of the data.

ASSEMBLYMAN BENNETT: At Earle, again -- and I am not pounding on Earle -- the Phase Two Study that was done-- I believe that was because it was on the NPL list. According to

EPA, it had been completed in December '86. Has DEP had an opportunity to review that study, having received it from either EPA or the Navy directly?

DEPUTY COMMISSIONER CATANIA: We have not received the study yet.

ASSEMBLYMAN BENNETT: Do we have any idea as to whether we can expect to receive that study?

DEPUTY COMMISSIONER CATANIA: We expected the study in December.

ASSEMBLYMAN BENNETT: Do the Committee members have any questions with respect to the Department on the Federal facilities?

ASSEMBLYMAN SHINN: Just relative to the BOMARC site, out of the data you have now, what potential groundwater situation is there relative to the most recent data?

DEPUTY COMMISSIONER CATANIA: The information we have suggests there was a surface cleanup done, and there was a concrete pad placed over the site. John, do you want to take it from there? (no immediate response from Dr. Trela)

ASSEMBLYMAN SHINN: That's good from a range standpoint and adding to the leaching effect, but I believe that site is in the Cohansey, right, the aquifer?

DR. TRELA: Yes, sir, that is correct.

DEPUTY COMMISSIONER CATANIA: Directly atop the Cohansey.

ASSEMBLYMAN SHINN: And if there is just a cap on the top of it-- That doesn't mean much in the Cohansey unless it is ~~one~~ a awful big cap, because--

DR. TRELA: Well, what they did was-- There were numerous soil samples taken through that area.

ASSEMBLYMAN SHINN: I'm sorry?

DR. TRELA: There were numerous soil samples taken through that area -- okay? -- that characterized the areas of contamination. Then what they did was, the areas that were

highly contaminated near the fire site were capped over with concrete. They put six or eight inches of concrete over the top of the contaminated soil. It still sits on the site.

The water table there is fairly deep. As you know, it is up on a ridge, so it is not like in the lowlands as most of Fort Dix is in that area. It is up on a ridge, so the water table is 20, 30, 40 feet deep. So it is not a typical Pine Barrens area, where the water table is only a few feet below the surface, because it is on that big knob of a hill up there.

The other thing that is rather critical is, they run on a regular basis -- on an annual basis -- radiometric surveys. They take radiation measurements to make sure that nothing is coming out of there. It is our understanding that that cap-- We were on the site, I guess, probably about 15 or 18 months ago. I can get you the exact date, if you want it. But we toured the site with military personnel, and the area is fenced. It is also patrolled by military police to prevent public access into that area.

ASSEMBLYMAN SHINN: My concern, because of the Cohansey involvement, is more the groundwater situation relative to the contamination, and what the potential is for off-site migration of the contaminant.

DR. TRELA: Well, the monitoring wells-- They recently put monitoring wells in. I think at the end of last year; I don't know if it was November or December. Those wells, I believe, were sampled, but that is the sampling that Mr. Bennett referred to earlier that would not be available until the end of the study in 1988, or something like that. So they are evidently collecting samples, and they have data, but they are not going to share it with us at this point in time.

ASSEMBLYMAN SHINN: We can't answer the question of whether, let's say, their parameter monitoring wells show off-site contamination, or it's getting better, it's getting worse?

DR. TRELA: We have done sampling off the site in the wells in the area -- okay? -- and there is no problem out there. Based on our knowledge of the behavior of the--

ASSEMBLYMAN SHINN: This is downgrading?

DR. TRELA: Yeah. Based on our knowledge of the behavior of the plutonium oxide, it is highly insoluble. So, it is not something like salt, that is going to readily dissolve and leach out. It is highly insoluble. Based on the "scientific theory" -- in quotes -- there should not be a problem if it is capped by concrete, in terms of leaching through. It is not in the water table and it is capped by concrete.

ASSEMBLYMAN SHINN: It is attenuating the soil.

DR. TRELA: So it is essentially in a dry zone. I emphasize the word "theory," because we do not actually have the on-site measurements to confirm that. It would be very nice to have the data to confirm the theory with the reality.

ASSEMBLYMAN SHINN: Okay. You are satisfied that that cap is reasonably -- has good permeability?

DEPUTY COMMISSIONER CATANIA: Assemblyman, the real answer is that we don't have enough information to tell you we are satisfied with it. When they tell us we can't have the results of the monitoring wells until February, 1988, we cannot make a representation to you--

ASSEMBLYMAN SHINN: But, as far as the physical condition of the concrete cap itself?

DEPUTY COMMISSIONER CATANIA: As far as we know, the cap appears to be in very good shape. The area is being monitored. There is security; it is fenced off. There does not seem to be an immediate public health or environmental problem, but absent monitoring well data, we cannot give you the assurances we would like to give you.

ASSEMBLYMAN SHINN: Okay.

ASSEMBLYMAN BENNETT: Could you write down some documents I would like to have for the Committee for the twenty-first? The 1986 Air Force BOMARC report. There is a BOMARC report the Department has; it is dated 1986. My understanding is that there is also some sort of a memorandum with respect to the cleanup of that site that was generated internally, or within EPA. Could you see that that is made available also?

DR. TRELA: With respect to--

ASSEMBLYMAN BENNETT: BOMARC.

DR. TRELA: --that report -- that specific report, does it repeat--

ASSEMBLYMAN BENNETT: Two separate documents.

DEPUTY COMMISSIONER CATANIA: We have produced a summary of what we understand was done there -- is what you're saying -- as an internal document, and you would like a copy of that, as well as--

ASSEMBLYMAN BENNETT: No, the costs to clean it up -- BOMARC.

DEPUTY COMMISSIONER CATANIA: I have not seen cost estimates.

ASSEMBLYMAN BENNETT: It is just my understanding that you have it. I am not saying that you do or you don't. I'm saying, it is my understanding.

DR. TRELA: We will check the file. If we have it, we will make it available.

ASSEMBLYMAN BENNETT: Right.

DEPUTY COMMISSIONER CATANIA: Fairly recently, Assemblyman, we prepared some internal memos, in fact, some letters, because some people were suggesting that the BOMARC site be considered as a storage site for the radon drums.

ASSEMBLYMAN BENNETT: Correct.

DEPUTY COMMISSIONER CATANIA: We prepared a summary, kind of a history of the site, and it actually may have some

estimates in it. We will be happy to make that available to you.

ASSEMBLYMAN BENNETT: In fact, there was a statement saying something to the tune-- I mean, a public statement, I think, that the BOMARC site would cost something along the line of conceivably a billion dollars. That was attributed somewhere.

DEPUTY COMMISSIONER CATANIA: Anybody who gives you a number before the feasibility study is done is just picking numbers out of the air.

ASSEMBLYMAN SHINN: I think it is awfully important, because some people get misconceptions about a contamination that may have abilities to become a disposal site. I think in the deliberations this site should be characterized strictly as containment and a cleanup site, and certainly not any potential for any future disposal. We are in the Pinelands; we are over the Cohansey. You know, any ideas about radon disposal or anything on that site is just ill-conceived, as far as I am concerned. I hope none of that is coming from the Department.

DEPUTY COMMISSIONER CATANIA: As the documents the Chairman just requested will show, the Department has taken the position that we are certainly not suggesting this as an appropriate site. In fact, when the Federal government-- About the most forthcoming that the Federal government has been on this property, was when they offered it to us. They said that if we could accept the property, and accept the liability of cleaning it up, we could store whatever kind of drums we wanted to. We said, "Thank you very much, but we prefer that you clean it up."

ASSEMBLYMAN SHINN: They may be close-mouthed, but they're not dumb, right?

DEPUTY COMMISSIONER CATANIA: Exactly.

ASSEMBLYMAN BENNETT: Are there any other questions at this point? (no response)

What I would like to do, if you wouldn't mind -- and I am sure you wouldn't mind, Commissioner-- As a result of the information you have given me, plus some of the comments, I would like to be able to give you some additional questions in writing with the site specifics, rather than going through each one now. That information, I think, will be helpful as to go to the two next steps and have EPA and then the individual facilities come before the Committee. If at that point I am at least able to have the information that the Department has, I won't be faced with the possibility of them telling me, "The Department has this information," when, in fact, you don't have it.

I will get those questions to you as quickly as staff is able to finish them. Hopefully, we will be able to get an answer as quickly as possible, because of the time constraints.

I compliment you for the rather thorough reports that have been given to me, and I appreciate receiving them. I am sure the rest of the Committee is going to be just thrilled to be able to sit down and read them.

You cannot deal with pollution isolated. Whatever it takes for us to see to it that we can have a comprehensive program including every facility in the State -- Federal and private -- is what this Committee is going to continue to seek.

I thank you for your private presentations today. On that information, I think we are both leaving with additional work to do, since you have additional questions to answer, and we have additional questions to promulgate. But, only through the ongoing discussions, and the questions and answers, are we going to be able to assure the public that, in fact, everything that can be done will be done. If it can't be done, we will certainly see to it what impediment is being placed in front of us as to why it can't be done. We will ask questions as long as we are able to ask questions.

Thank you once again for coming today.

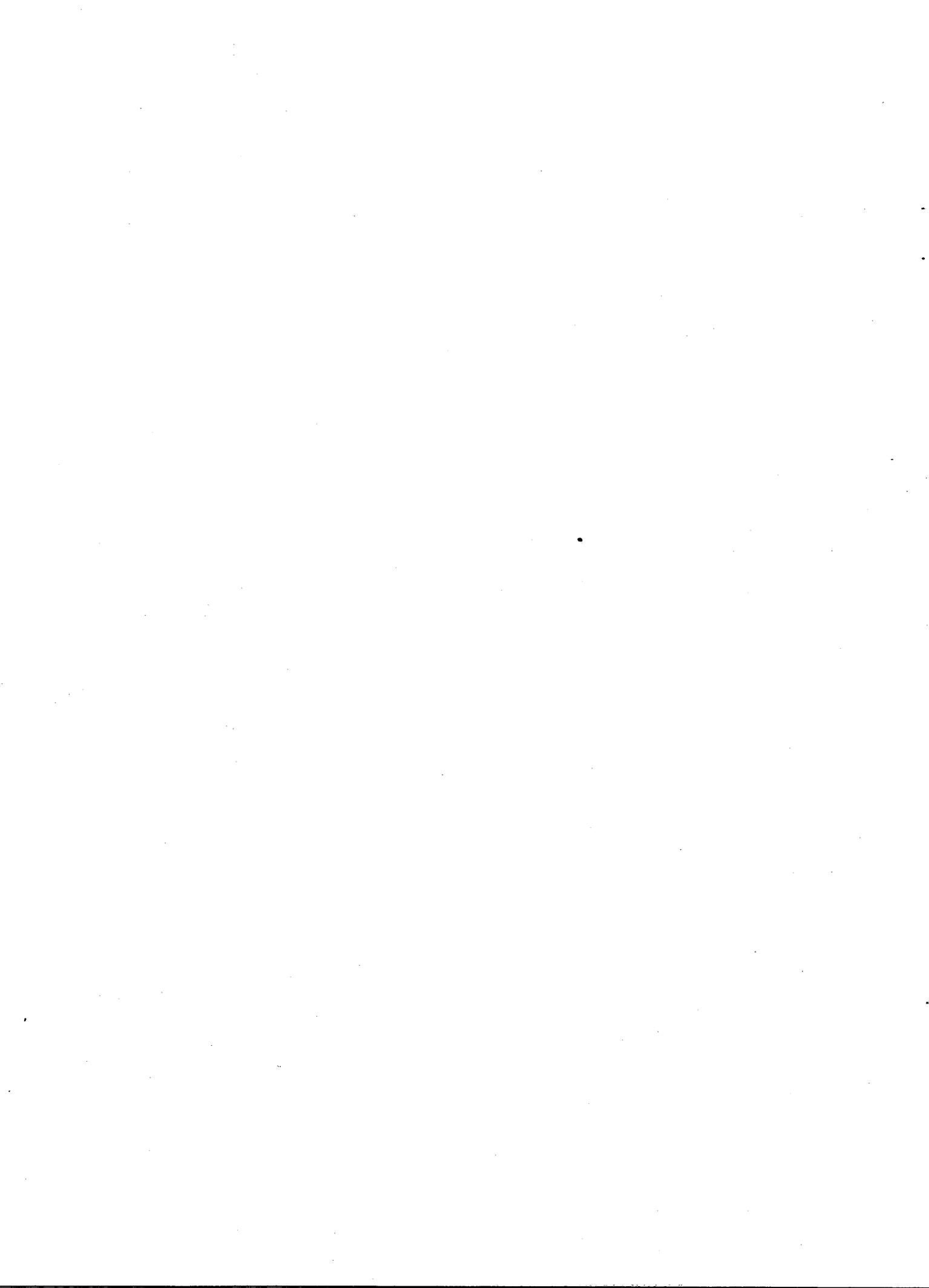
DEPUTY COMMISSIONER CATANIA: Thank you, Mr. Chairman. We would be happy to have our staff available when you have the Federal--

ASSEMBLYMAN BENNETT: I would appreciate that. Thank you.

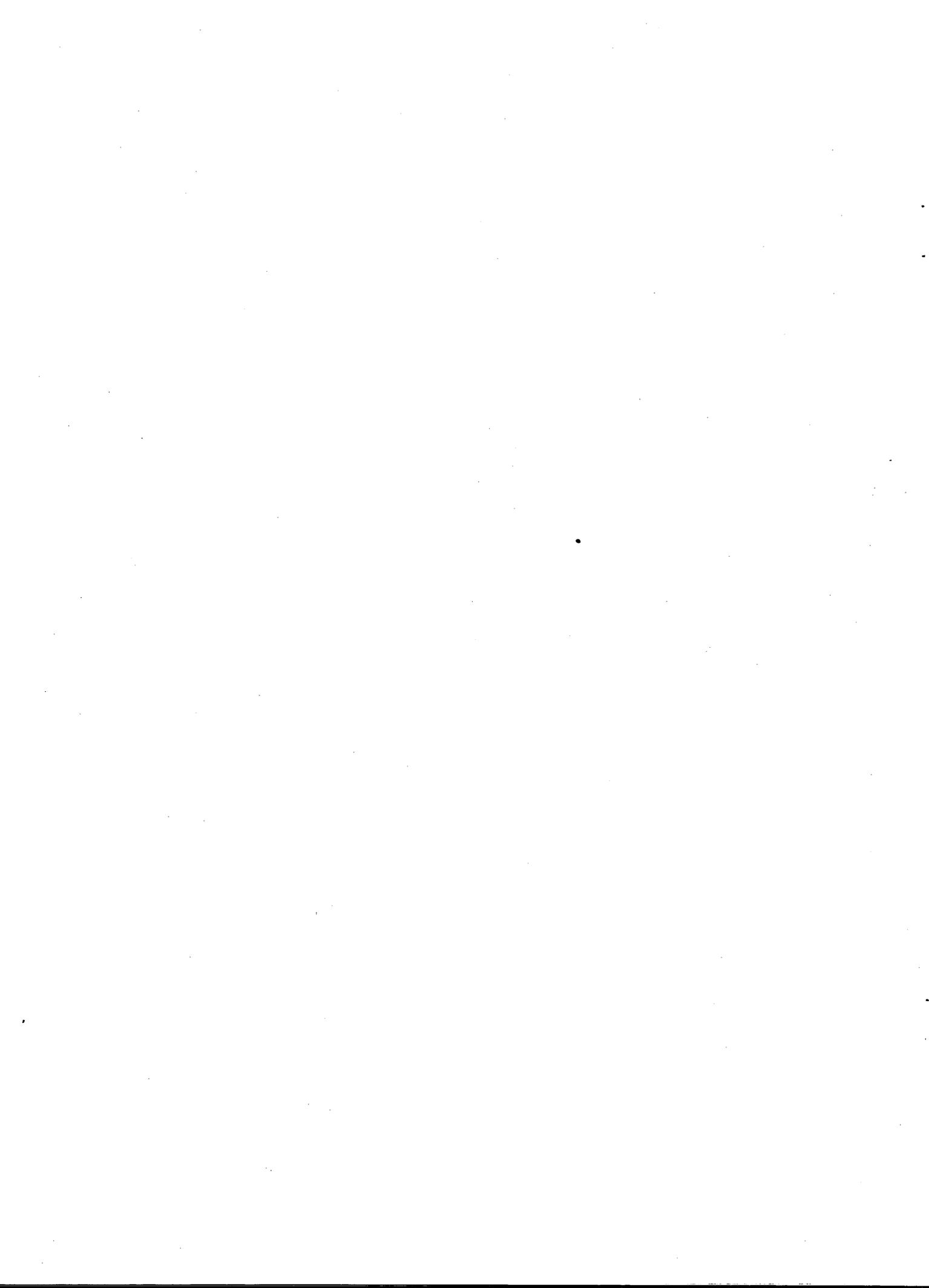
DEPUTY COMMISSIONER CATANIA: --representatives in, so they can't sit there and tell you they have given us something, without our being able to respond to that.

ASSEMBLYMAN BENNETT: I appreciate it.

(MEETING CONCLUDED)



APPENDIX



HAZARDOUS WASTE PROGRAM BRIEFING EXHIBITS  
BEFORE THE ASSEMBLY ENVIRONMENTAL QUALITY COMMITTEE

New Jersey Department of Environmental Protection

May 11, 1987

# THE COMPREHENSIVE HAZARDOUS WASTE MANAGEMENT PROGRAM

## ➔ REMEDIATION OF PAST PRACTICES

- *\$1.6 Billion program over 5 years*
- *Tools: CERCLA/SARA/RCRA Corrective Action  
NJ Spill Act*

## REGULATION OF CURRENT PRACTICES

- 4,200 known generators, 260 TSD facilities,  
164 RCRA regulated facilities to be permitted.
- Ongoing enforcement through inspections and  
compliance monitoring.
- Strong ECRA law to remediate, regulate and prevent  
at up to 15,000 industries.

## PREVENTION OF NEW SITES

- Minimization of wastes
- Enhanced regulatory and enforcement controls
- Program support through a fee schedule

**HAZARDOUS WASTE REMEDIATION PROGRAM COSTS — FY87—FY91  
ALL SITES (NPL, Non-NPL, Water Supply Replacement)**

(\$ Millions)

	1987	1988	1989	1990	1991	TOTALS
STATE	77.50	160.70	186.10	141.90	74.30	\$ 640.50
FEDERAL	62.40	132.50	166.10	108.40	28.20	\$ 497.60
PRIVATE	66.00	96.00	182.60	132.30	42.50	\$ 519.40
TOTAL	205.90	389.20	534.80	382.60	145.00	\$1657.50

## CUMULATIVE FUNDS AVAILABLE

	<u>Funds Available as of 7-31-86</u>	<u>Funds Available as of 12-31-86</u>	<u>Increase</u>
New Jersey Spill Fund	\$ 92 Million	\$ 96 Million	\$ 4.0
General State Fund (1985)	\$150 Million	\$150 Million	
1981 Hazardous Discharge Bond Fund	\$100 Million	\$100 Million	
1986 Hazardous Discharge Bond Fund	- 0 -	\$200 Million	\$200.0
Federal "Superfund"	<u>\$ 79 Million</u>	<u>\$ 81 Million</u>	<u>\$ 2.0</u>
<u>TOTAL</u>	<u>\$421 Million</u>	<u>\$627 Million</u>	<u>\$206 Million</u>

## AUTHORIZATIONS

	<u>Funds Available as of 7-31-86</u>	<u>Funds Available as of 12-31-86</u>	<u>Increase</u>
New Jersey Spill Fund	\$ 76.6 Million	\$ 84.7 Million	\$ 8.1
General State Fund (1985)	\$ 99.4 Million	\$119.0 Million	\$ 20.4
1981 Hazardous Discharge Bond Fund	- 0 -	- 0 -	- 0 -
1986 Hazardous Discharge Bond Fund	- 0 -	- 0 -	- 0 -
Federal "Superfund"	\$ 78.8 Million <hr/>	\$ 81.2 Million <hr/>	\$ 2.4 <hr/>
<u>TOTAL</u>	\$254.8 Million	\$285.7 Million	\$ 30.9 Million

## EXPENDITURES

	<u>Expenditures</u> <u>as of 7/31/86</u>	<u>Expenditures</u> <u>as of 12/31/86</u>	<u>Increase</u>
New Jersey Spill Fund	\$ 57.1	\$ 61.3	\$ 4.2
General State Fund (1985)	\$ 26.0	\$ 39.0	\$ 13.0
Federal "Superfund"	\$ 13.9	\$ 18...	\$ 4.3
<u>TOTAL</u>	\$ 97.0 Million	\$118.5 Million	\$ 21.5 Million

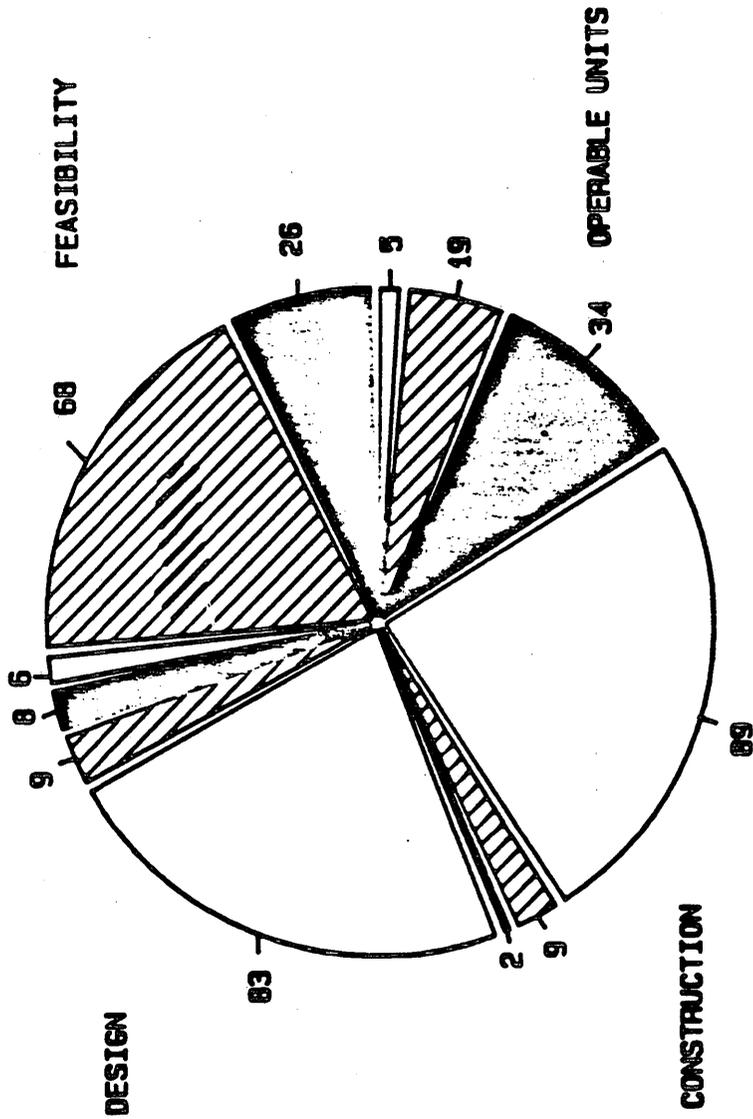
## NEW JERSEY'S SHARE ON NATIONAL SUPERFUND

	<u>National</u>	<u>New Jersey</u>	<u>Percentage</u>
FY 86	\$ 83.4 Million	\$ 17.4 Million	21
FY 87 *	<u>\$ 417.6 Million</u>	<u>\$ 82.7 Million</u>	20
TOTAL	\$ 501.0 Million	\$ 99.6 Million	

**NEW JERSEY RANKS NO. 1**

\* Projected

# SUPERFUND SITE ACCOMPLISHMENTS MARCH 1987



- - COMPLETED PHASE
- ▨ - PHASE UNDERWAY
- - PHASE YET TO BE INITIATED

## WATER SUPPLY PROJECTS COMPLETED OR NEARING COMPLETION

<u>County</u>	<u>Project Name</u>	<u>Cost</u>	<u># of Residences Affected</u>
Cumberland	North Vineland	800,000	155
Atlantic	Pomona Oaks	4,000,000	200
Somerset	Bradley Gardens	120,000	35
Somerset	Washington Valley Auto	400,000	200
Gloucester	BROS	990,000	15
Somerset	Krysowaty Farms	1,085,000	23
Mercer	Sharon Road	240,000	8
Ocean	Stafford Twp	2,700,000	200
Cape May	Middle Twp/ Cape May Court House	500,000	70
Warren	Brass Castle	2,800,000	220
Ocean	Shelter Cove	635,000	65
Gloucester	Upper Deerfield	780,000	89
Burlington	Edgewater Park	260,000	92
Burlington	Delanco	195,000	23
Camden	Winslow	430,000	112
	<b>TOTAL</b>	<b>\$15,235,000</b>	<b>1507</b>

\$10,000 per residence

# PROJECTS ADVANCED SINCE OCTOBER 1, 1986

## RI/FS Starts

### NPL Sites

1. Hopkins Farm
2. Lodi Wellfields
3. Matlack Trucking
4. M & T DeLisa
5. Pomona Oaks
6. Tang/Chemsci
7. Upper Deerfield
8. Wilson Farm

### Non NPL Sites

1. Cadmus Corporation
2. Civaudan Corporation
3. Gravel Pit
4. FF
5. Southland Corporation
6. Union Carbide -  
Pocomtown Road

## RI/FS Completions

### NPL Sites

1. Shieldalloy

### Non NPL Sites

1. JCP & L (Belmar)

## Design Starts

### NPL Sites

1. GEMS (Long term)
2. Lang Property
3. Tang/Chemsci (Main)

## Design Completions

### NPL Sites

1. Fairlawn Wellfields (Fisher Scientific)

## Construction Starts

### NPL Sites

1. Bridgeport Rental & Oil Services (Tank Farm)
2. Fairlawn Wellfield (Fisher Scientific)

## Construction Completions

### NPL Sites

1. Fairlawn Wellfield (Water Treatment)

## SUPERFUND AMENDMENTS

- Increased funding levels
  - \$8.5 B over 5 years
  - Management oversight
  
- Title III
  - Emergency Planning :
    - State Emergency Response Commission
    - Local Emergency Planning Committee
    - Comprehensive Emergency Response Plans
  
  - Community Right-To-Know :
    - MSDS / List
    - Tier I / Tier II Inventory Forms
    - Toxic Chemical Release Forms
  
- Underground Storage Tank Program
  
- Cleanup Standards (ARAR's)
  
- Permanent Onsite Solutions
  - Public Participation Impact
  
- Innovative Technologies
  
- Community Relations
  - Technical Assistance Grants
  - Citizen's Right to Sue

RESULTS: TAKES LONGER, COSTS MORE,  
PRODUCES TECHNICALLY BETTER SOLUTIONS

## SUPERFUND AMENDMENTS

- **Curtailed Reimbursement**
  - Remedial Actions
  - Monitoring
  
- **Management Assistance Grants**
  - \$250,000 / Year
  - NJ Costs - \$10 M
  
- **Funding Delays**
  - Programming major activities difficult
  
- **Site Inspection "Hammer"**
  - January 1, 1988 - All PA's Completed
  - January 1, 1989 - All SI's Completed
  - Over 1200 Sites on CERCLIS
  - Approximately 400 SI's Completed
  - Potentially over 800 left
  
- **Title III**
  - No Funding
  - Risk Communication
  - Complexity of Various Lists
  - Conflicts / Preemption

## RCRA / CERCLA ISSUES

- POTW ' s
  - Liability
  - Use of Federal Funding
  
- Land Disposal Bans
  
- Off Site Disposal Policy
  - Hazardous & Non Hazardous must go to RCRA Facility
  - Facilities must be in compliance or under corrective action program
  - No national system to identify acceptable facilities
  
- Research Centers
  - RCRA Permits

# THE COMPREHENSIVE HAZARDOUS WASTE MANAGEMENT PROGRAM

## REMEDIATION OF PAST PRACTICES

- \$1.6 Billion program over 5 years
- Tools: CERCLA/SARA/RCRA Corrective Action  
NJ Spill Act



## REGULATION OF CURRENT PRACTICES

- *4,200 known generators, 430 TSD facilities, 159 RCRA regulated facilities to be permitted.*
- *Ongoing enforcement through inspections and compliance monitoring.*
- *Strong ECRA law to remediate, regulate and prevent at up to 15,000 industries.*

## PREVENTION OF NEW SITES

- Minimization of wastes
- Enhanced regulatory and enforcement controls
- Program support through a fee schedule

## RCRA UNIVERSE

<b>Notifiers</b>	<b>9,700</b>
<b>Active Handlers</b>	<b>4,200</b>
<b>Active TSD Facilities</b>	<b>260</b>
<b>Facilities Requiring Permits</b>	<b>164 *</b>
<b>Facilities Which May Require Corrective Action</b>	<b>640</b>

\* 200 additional facilities pending enforcement resolution.

**HAZARDOUS WASTE REMEDIATION PROGRAM COSTS — FY87—FY91  
ALL SITES (NPL, Non-NPL, Water Supply Replacement)**

(\$ Millions)

	1987	1988	1989	1990	1991	TOTALS
STATE	77.50	160.70	186.10	141.90	74.30	\$ 640.50
FEDERAL	62.40	132.50	166.10	108.40	28.20	\$ 497.60
PRIVATE	66.00	96.00	182.60	132.30	42.50	\$ 519.40
TOTAL	205.90	389.20	534.80	382.60	145.00	\$1657.50

→ OBTAINED THROUGH AGGRESSIVE ENFORCEMENT PROGRAM

X91

## RESPONSIBLE PARTY SETTLEMENT \*

Between January 1, 1986 through September 31, 1987

<u>COUNTY</u>	<u>NAME</u>	<u>AMOUNT (\$ M)</u>
Bergen	Amland	\$ 1.00
Salem	Hercules	2.00
Hudson	Hudson County Chromium	
	o Diamond Shamrock	0.35
	o P P G	0.35
Burlington	International Storage & Timeline	0.75
Middlesex	Koppers (Distriggs)	2.00
Hudson	Koppers (Kearny)	2.00
Morris	L.E. Carpenter	1.00
Morris	Marotta Scientific	0.50
Middlesex	Rhone Poulenc	2.20
Warren	Southland	1.00
Bergen	U O P	5.00

\* Enforcement Administrative Consent Orders with Financial Assurance greater than \$100,000

# RESPONSIBLE PARTY SETTLEMENTS \*

October 1, 1986 - April, 1987

<u>COUNTY</u>	<u>NAME</u>	<u>AMOUNT (\$M)</u>
Middlesex	BFI/Monroe Twp.	\$ 1.0 **
Bergen	Cadmus/Westgate	2.5
Morris	Dover Well # 4	0.7
Passaic	Givaudan	1.0
Monmouth	IFF	4.0
Morris	Radiation Technology	0.8
Morris	Rockaway Twp Wellfield	0.7
Middlesex	Sayreville Landfill	0.9
Middlesex	Union Carbide	1.0
		<hr/>
	TOTAL	\$12.6 M

\* Enforcement Administrative Consent Orders with Financial Assurance greater than \$100,000 since October 1, 1986

\*\* Responsible Parties have initiated work; ACO signed in this report period.

**ENFORCEMENT DOCUMENTS ISSUED  
BETWEEN JANUARY 1986 THROUGH MARCH 1987  
WITH PENALTY ASSESSMENTS UNDER \$100,000**

**TOTAL HAZARDOUS WASTE PROGRAM \***

<u>Document Type</u>	<u>Number Issued</u>	<u>Amount Assessed</u>	<u>Number Collected</u>	<u>Amount Collected</u>
Administrative Consent Order	1	\$ 5,000	0	\$ 0
Administrative Order w/Penalty	166	\$966,420	124	\$358,214
Civil Administrative Penalty	63	\$136,428	37	\$ 63,815
Notice of Violation	233	\$680,225	136	\$265,917
<u>GRAND TOTAL</u>	463	\$1,788,073	297	\$687,946

\* Additionally 104 Directive Letters were issued which require the party responsible for the hazardous waste discharge to remediate the problem. No penalties are associated with this document.

# Environmental Cleanup Responsibility Act (ECRA)

## Approved Cleanup Plans \* (Since October 1, 1986)

### Facility Name

Air Products & Chemicals, Inc	\$ 608,000
Burroughs Corp. Carlstadt Facility	144,000
CBS, Inc., CBS Toys Division	250,330
Continental Fiber Drum, Inc.	292,787
Seacoast Laboratories, Inc.	470,000
Union Precision Mfg., Inc.	280,000
Weston Instruments	151,625
	<hr/>
Total	\$ 2.2 Million

## Consent Order \*\*

	<u>Number</u>	<u>Amount</u>
April 1, 1986 - October 1, 1986	61	\$ 124 Million
October 1, 1986 - March 1, 1987	144	\$ 120 Million

\* Greater than \$100,000

\*\* With financial assurance greater than \$100,000

# THE COMPREHENSIVE HAZARDOUS WASTE MANAGEMENT PROGRAM

## REMEDIATION OF PAST PRACTICES

- \$1.6 Billion program over 5 years
- Tools: CERCLA/SARA/RCRA Corrective Action  
NJ Spill Act

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- 4,200 known generators, 260 TSD facilities,  
164 RCRA regulated facilities to be permitted.
- Ongoing enforcement through inspections and  
compliance monitoring.
- Strong ECRA law to remediate, regulate and  
prevent at up to 15,000 industries.

## PREVENTION OF NEW SITES

- 
- *Minimization of wastes*
  - *Enhanced regulatory and enforcement controls*
  - *Program support through a fee schedule*

## WASTE MINIMIZATION INITIATIVE

- 1 Hazardous Waste Fee Schedule
  - Volume of Waste Generated
  - Toxicity
  - Facility Type
  
- 2 Waste Audits
  - Non-regulatory
  - NJIT/Rutgers involvement
  
- 3 Research in Innovative Technology
  - A-2536
  - Matching Grants
  
- 4 Financial Incentive Evaluation
  - Taxes
  - Grants/loans
  
- 5 Technical Advisement/Assistance Program
  - Information sharing between industry and DEP
  
- 6 Regulatory Review

## ENHANCED REGULATORY AND ENFORCEMENT CONTROLS

- Five Year Program Projections – Total \$ 1.6 Billion
  - First year (FY87) \$ 66 Million in Private Funds
- Current Status of Private Funding
  - \$ 12.6 Million

### NEED :

- Enforcement Program Support
  - \$ 3 Million per year for 5 years
- 100 : 3 Leverage

Cost	\$ 3 Million / Yr	5 Yr \$15 Million
Saving	\$100 Million / Yr	5 Yr \$500 Million

## ENHANCED REGULATORY AND ENFORCEMENT CONTROLS

### RECOMMENDATION:

- Short Term :

Appropriation:

- Establish 40 site-specific positions (Spill Fund)
- \$ 700,000 Resolution for program operation cost

- Long Term :

Legislation :

- *HAZARDOUS WASTE FEE PROGRAM*
- Legislation to place penalties in the Hazardous Discharge Cleanup Fund for future actions.
- Legislation to provide oversight costs for ACO's.
- Enactment of stiff legislation to increase penalties and criminal liabilities for polluters.

**PROGRAM SUPPORT THROUGH A FEE SYSTEM**  
**IMPOSED ON THE HANDLING OF HAZARDOUS WASTES**

**CRITERIA**

- Volume of Waste Generated
- Toxicity
- Facility Type

**REVENUE TARGET:**

- \$8 to \$10 Million

# COMPREHENSIVE WASTE MANAGEMENT PROGRAM

Remediation of Past Practices - \$1.6 Billion over 5 years

\$500 M	Federal
\$640 M	State
\$519 M	Enforcement - Penalties/Oversight/Fees

MINIMIZATION - Waste not generated doesn't have to be  
TREATED, STORED, DISPOSED

- Fees
- Audits
- Research
- Financial Incentives
- Technical Assistance Program
- Regulatory Review

REGULATORY CONTROL - for waste which can't be minimized or reduced.

- Permitting
- Enforcement

SITING - for the inevitable residuals that must go somewhere

- SARA requirement in 3 years for Capacity Assurance

HAZARDOUS WASTE FEE SCHEDULE - "Polluter Pays" for the Program

- Incentive for reduction
- Support Regulatory, Enforcement, & Minimization Program

## FEDERAL FACILITIES

### Federal Role :

E.O. 12088 - EPA responsible for monitoring federal facility compliance with environmental laws

### Superfund Amendments

- o Greater EPA involvement in oversight
- o Mandatory schedules for assessment and remedial action

### State Role

- o Document Review
- o Compliance with State ARARS
- o States and citizens can enforce schedules, terms & conditions of cleanup

### Jurisdiction at Federal Facilities - COMPLEX PROBLEM

Federal - EPA Enforcement power may be weakened if DOJ opinion to have OMB settle disputes holds

State - Advisory Role - No REAL CONTROL

Solution : Congressional Action to provide EPA with necessary enforcement authority

Hazardous Discharge Site Cleanup  
Status Report Summary

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Part I - Alphabetical Listing  
Part II - Listing by Status

KEY

SCF	New Jersey Spill Compensation Fund
GSF	General State Funds and Capital Appropriations
EPA	US EPA Superfund CT - Contracts CP - Cooperative Agreements
MULTI	All "MULTI" Site Authorizations Shown are Summaries. Details are on file with FIU.
SCF-000	Sites that Amounts were Expended Prior to the Formal Authorization Process

PART I

The following list reflects the change in status, if any, between July and December of 1986 of hazardous waste site cleanups based on monies spent to effect remediation. Several facilities of particular concern appear on the list which is otherwise a random sample of all sites listed by the Department of Environmental Protection.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
884-021	Amer.Cyn.BoundBrook	SCF-197	no change, all spent
884-020	Amer.Cyn.Linden	SCF-198	no change, \$ left
884-038	AMR Labs	SCF-232	no change, all spent
882-052	BaroneBarrelPaterson	SCF-000	no change, all spent
MULTI	Blanket Field Analy	SCF-375	\$ spent, \$ left
080-069	Bog Creek Farm	EPA-CT01	no change, none spent
080-069	Bog Creek Farm EPA lead	GSF-033-1	no auth.
080-028	Bridgeport Rental	SCF-000	no change, all spent
		GSF-011-1	no change, none spent
		GSF-077	no change, none spent
		GSF-078	\$ spent, \$ left
		SCF-151	no change, all spent
		SCF-151A	no change, all spent
		SCF-151C	no change, all spent
		EPA-CT02	no change, none spent
080-028	BrosTankRemoveEPA lead	GSF-030-2	no auth.
080-021	Burnt Fly Bog	SCF-000	no change, all spent
		GSF-129	new entry, none spent
		SCF-177	no change, all spent
		SCF-177A	\$ spent, \$ left
		SCF-204	no change, all spent
		SCF-350	no change, \$ left
		EPA-CP04	\$ spent, \$ left
		GSF-PEND	no change, no auth., \$ spent
		GSF-063	no change, none spent
		GSF-105-1	no auth.
		SCF-268	no change, \$ left
886-020	Caldwell Trucking	EPA-CT03	no change, none spent
789-017	Chemical Control	SCF-000	no change, all spent
		SCF-000	no change, all spent
		SCF-114	
		SCF-114A	?
		SCF-114B	?
		SCF-114C	?
		SCF-114D	?
		EPA-CT04	no change, none spent

885-002	Combe Fill North	SCF-245-1	?
886-037	CottBeverageAbandDrum	SCF-357	no change, none spent
080-104	Derewal Chem Co	SCF-306	?
885-114	Diamond Shamrock	GSF-095	no change, none spent
		SCF-344	no change, \$ left
886-069	EdgewaterIndusPark	SCF-393	\$ spent, \$ left
080-063	Ewan Property	EPA-CT08	no change, none spent
080-017E	Friedman Property	SCF-137	no change, none spent
884-019	GAF Linden	SCF-200	?
		SCF-320	no change, none spent
884-023	Givaudan Corp	SCF-199	no change, \$ left
080-017A	Goose Farm	SCF-000	no change, all spent
789-005	Hammonton	SCF-000	new entry, all spent
884-035	Hildemann	SCF-219A	new entry, no auth.
886-011	Indus. Latex Co.	SCF-336	no change, \$ left
884-036	Jersey City Chromium	SCF-229	?
		SCF-254	new entry, \$ left
080-062	Kearny Drum Dump #3	GSF-042	no change, none spent
080-043	Kin Buc	SCF-0117A	no change, all spent
		SCF-117	no change, all spent
		EPA-CT11	no change, none spent
080-038	Krysowaty	SCF-390	no change, all spent
887-006	Landfill&Develop LF	GSF-125	new entry, \$ left
080-049	Lone Pine Landfill	SCF-118	no change, all spent
		SCF-118A	?
		GSF-122	\$ spent, \$ left
		GSF-123	no change, none spent
		SCF-359	?
		EPA-CT16	no change, none spent
		GSF-032	no change, none spent
886-059	Loveland Corp A D	GSF-PEND	no change, no auth., \$ spent
883-037	Manasquan Wildlife Ref.	SCF-173	no change, \$ left
080-079	Millmaster Onyx, Gulf	GSF-039	no change, \$ left
882-058	Myers Prop.Pittstown	EPA-CT18	no change, none spent
885-003	Newton Creek	SCF-248	no change, all spent
886-002	OldDeseaDr Malaga A D	GSF-134	all spent
080-059	PJP Landfill	GSF-010-1	\$ spent, \$ left
		GSF-090	\$ spent, \$ left
		GSF-091	no change, none spent
		GSF-096	\$ spent, \$ left
		GSF-097	\$ spent
		SCF-201	\$ spent
		SCF-201A	no change, all spent
885-130	PJP Landfill	SCF-283-1	\$ spent, \$ left
		SCF-283A	new entry, no auth.
		SCF-283B	\$ spent
887-031	Paterson Maint.Yard	SCF-446	new entry, \$ left
887-012	Perona Tire Fire	SCF-413	new entry, \$ left
887-005	Phila.Ave aband.drum	SCF-426	new entry, \$ left
885-065	Pratt Gabriel	SCF-347	no change, \$ left
885-143	Pulaski Skyway	SCF-303	\$ spent, \$ left
882-057	Quanta	SCF-000	new entry, all spent
884-042	Radon	GSF-035	\$ spent, \$ left
MULTI	Radon	SCF-253	?
		SCF-349	no change, none spent
VARIOUS	Radon	GSF-092	new entry, none spent
		GSF-130	new entry, \$ left
884-042	Radon	GSF-0001	\$ spent, \$ left

884-040	Radon	GSF-103	\$ spent, \$ left
		SCF-234	\$ spent
		EPA-CT23	no change, none spent
884-042	Radon	GSF-102	\$ spent, \$ left
		SCF-233	\$ spent
		EPA-CT22	no change, none spent
884-041	Radon	GSF-101	\$ spent, \$ left
		SCF-227	\$ spent
887-004	Ringo's Aband Drum	SCF-425	new entry, \$ left
887-060	Rt 9 labpacks	SCF-453	new entry, \$ left
885-124	Shirley Ave	SCF-278	no change, all spent
MULTI	Small drum roundup	SCF-156A	no change, \$ left
080-042	Storer Dump	SCF-179	no change, none spent
080-056	Syncon Resins	SCF-150C	new entry, no auth.
884-030	Upper Deerfield TWP	SCF-224	?
885-145	Wheeler Point Rd.	SCF-305	?
080-073	Woodland TWP Rt 532	SCF-262	new entry, no auth.

PART II

TABLE 1

All funds authorized for the following cleanups were expended prior to July 31, 1986; no status change was reported in the December 31, 1986 update provided by the department.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
884-021	Amer.Cyn.BoundBrook	SCF-197	no change, all spent
884-038	AMR Labs	SCF-232	no change, all spent
882-052	BaroneBarrelPaterson	SCF-000	no change, all spent
080-028	Bridgeport Rental	SCF-000	no change, all spent
		SCF-151	no change, all spent
		SCF-151A	no change, all spent
		SCF-151C	no change, all spent
080-021	Burnt Fly Bog	SCF-000	no change, all spent
		SCF-177	no change, all spent
		SCF-204	no change, all spent
789-017	Chemical Control	SCF-000	no change, all spent
		SCF-000	no change, all spent
080-017A	Goose Farm	SCF-000	no change, all spent
080-043	Kin Buc	SCF-0117A	no change, all spent
		SCF-117	no change, all spent
080-038	Krysowaty	SCF-390	no change, all spent
080-049	Lone Pine Landfill	SCF-118	no change, all spent
885-003	Newton Creek	SCF-248	no change, all spent
080-059	PJP Landfill	SCF-201A	no change, all spent
885-124	Shirley Ave	SCF-278	no change, all spent

TABLE 2

Funds were available for the following projects; however, no remedial action was taken between July and December 1986. Some monies were spent prior to July 1986. The figures represent authorized sums not yet expended.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
884-020	Amer.Cyn.Linden	SCF-198	no change, \$5445
080-021	Burnt Fly Bog	SCF-350	no change, \$100
		SCF-268	no change, \$2614
885-114	Diamond Shamrock	SCF-344	no change, \$1250
884-023	Givaudan Corp	SCF-199	no change, \$3700
886-011	Indus. Latex Co.	SCF-336	no change, \$705
883-037	Manasquan Wildlife Ref.	SCF-173	no change, \$8750
080-079	Millmaster Onyx, Gulf	GSF-039	no change, \$5100
885-065	Pratt Gabriel	SCF-347	no change, \$2402
MULTI	Small drum roundup	SCF-156A	no change, \$2729
TOTAL.....			\$32,795

TABLE 3

Funds were expended for cleanup activities for the following projects during the July - December 1986 period; however, additional funds are available.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
MULTI	Blanket Field Analy	SCF-375	\$94,897
080-028	Bridgeport Rental	GSF-078	\$3201
080-021	Burnt Fly Bog	SCF-177A	\$2,622,960
		EPA-CP04	\$7,104,501
886-069	EdgewaterIndusPark	SCF-393	\$4155
080-049	Lone Pine Landfill	GSF-122	\$7584
080-059	PJP Landfill	GSF-010-1	\$2,005,329
		GSF-090	\$10,235
		GSF-096	\$122,689
885-130	PJP Landfill	SCF-283-1	\$41,281
885-143	Pulaski Skyway	SCF-303	\$399
884-042	Radon	GSF-035	\$4,419,864
884-042	Radon	GSF-0001	\$4,897,638
884-040	Radon	GSF-103	\$20,740
884-042	Radon	GSF-102	\$9321
884-041	Radon	GSF-101	\$115,053

TABLE 4

The following sites received no remediation during the five month period evaluated although funds were available for such work.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
080-069	Bog Creek Farm	EPA-CT01	no change, none spent
080-028	Bridgeport Rental	GSF-011-1	no change, none spent
		GSF-077	no change, none spent
		EPA-CT02	no change, none spent
080-021	Burnt Fly Bog	GSF-063	no change, none spent
886-020	Caldwell Trucking	EPA-CT03	no change, none spent
789-017	Chemical Control	EPA-CT04	no change, none spent
886-037	CottBeverageAbandDrum	SCF-357	no change, none spent
885-114	Diamond Shamrock	GSF-095	no change, none spent
080-063	Ewan Property	EPA-CT08	no change, none spent
080-017E	Friedman Property	SCF-137	no change, none spent
884-019	GAF Linden	SCF-320	no change, none spent
080-062	Kearny Drum Dump #3	GSF-042	no change, none spent
080-043	Kin Buc	EPA-CT11	no change, none spent
080-049	Lone Pine Landfill	GSF-123	no change, none spent
		EPA-CT16	no change, none spent
		GSF-032	no change, none spent
882-058	Myers Prop.Pittstown	EPA-CT18	no change, none spent
080-059	PJP Landfill	GSF-091	no change, none spent
MULTI	Radon	SCF-349	no change, none spent
884-040	Radon	EPA-CT23	no change, none spent
884-042	Radon	EPA-CT22	no change, none spent
080-042	Storer Dump	SCF-179	no change, none spent

TABLE 5

Authorizations for the following projects are not listed in either the July or the December reports from the department.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
080-069	Bog Creek Farm EPA lead	GSF-033-1	no auth.
080-028	BrosTankRemoveEPA lead	GSF-030-2	no auth.
080-021	Burnt Fly Bog	GSF-105-1	no auth.

The following projects appear on the December 1986 update from the department but do not appear on the July 1986 status report.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
080-021	Burnt Fly Bog *	GSF-129	new entry, none spent
789-005	Hammonton	SCF-000	new entry, all spent
884-035	Hildemann	SCF-219A	new entry, no auth.
884-036	Jersey City Chromium	SCF-254	new entry, \$ left
887-006	Landfill&Develop LF	GSF-125	new entry, \$ left
885-130	PJP Landfill *	SCF-283A	new entry, no auth.
887-031	Paterson Maint.Yard	SCF-446	new entry, \$ left
887-012	Perona Tire Fire	SCF-413	new entry, \$ left
887-005	Phila.Ave aband.drum	SCF-426	new entry, \$ left
882-057	Quanta	SCF-000	new entry, all spent
VARIOUS	Radon	GSF-092	new entry, none spent
		GSF-130	new entry, \$ left
887-004	Ringoies Aband Drum	SCF-425	new entry, \$ left
887-060	Rt 9 labpacks	SCF-453	new entry, \$ left
080-056	Syncon Resins *	SCF-150C	new entry, no auth.
080-073	Woodland TWP Rt 532 *	SCF-262	new entry, no auth.

\* These are Superfund sites.

TABLE 6

Authorized sums are consistently carried through from one update to the next and running totals of expenditures are presented. However, for the following projects, authorized amounts for the December report were the same as expended amounts in the July report, while additional sums authorized prior to July were dropped.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
789-017	Chemical Control	SCF-114A	? \$117,679
		SCF-114C	? \$5265
		SCF-114D	? \$3285
884-019	GAF Linden	SCF-200	? \$4715
884-036	Jersey City Chromium	SCF-229	? \$6718
080-049	Lone Pine Landfill	SCF-359	? \$4295
		SCF-118A	? \$7940
MULTI	Radon *	SCF-253	?
885-145	Wheeler Point Rd. *	SCF-305	?

\* Indicates possible accounting error as follows:

<u>Site</u>	<u>July auth.</u>	<u>July spent</u>	<u>Dec. auth.</u>	<u>Dec. spent</u>
Radon	\$700,000	\$658,866	\$652,509	\$658,866
Wheeler	\$25,000	\$9530	\$9530	\$11,272

The following is a list of projects for which funds were listed as authorized in the July 1986 status report but for which only zero "0" sums authorized and spent are listed in the December update.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
789-017	Chemical Control	SCF-114B	? \$230,000
885-002	Combe Fill North	SCF-245-1	? \$1940
080-104	Derewal Chem Co	SCF-306	? \$21,000
884-030	Upper Deerfield TWP	SCF-224	? \$20,000

TABLE 7

More monies were spent for the following site cleanups than were authorized. The amounts listed are the excess expenditures.

<u>Site No.</u>	<u>Site Name</u>	<u>Auth.No.</u>	<u>Status Change</u>
080-059	PJP Landfill	GSF-097	\$18,214
		SCF-201	\$813
885-130	PJP Landfill	SCF-283B	\$492,939
884-040	Radon	SCF-234	\$838
884-042	Radon	SCF-233	\$2263

Funds were expended for remedial work at the following sites prior to July 1986 but without authorization. No monies were spent during the July to December 1986 period in question.

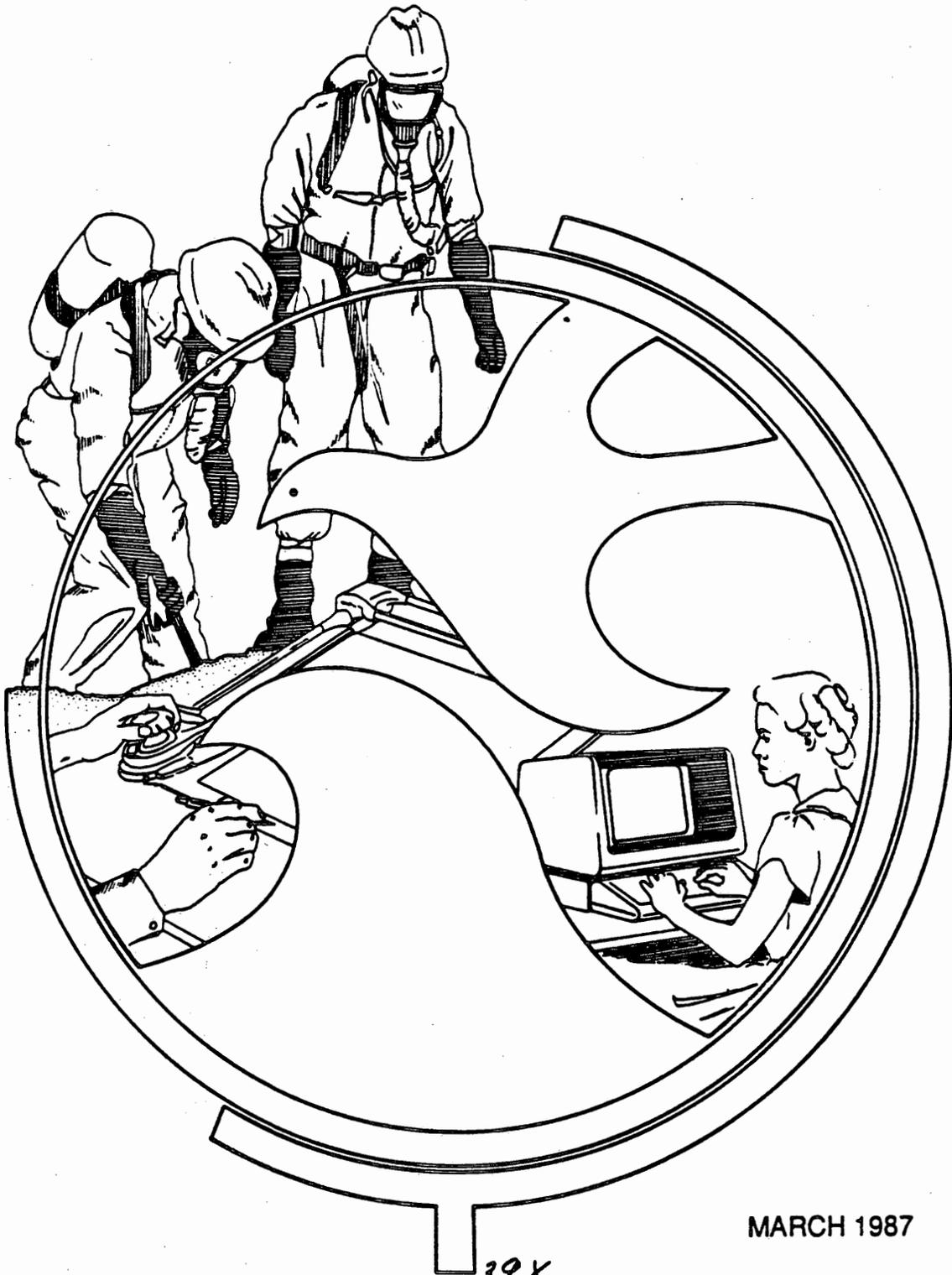
080-021	Burnt Fly Bog	GSF-PEND	no change, no auth., \$3365 spent
886-059	Loveland Corp A D	GSF-PEND	no change, no auth., \$3364 spent



# **Status Report**

# **On the Hazardous Waste Management Program in New Jersey**

## **UPDATE**



MARCH 1987

39X

Let's protect our earth



STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
RICHARD T. DEWLING, Ph.D., P.E., COMMISSIONER  
CN 402  
TRENTON, N.J. 08625  
609-292-2885

MAR 18 1987

Dear Colleague:

We are submitting our semi-annual update of the Hazardous Waste Management Program, including our accomplishments and a summary of issues which may impact on future program success.

Since our last report (October 1986), numerous federal, state and citizen actions have occurred to provide the stable long-term financial commitment necessary to achieve the goals identified in our five year program for hazardous discharge site cleanup. The Superfund Amendments and Reauthorization Act (SARA) of 1986 is expected to provide \$8.5 billion over five years; a five-fold increase over the previous level of funding provided under the Comprehensive Environmental Response Compensation Act (CERCLA-Superfund). Revisions to the New Jersey Compensation and Control Act, Corporate Business Tax, 1981 Hazardous Discharge Bond Act and passage of the 1986 Hazardous Discharge Bond Act are expected to yield approximately \$635 million in state funding over five years.

The Department has advanced Superfund sites through the remedial process, despite delays in the availability of federal financial support and confusion and delays associated with the new SARA provisions. Looking into the future, we project the new Superfund law will both increase costs and the length the time needed to complete projects, but should yield better environmental solutions.

The pioneering ECRA program continues to achieve significant private party commitments to clean up sites. Implementation of recommendations from the Office of Management and Budget and legislative oversight have reduced backlogs and case processing time in most areas. Waterline replacement and responsible party cleanups under enforcement have also produced success stories.

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External recognition of New Jersey's program was recently provided by an independent Washington-based environmental group. The Fund for Renewable Energy and the Environment chose New Jersey's hazardous waste management program as the best state program in the nation.

Number 1 program ranking based upon past performance is one thing; maintaining that stature for the future requires that additional actions, which are described in the action agenda (Section IV) of this report, be taken now.

In 1986, we dealt with a long-term financial commitment to solve hazardous waste problems. In 1987, our action agenda focus shifts to program development. Briefly, our agenda encompasses the completion of a comprehensive hazardous waste program, through the pollution prevention initiative; an evaluation of the structure and procedures necessary to accommodate the significant remedial construction activities anticipated by 1989; and the steps necessary to assure adequate disposal capacity in the future.

The heart of our action agenda, the pollution prevention initiative, consists of three important items: waste minimization, a strong regulatory and enforcement program and a fee program to support these initiatives. Implementation of this program will reduce the amount of waste which must be stored, treated or disposed, assure that the remaining waste inevitably produced is properly handled, and shift the burden of financial support from the citizens of this state to those who benefit from the generation of hazardous waste.

I look forward to meeting with you to discuss our issues, accomplishments, and recommendations for assuring our continued success.

Sincerely,



Richard T. Dewling

**NEW JERSEY HAZARDOUS WASTE MANAGEMENT PROGRAM**

**UPDATE**

**MARCH 1987**

**New Jersey Department  
of Environmental Protection  
Richard T. Dewling, Ph.D., P.E.,  
Commissioner**

NEW JERSEY HAZARDOUS WASTE CLEANUP PROGRAM UPDATE

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- I. Hazardous Waste Remediation Program Costs - FY87 - FY91
- II. Summary of Major Site Status Information
- III. Water Supply Projects Completed or Nearing Completion
- IV. Major Responsible Party Settlements
- V. Environmental Cleanup Responsibility Act (ECRA) - Cleanup Plans Approved Greater than \$100,000/Summary of Consent Orders
- VI. Environmental Cleanup Responsibility Act (ECRA) - Administrative Consent Orders with Financial Assurance Greater than \$100,000 Since October 1, 1986-Detailed Listing

## Appendix

- A. Detailed Financial Information by Site (All Funds) as of December 31, 1986
- B. Major Site Status Information (Detailed)
- C. Hazardous Waste Management Programs Organizational Chart

## HAZARDOUS WASTE CLEANUP PROGRAM

### I. FINANCIAL STATUS INFORMATION

#### A. Sources of Funding

In October, the Department provided a projection on anticipated funding needs of \$1.6 billion over the next five years to support the hazardous site cleanup program (see Attachment I). This total was expected to be derived from three general categories of funds:

State	- \$640 million
Federal	- \$497 million
Private	- \$519 million
Total	- \$1656 million

Since then, significant federal, state and citizen actions have occurred to provide the stable, long-term financial commitment necessary to support the hazardous waste cleanup program in New Jersey.

On October 17, 1986 the President passed the Superfund Amendments and Reauthorization Act (SARA) which is expected to provide \$8.5 billion, to support cleanups over five years. Of this \$8.5 billion New Jersey anticipates receiving approximately \$500 million over five years. In addition, New Jersey expects approximately \$500 million in contributions from private responsible parties to meet the total program goal of \$1.6 billion.

In 1986, the state legislature approved revisions to the Spill Compensation and Control Act, Corporate Business Tax Revision, 1981 Discharge Bond Act and approved the 1986 Hazardous Discharge Bond Act, which was subsequently approved by referendum. These state actions are expected to provide \$635 million to support publicly funded hazardous waste cleanup actions over the next five years.

These actions have provided the financial support necessary to achieve the goals identified in our five year projections for a strong remedial program. In only a few short months our financial picture has changed as follows:

	<u>Funds Available as of 7-31-86</u>	<u>Funds Available as of 12-31-86</u>
N.J. Spill fund	\$ 92 million	\$ 96 million
1985 General Fund Capital Approp. for H.W. Cleanup	150 million	150 million
1981 Hazardous Discharge Bond Fund	100 million	100 million
1986 Hazardous Discharge Bond Fund	- 0 -	200 million
Federal Superfund	79 million	81 million
	<hr/>	<hr/>
	\$421 million	\$627 million

In future years, the funds available to the program are expected to continue to increase significantly. An additional \$40 - \$50 million per year is anticipated from the changes to the Corporate Business Tax, totalling over \$225 million over the next five years. Changes to the Spill Tax have also been implemented which are anticipated to produce \$110 million in 1987 through 1992. These amounts will increase substantially the future sums available to the program.

**B. Authorizations and Expenditures**

As of December 31, 1986 approximately \$286 million has been authorized from public sources to support remedial actions; this represents an increase of approximately \$31 million between July 31, 1987 and December 31, 1986.

The breakdown of authorizations from individual funds is as follows:

	<u>Authorizations as of 7-31-86</u>	<u>Authorizations as of 12-31-86</u>	<u>Increase</u>
N.J. Spill Fund	\$76.6	\$84.7	\$8.1
General State Fund	99.4	119.8	20.4
1981 N.J. Haz. Discharge Bond Fund	0	0	0
1986 N.J. Haz. Discharge Bond Fund	0	0	0
Federal Superfund	78.8	81.2	2.4
	<hr/>	<hr/>	<hr/>
Total	\$254.8	\$285.7	\$30.9

Consistent with our previous report, the largest proportion of total authorizations and greatest increase since July 31 is seen against the General State Fund Appropriations of 1985. The noticeable lack of increase in federal support is evident in the above and reflects the fact that the reauthorized Superfund is still in an early startup phase. In fact, at nearly the mid point in FY87 the final federal EPA spending plan under SARA is still in draft form and New Jersey still has not received a cent from the new Superfund.

Expenditure data which follow exhibit similar conclusions.

	<u>Expenditures as of 7-31-86</u>	<u>Expenditures as of 12-31-86</u>	<u>Increase</u>
N.J. Spill Fund	\$57.1	\$61.3	\$ 4.2
General State Fund	26.0	39.0	13.0
Federal Superfund	13.9*	18.2*	4.3*
Total	<u>\$97.0</u>	<u>\$118.5</u>	<u>\$21.5</u>

\*Expenditure figures for those sites where federal EPA acts as the lead in administering the program are not maintained by the State.

The overall increase in expenditures over five months is \$21.5 million, the bulk of which was made against the General State Fund Authorizations. A detailed site specific financial report is provided as Appendix A.

## II. PROGRAM ACCOMPLISHMENTS

### A. Progress at Major Sites (Publicly and Privately Funded)

The Department has continued to make substantial progress in initiating new actions and in advancing ongoing projects toward final remediation. New Jersey now has 100 sites proposed or included on the National Priorities List (NPL). Three new sites: Curcio Scrap Metal, Cosden Chemical and Horstman's Dump, were proposed by EPA for inclusion in January 1987. The three new sites are currently undergoing enforcement investigations. At the 97 remaining Superfund sites, remedial investigations/feasibility studies have been initiated at 94 sites. Of the remaining sites yet to be initiated:

- o 1 site (Cooper Road) has undergone a removal action and is being evaluated for deletion from the NPL.
- o 1 site (Mannheim Avenue) has undergone a removal action and an RI/FS for groundwater contamination is necessary. EPA is currently negotiating with the PRP.
- o 1 site (PJP Landfill) has undergone an extensive Remedial Action and request for proposal to perform a post closure RI/FS is currently being finalized.

In summary, since October 1, 1986 the following progress has occurred at Superfund sites:

- o RI/FSs            8 initiated  
                      1 completed
- o Designs            3 initiated  
                      1 completed
- o Construction    2 initiated  
                      1 Completed

State funded activities for sites not on the NPL include:

- o RI/FS            6 initiated  
                      1 completed

A summary of specific sites included in these categories is provided in Attachment II. A detailed listing of all sites, both publicly and privately funded, where status changes have occurred since October 1, 1986 is provided in Appendix B. It should be noted that multiple projects may take place concurrently at a given site.

Despite modest federal support and delays, the Department has continued to effect site stabilization activities and to ensure the provision of safe drinking water to residents around hazardous waste sites. Since the conception of the Contaminated Wellfield Program over three years ago, approximately 1500 residents have been provided with new potable water supplies, primarily through the extension of existing water mains or the construction of new municipal water supply systems. This has been augmented through the availability of the 1985 General Fund. The Department is currently working on 20 new projects which will provide water supplies to over 2200 additional residences. A complete listing of completed water supply replacement projects (or those nearing completion) appears in Attachment III. Funds committed to the projects underway total \$15 million.

## B. Enforcement

The Department's five year Responsible Party (RP) goal includes \$500 million in privately financed remedial actions. This is an ambitious, but achievable goal.

The Responsible Party (RP) remedial process involves identification of environmental concerns at a site by means of a RCRA Facility Assessment, a CERCLA PA/SI or other regulatory/enforcement mechanisms; confirmation sampling of waste, soils, ground water and/or surface water by either the RP or by the Department; preparation of a comprehensive Administrative Consent Order (ACO) to address all environmental concerns at a site by means of a Remedial Investigation /Feasibility Study; negotiation with the RP on the particular terms of the ACO including the scope of the RI/FS and the remedial measures to be taken, the amount of stipulated penalties to be paid by the RP if they fail to meet the conditions of the ACO, and the amount of oversight costs incurred by the Department that will be reimbursed by the RP.

It is in the best interests of both private industry and the Department to conduct remedial actions through this RP process; by voluntarily signing ACOs and conducting privately funded remedial actions, industry and the Department save the taxpayers millions of dollars a year, yet the Department ensures that the remedial action is conducted in accordance with its own requirements through its oversight of the RP remedial process.

Since October 1986, the Department has entered into eight major Administrative Consent Orders (ACOs) with RPs totalling approximately \$14 million (see Attachment IV). Four of these agreements provide for conduct of the study by the RP, while the other three involve cost reimbursements for DEP conducted studies.

Through the 1986 hazardous waste programs reorganization and the establishment of the Bureau of Case Management within the Enforcement element of the Division of Hazardous Waste Management, new focus can be placed on achieving our goal of \$500 million over five years in responsible party commitments.

C. Environmental Cleanup Responsibility Act Results

Another facet of the responsible party remedial action program is achieved through the Environmental Cleanup Responsibility Act (ECRA). Established in 1984, ECRA has proven to be highly successful in assuring cleanups prior to the sale or transfer of property. This unique program has led to the identification and remediation of numerous industrial sites that might otherwise have gone undetected for an indefinite period into the future.

This program is now entirely fee supported, generating a budget of \$4.5 million to support a staff of 104 employees needed to process the following activities on an annual basis: site reviews of 1300 subject industrial establishments; issue over 7000 applicability determinations and execute 350 Administrative Consent Orders. In calendar year 1986, 45 major cleanups occurred entailing \$25 million dollars worth of privately funded cleanup work. The program also issued over 5000 applicability determinations and executed 310 Administrative Consent Orders. The total estimate of financial assurances from executed ACOs was \$260 million. In December 1986, over 1000 actions were conducted in response to the changes in the new federal tax laws.

Since our last report of October 1986, the ECRA program has approved seven major (over \$100,000 in cost) cleanup plans totalling over \$2 million (Attachment V). For the period October 1, 1986 to March 1, 1987, 144 such major Administrative Consent Orders (ACOs) were executed representing 50 percent of all ACOs executed under the ECRA program to date. These companies have posted an aggregate of \$120.1 million in financial assurances (see Attachment VI for a list of projects in this category).

The ECRA program was also recently upgraded to Element status, thereby enabling greater responsiveness to industry in the future.

### III ISSUES AFFECTING THE HAZARDOUS WASTE CLEANUP PROGRAM

#### A. Superfund Amendments and Reauthorization Act of 1986 (SARA)

On October 17, 1986 President Reagan signed the Superfund Amendments and Reauthorization Act of 1986 (SARA). Although SARA establishes the mechanism to secure over five times the original funding level provided in the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, it also includes several provisions that are expected to dramatically affect the remediation process. The following provides a brief discussion of the areas expected to most significantly impact New Jersey's program.

##### 1. Funding Delays

Although in October, 1986 SARA reauthorized the Superfund Program to \$8.5 billion over five years, the taxing and appropriation authorities were not effective until January 1, 1987. Starting in January the Federal Office of Management and Budget (OMB) and EPA had to begin allocating the funds. Although this is simply a paperwork exercise, it has been very time-consuming, since the funds have to be given to EPA by OMB and EPA Headquarters then allocates to the Regions. All new projects which were scheduled for funding in November and December are now scheduled to be funded in late March.

The money New Jersey will receive in FY87 is likely to be much lower than our Status Report of September projected. The potential shortfalls appear due to the high construction costs at BROS and Lone Pine; at this time, it is uncertain which project will be funded, if either. Discussions are currently underway with EPA to resolve this issue.

##### 2. Remedial Process

The Remedial Investigation/Feasibility Study (RI/FS) phase will change significantly as a result of SARA. It will take longer, cost more and produce environmentally better solutions. The basic underlying shift in CERCLA is the reversal by Congress from requiring proven technologies for cleanup to encouraging the use of new and emerging or innovative cleanup methods that will achieve permanent solutions (remedies that significantly reduce the volume, toxicity or mobility of the hazardous materials).

##### a. Treatability Studies

Previously, treatability studies were optional during the RI/FS and were primarily intended to acquire design parameters. They were therefore conducted mainly in the remedial design phase. However, in order to determine which new technologies are appropriate and will actually work, treatability studies will now undoubtedly be an integral part of almost all RI/FSs, and will therefore extend the timeframe associated with the RI/FS.

#### b. Cleanup Standards

Another important change in the law acknowledges the need to systematically incorporate State requirements into the remedial action process. Specifically, SARA requires that the proposed remedy meet or exceed all applicable relevant and appropriate requirements (ARARs) of all federal and state environmental laws and regulations. All exceptions must be fully justified. Although for many of the sites in New Jersey, the Department already incorporated federal and state ARARs, ARARs have only been applied to the selected Remedial Action. This provision of SARA reinforces the need for treatability studies prior to the selection of the remedy to assure that new technologies will achieve acceptable standards. ARARs must now be formally identified within the Remedial Investigation (RI) for every technology being considered before remedial alternatives are developed.

#### c. New Technologies

The use of new technologies may require pilot studies in the design phase. Pilot studies may be needed to "scale up" the technologies to bring it out of the laboratory and test its actual operational parameters needed to design the action. Although we foresee the emergence of mobile treatment units, on-site construction of the new technologies remedies also may be necessary and would be expected to affect the duration of the remedial action phase, but should reduce future Operation and Maintenance (O&M).

#### d. Increased State Cost

The cost of the remediation process will also significantly increase under SARA. The intent of Congress was to reduce overall the long-term cost of remedial action by reinforcing the land disposal restrictions in RCRA and preventing what Congress describes as the "Shell Game", simply moving material from one site to another and possibly having to remediate that site in the future. Because SARA will result in an overall increase in the cost of remedial actions, the state's cost share will increase comparably. However, SARA also provides New Jersey with more liberal means of receiving credit against our future cost share for state funds previously spent at NPL sites. SARA also contains a provision that provides 90% federal funds for up to 10 years to operate on-site treatment facilities that restore ground water and surface water. This should reduce the state's cost share of Operation and Maintenance which was previously interpreted to be 90/10 for the first year and 100 percent state funded for the remainder.

In the long term, the approach of satisfying ARARs and favoring permanent remedies is expected to achieve a better cleanup. However, the above requirements of SARA are expected to significantly impact the previously anticipated duration of the entire remedial action process (RI/FS, design, construction). The impacts of this have thus far been seen in the design phase. Of the 28 scheduled to start in FY87, it is expected that at most 15 will be funded. Constant interaction with EPA is assisting in defining the full impact of SARA.

### 3. Publicly Owned Treatment Works (POTWs)

In numerous Superfund cleanups, the disposal of treated leachate is a question of critical concern and has been a contributing factor to construction delays. Traditionally, the acceptance of waste by POTWs had been regulated under the Clean Water Act. Pursuant to the reauthorization of CERCLA, POTWs that accept treated effluent are now subject to Superfund liability, consequently, they are in danger of losing their liability insurance carriers. To address this concern the Department has requested that the Office of the Attorney General analyze this issue. The Department is seeking to identify the cases where an overriding public and environmental health risk justifies action.

### 4. Enforcement Activities

The provisions affecting the remedial process discussed above will similarly impact the enforcement activities and cause consistent project delays. Existing enforcement agreements with Responsible Parties, where remedial investigation are not in conformance with SARA, may be subject to renegotiation and judicial review.

SARA also provides EPA with significant discretion in its enforcement actions. In addition, and at the same time, it specifies timeframes for negotiation.

EPA's decision to settle with a potential responsible party (PRP) is not subject to judicial review in federal court, i.e., a PRP cannot sue EPA in federal court to compel a settlement. In addition, SARA specifically outlines those EPA actions which are subject to judicial review, e.g. citizens right to sue, cost recovery, etc. EPA is also allowed to settle with "minor" PRPs; this discretion was previously afforded only to the Justice Department. SARA also allows EPA to establish non-binding preliminary allocation of responsibility and allows for the partial contribution of private funds towards the cost of conducting remedial actions.

In relation to timeframes of negotiation, PRPs must be given 60 days notice to provide a proposal to perform the RI/FS using public funds and an additional 30 days is allotted for negotiations of a consent order. During this time, EPA cannot initiate an RI/FS with public funds.

For remedial design and action, PRPs must be given 60 days notice and 60 days to negotiate. Although use of public funds for a remedial action cannot be initiated during this timeframe, a remedial design can.

In addition, all publicly funded actions are subject to these time frames at the completion of each phase.

These provisions can result in PRPs refusing to negotiate with the state, whose position historically has been more strict. It is currently unclear, whether or not the state can be afforded these powers of discretion and/or EPA will decide not to utilize them. This may seriously affect our ability to develop and maintain our effective PRP enforcement program.

## 5. National Priorities List (NPL) Process

SARA also mandates the completion of Preliminary Assessments (PAs) and Site Investigation (SIs) for all sites included on EPA's CERCLA information system (CERCLIS) within specified timeframes and requires revision of the Hazard Ranking System (HRS) used to determine the eligibility of sites for federal funding.

By January 1, 1988 PAs must be completed on all sites included in CERCLIS; those requiring additional evaluation through the SI process must be completed by January 1, 1989. In addition, citizens may petition EPA to conduct PA/SIs at any site.

New Jersey currently has approximately 1,200 sites on CERCLIS, however, this number could increase based on citizen petitions and the identification of new sites through incident notifications, compliance and monitoring. We expect to complete PAs on all 1,200 New Jersey sites by October 1, 1987. However, because there is the potential to have approximately 750 sites requiring SIs, we anticipate problems in satisfying this mandate. New Jersey and EPA are evaluating several alternatives in order to satisfy this requirement, including the use of contractor services.

Within four years of enactment, all sites, where deemed necessary, must be evaluated utilizing the HRS: SARA does not, however, mandate the listing of sites on the National Priorities List (NPL).

Over the last year the Department has developed a strategy which involves the use of private funds in effectuating timely and appropriate remedial actions and utilizes the NPL with its associated enforcement leverage and funding as an integral tool. The strategy also integrates into one Comprehensive Site List (CSL) all sites from all of its hazardous waste programs. This will be used in conjunction with CERCLIS as an expanded and more useful database for enhanced management and tracking. From the CSL the Department will evaluate and prioritize its sites to maximize all program tools and options. Only that portion of sites where RPs are unwilling or unable to take appropriate actions will require public funding.

Although SARA requires that preliminary assessments and site inspections be conducted for those sites included on CERCLIS, it would be short-sighted to consider this list as finite. Therefore, the strategy will also include procedures for site discovery and assessment and the appropriate additions to EPA's CERCLIS database.

## 6. Community Relations

The previously discussed emphasis of SARA on the selection of permanent remedies tied with the constant reduction in available capacity at regulated RCRA facilities and limitations inherent in the EPA off-site disposal policy result in an emphasis for on site solutions for remediation. This fact is expected to result in considerable public opposition. The only way to affectively address this issue and avoid massive delays in the ultimate cleanup is through the continuous involvement of the public in the decision making process.

At least four specific SARA mandates will greatly increase the public's involvement in the Superfund cleanup process. These are:

1. Technical Assistance Grants of \$50,000 to local groups for consultants to critique agency proposals and decisions.
2. The explicit "Citizens' Right to Sue" if they feel the agencies are not performing as they should in the cleanup process.
3. Health effects data to be disseminated to local communities.
4. Formal transcripts are now required for all Superfund public meetings.

The individual and synergistic effects of these mandates will greatly affect the volume and nature of the discourse between the public and the DEP. It is apparent that our progress and success in achieving cleanup will be dependent on our ability to modify and/or amplify our existing system of Community Relations and the cooperation of New Jersey's citizens.

#### 7. Site Access

The issue of site access has two separate and distinct problems associated with it. We need site access for RI/FS studies. In several instances this has been a problem and in at least one instance, (JIS), the owner has promised to contest our right to visit the site and to do the necessary work. We have addressed this type of site access problem by going to court and obtaining an order to gain access. It would appear that this problem is going to occur frequently enough that remedial legislation might be appropriate.

The second type of site access problem involves long-term utilization of a site. The problems at GEMS regarding the long-term remedial program are the best examples that we can identify at this time regarding this type of problem. The type of access needed at these sites is of a long-term nature and may necessitate some form of condemnation in order for the cleanup to take place. Specific legislative authorization to enable this type of access/condemnation are needed, and becomes increasingly more critical as we enter the major construction activities expected in 1989.

#### 8. State Advancement of Funds to EPA

During the uncertainty associated with the reauthorization of CERCLA, the state was prepared to advance over \$37 million to continue or initiate actions at Superfund sites.

Between October 1 and December 31, 1986 the state advanced a total of \$300,000 to EPA to initiate Remedial Investigations/Feasibility Studies at three sites: Pomona Oaks, Lodi Wellfield and Upper Deerfield. This was not the first time the state had forwarded funds to allow projects to proceed. Between late 1985 and early 1986 approximately \$1.2 million was advanced to provide an alternate water supply near the Kryswaty Farm site.

However, these actions did not come without costs. To date, the advancement of funds for Krysowaty Farm has resulted in a loss of \$75,000 of interest to the state and a total of approximately \$3,000 for Pomona Oaks, Lodi Wellfield and Upper Deerfield.

The loss of this interest is insignificant when compared with the benefits of providing potable water to New Jersey citizens and continuing to advance remedial actions at hazardous waste sites.

## B. RCRA/CERCLA Issues

### 1. Land Disposal Bans

The Hazardous and Solid Waste Amendments of 1984 (HSWA) to the Resource Conservation and Recovery Act impose bans on the land disposal of certain types of hazardous wastes in accordance with a timetable established in the Act.

The HSWA land disposal bans began in November 1986 for spent solvents. A lack of available treatment capacity nationally resulted in a two-year delay of the ban for certain types of solvents and dioxin-containing wastes. A statutory exemption has extended the effective date of land disposal restrictions for contaminated soils and debris from CERCLA 106 and 104 response actions and RCRA corrective actions until November 8, 1988. All listed wastes will be ranked and evaluated by EPA for possible land disposal restrictions by 1990.

The HSWA land disposal bans may have significant impact on the disposal of wastes removed during the site remediation process. Land disposal of wastes affected by the bans is no longer a viable option. Plans for remedial actions developed prior to the passage of HSWA or cleanup actions that are ongoing when the bans become effective may be severely impacted by restrictions on land disposal. Remediation schedules or cleanup costs may need to be revised to account for wastes newly restricted from land disposal.

### 2. Off-Site Disposal Policy

SARA mandates that waste resulting from actions taken under CERCLA be disposed of at RCRA and TSCA facilities. The definition of "CERCLA waste" would include both hazardous and non-hazardous waste as defined by RCRA. Only facilities and units where there is an absence of a "significant" violation (facility) and where no release has occurred (unit) are eligible to accept CERCLA waste. In addition, any other units at such facilities with releases must be controlled under an approved Corrective Action Program incorporated into a facility permit or federally approved order.

The off-site disposal policy set forth under CERCLA and SARA, although theoretically reasonable, has proven to be impracticable. The policy has halted many cleanups already in progress and prevented the initiation of others. The policy has substantially increased expenditures for cleanups by establishing requirements that are well beyond what is appropriate and prudent using sound environmental practices.

The Department has identified additional problems and potential solutions to the off-site disposal policy. For example, there is no national system to identify acceptable disposal facilities. Facilities move in and out of compliance from month to month. Consequently, acceptable disposal sites are unknown, delays and rebidding of cleanup contracts result, and cleanup actions are delayed. A national tracking and reporting system should be established to provide states with current listings of acceptable disposal facilities.

The off-site disposal policy should be amended to allow disposal of non-hazardous waste at non-hazardous facilities to reduce overall costs, retain limited capacity and still provide the appropriate level of environmental and health protection. The Department further recommends that EPA should work to expand available capacity by accelerating the Part B issuance and associated corrective action programs for non-complying RCRA facilities.

### 3. Research Centers

Sections 209 and 311 of SARA require the establishment of hazardous waste research centers for the research and development of new, innovative technologies to treat and dispose of hazardous wastes. SARA, however, fails to exempt these academic research centers from the extensive research facility permitting requirements mandated by the Resource Conservation and Recovery Act (RCRA). The result of this inconsistency is that few, if any, academic facilities will be established since they are subject to extensive RCRA permit requirements.

Academic research in several areas should be aimed at exploring and perfecting scientific technologies to control hazardous wastes. These areas are of major economic, environmental and political interest. They encompass recycling and destroying or rendering harmless dangerous chemicals through biological, chemical and physical treatment. Investigative research into new technologies requires the use of hazardous waste samples. Health effects assessments or toxicity studies of various waste streams also rely on the availability of hazardous waste samples.

Current federal regulations provide for some research studies if the facility obtains either a Research, Development and Demonstration (RD&D) permit or registers as a Treatment, Storage or Disposal (TSD) facility. RD&D permits were designed for companies developing innovative treatment technologies for which permit standards have not been promulgated. Neither of the alternatives available were designed with academic research in mind. Toxicological studies of hazardous wastes are not provided for by the current federal regulations.

The Department believes that to the maximum extent practicable, all hazardous waste activities should be controlled. In the case of academic research, however, we are exploring options for alternative control mechanisms other than full facility permits and requesting that EPA consider a variance for these centers.

#### IV. AGENDA FOR ACTION

##### A. The Comprehensive Hazardous Waste Management Program

Throughout this report, we have focused on the needs and accomplishments of the remedial programs, both publicly and privately funded. The state has committed to a \$1.6 billion cleanup program to remedy some of our worst major hazardous waste sites. This, however, is only a portion of a comprehensive hazardous waste management program. The missing piece, i.e., prevention, is embodied in the three new major hazardous waste management initiatives:

- o minimization of wastes generated,
- o enhanced regulatory and enforcement controls, and
- o program support from a fee system imposed on the handling of hazardous waste.

The integration of these components, together with the remedial program, firmly establish New Jersey's program as one of the most comprehensive in the nation by providing the proper balance of remediating past abuses while avoiding future problems. This balance is in the best public interest and financial well being of the state.

##### a. Waste Minimization

Over 9.1 million tons of waste is generated annually in New Jersey. This waste must be properly handled in order to avoid future threats to public health and the environment. However, waste that isn't produced doesn't need treatment, doesn't require a disposal site and can't cause pollution.

New Jersey has recently been acclaimed by the Fund for Renewable Energy and the Environment as having the best hazardous waste management program in the nation. One reason for this is our long-standing program in waste minimization. Over the past four years the Department has had a Hazardous Waste Advisement Program which has provided information to industries on waste minimization alternatives, program information on RCRA permits, conducted training seminars, provided technical assistance, and supported local household hazardous waste collection days.

The Department is now proposing to expand this program to include a waste audit program, research in innovative technologies, financial incentives for the implementation of waste minimization techniques, technical assistance to industry, establishing an information exchange and an evaluation of existing regulations to promote minimization.

The implementation of waste minimization initiative will require legislative, technical, regulatory, and industrial commitment.

The legislature currently has before it several bills which will represent the first step in developing a new strategy for waste minimization. The Department strongly supports the continued evaluation and refinement of effective legislation to support this initiative.

b. Enhanced Regulatory and Enforcement Controls

If the legislature, regulatory agencies, and industry are jointly successful in the waste minimization program, even beyond our most optimistic projections, it alone will not be enough. Hazardous waste is a part of the fabric of our modern society and we cannot be so naive to think it can be eliminated entirely. We must assure that we have a strong regulatory and enforcement program in place to address the waste which will still be produced.

The Department is placing new emphasis on the permitting of facilities which treat, store, dispose or handle hazardous wastes through the RCRA permit program, while maintaining its emphasis on strict enforcement of the state rules and regulations designed to prevent releases. In addition, the RCRA program was recently consolidated to facilitate increased permit and regulatory accomplishments.

The primary focus, however, rests with the enforcement program to guard against poor waste management practices and potential releases as well as to remediate problems from past practices. On the remedial side, the enforcement program will continue to be aggressive in its goal to have private responsible parties commit to full remediation through Administrative Consent Orders. Its new mandate to provide \$500 million over five years in remediation will drive the program to be more effective in the years ahead.

c. Program Support

Neither of the above two initiatives can proceed without a stable long-term mechanism of support. For years the burden of support for programs to assure the proper storage, treatment and disposal of hazardous waste has rested with the citizens.

The regulatory program which permits, monitors and, where necessary, compels the responsible party to conduct remedial actions under enforcement orders, currently costs approximately \$8 million annually; 30 percent of this support is provided through federal grants. Increases in enforcement and regulatory activities pursued under the RCRA Corrective Action Program and anticipated decreases in federal grant assistance will result in the need for increased financial support.

To address this issue, and support the prevention initiative, the Department is recommending the establishment of a hazardous waste fee schedule. Estimated revenues of \$8 - 10 million annually are anticipated from a fee schedule which is based on the volume of hazardous waste generated and type of facility applying for a permit. Parties which directly benefit from the amount of waste generated would be required to support the activities necessary to assure their compliance with the law. Facilities requesting permits for treatment technologies which support the destruction of waste would be assessed lower fees than those which have a higher potential for eventual public and environmental threat, i.e., land disposal.

In addition, a portion of the revenues generated by the fee program could be utilized to provide matching grants to small businesses to conduct waste minimization audits. Those who implement the recommendations of the audit and reduce the amounts of hazardous waste generated would be rewarded by a reduction in their annual fee, a reduction in disposal costs since they are generating less hazardous waste, and by a rebate of up to 50 percent of their share of the matching portion of the grant.

The integration of hazardous waste minimization and the pollution prevention initiative with our existing cleanup package makes our program whole. It closes the circle on the hazardous waste "problem". Upon implementation of these initiatives, New Jersey will be the first state in the United States to have an integrated policy and program which reduce and minimize wastes at their source to the greatest degree practical, aggressively regulates and controls those wastes that are produced preventing future problem while simultaneously addresses cleanup of the problems of the past.

#### B. Construction Organization for the Future

The construction phase of publicly funded hazardous waste site cleanups will likely reach significant proportions by 1989. Contract bids should average \$100-\$300 million per year for five to ten years thereafter. Present organizations and procedures within the Department, and within the various state support agencies, may not effectively and efficiently accommodate a construction program of this size and complexity without significant modification. A preliminary review of state and federal organizations with similar responsibilities indicates that the Department is understaffed and has inadequate authorities, particularly in the areas of procurement and law.

Accordingly, the Department plans to study, in-depth, the problem of accommodating the future construction program and has already initiated a preliminary strategy. The review will specifically include identification of present constraints, a comprehensive look of state and federal agencies with similar responsibilities and a determination of feasible alternatives. The study team leader has been designated, and the study will be initiated in April 1987. An interim report of study progress should be available in the fall of 1987.

#### C. Capacity Assurance

A significant amendment to SARA requires that, by October 17, 1989 states must provide assurances of the availability of hazardous waste treatment storage and disposal facilities which:

1. Have capacity for all hazardous waste expected to be produced in the state for the next 20 years,
2. Are in the state, or for out of state facilities, the state has secured interstate agreements,
3. Are acceptable to the President, and
4. Are in compliance with RCRA Subtitle C requirements.

If such assurances cannot be provided, the state will be ineligible for federal funding under the Superfund program. Our ability to satisfy the requirement is dependent upon aggressive and cooperative activities of the state, EPA, industry, outside states, and the citizens of New Jersey. It is necessary to insure that, at a minimum, the current process to site facilities being undertaken by the Hazardous Waste Facilities Siting Commission is not impeded in any way. We must also initiate the appropriate enforcement and permitting actions to allow all existing facilities to operate at maximum capacity and to comply with the federal off-site disposal policy.

In response to this issue, our organization has consolidated all RCRA activities under the Assistant Director for Hazardous Waste Regulation in the Division of Hazardous Waste Management. The Assistant Director will also function as the Capacity Assurance Officer. In addition, the Department has developed a nine point strategy to address this issue. Elements of the strategy include:

1. Continue, through the Hazardous Waste Facility Siting Commission, an aggressive program to establish new facilities;
2. Plan for more on-site solutions for permanent remedies at abandoned hazardous waste sites. Where appropriate, participation in the EPA SITES program of technology development;
3. Update capacity needs by total volume, waste types, and treatment technology over 20 years for all categories of waste (i.e., pursue the Management Plan update by the Hazardous Waste Facilities Siting Commission);
4. Identify those facilities capable of providing additional capacity for treatment of identified waste types through expansion and, where possible, expedite their RCRA permit processing;
5. Initiate discussions with other states to secure agreements for treatment of waste types for which there is expected to be a shortfall of treatment capacity. Ideally, these states will have a shortfall in areas where New Jersey has additional capacity;
6. Continue discussions with EPA to determine specific requirements for "assurance";
7. Continue to initiate remedial actions at existing sites eligible for federal funding as expeditiously as possible;
8. Urge that the Spill Fund Research Bill (A-2536) be passed as soon as possible and;
9. Implement the comprehensive waste management initiative including waste minimization, prevention of waste generation, and set of program fees directed at waste handlers.

## V. Conclusion

This document is the second of a series in our commitment to semi-annually report to the Legislature on the progress of the Hazardous Waste Management Program. The Department intends to submit similar reports in the fall (for activity through June) and spring (for activities through December) to assist in the legislative oversight of this program. The Department will continue to work cooperatively with the Legislature to insure a strong Hazardous Waste Management Program and to advance the projects as expeditiously as possible.

## ATTACHMENTS

- I. Hazardous Waste Remediation Program Costs - FY87 - FY91
- II. Summary of Major Site Status Information
- III. Water Supply Projects Completed or Nearing Completion
- IV. Major Responsible Party Settlements
- V. Environmental Cleanup Responsibility Act (ECRA) Cleanup Plans Approved Greater than \$100,000/Summary of Consent Orders
- VI. Environmental Cleanup Responsibility Act (ECRA) Administrative Consent Orders with Financial Assurance Greater than \$100,000, Since October 1, 1986 - Detailed Listing

# HAZARDOUS WASTE REMEDIATION PROGRAM COSTS - FY87-FY91

ALL SITES (NPL, Non-NPL, Water Supply Replacement)

(\$ Millions)

	1987	1988	1989	1990	1991	TOTALS
STATE	77.50	160.70	186.10	141.90	74.30	\$ 640.50
FEDERAL	62.40	132.50	166.10	108.40	28.20	\$ 497.60
PRIVATE	66.00	96.00	182.60	132.30	42.50	\$ 519.40
TOTAL	205.90	389.20	534.80	382.60	145.00	\$1657.50

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# PROJECTS ADVANCED SINCE OCTOBER 1, 1986

## RI/FS Starts

### NPL Sites

1. Hopkins Farm
2. Lodi Wellfields
3. Matlock Trucking
4. M & T DeLisa
5. Pomona Oaks
6. Tang/Chemsci
7. Upper Deerfield
8. Wilson Farm

### Non NPL Sites

1. Cadmus Corporation
2. Givaudan Corporation
3. Gravel Pit
4. FF
5. Southland Corporation
6. Union Carbide -  
Pocomtown Road

## RI/FS Completions

### NPL Sites

1. Shieldalloy

### Non NPL Sites

1. JCP & L (Belmar)

## Design Starts

### NPL Sites

1. GEMS (Long term)
2. Lang Property
3. Tang/Chemsci (Main)

## Design Completions

### NPL Sites

1. Fairlawn Wellfields (Fisher Scientific)

## Construction Starts

### NPL Sites

1. Bridgeport Rental & Oil Services (Tank Farm)
2. Fairlawn Wellfield (Fisher Scientific)

## Construction Completions

### NPL Sites

1. Fairlawn Wellfield (Water Treatment)

## WATER SUPPLY PROJECTS COMPLETED OR NEARING COMPLETION

<u>County</u>	<u>Project Name</u>	<u>Cost</u>	<u># of Residences Affected</u>
Cumberland	North Vineland	800,000	155
Atlantic	Pomona Oaks	4,000,000	200
Somerset	Bradley Gardens	120,000	35
Somerset	Washington Valley Auto	400,000	200
Gloucester	BROS	990,000	15
Somerset	Krysowaty Farms	1,085,000	23
Mercer	Sharon Road	240,000	8
Ocean	Stafford Twp	2,000,000	200
Cape May	Middle Twp/ Cape May Court House	500,000	70
Warren	Brass Castle	2,800,000	220
Ocean	Shelter Cove	635,000	65
Gloucester	Upper Deerfield	780,000	89
Burlington	Edgewater Park	260,000	92
Burlington	Delanco	195,000	23
Camden	Winslow	430,000	112
	<b>TOTAL</b>	<b>\$15,235,000</b>	<b>1507</b>

\$10,000 per residence

# RESPONSIBLE PARTY SETTLEMENTS \*

Since October 1, 1986

<u>COUNTY</u>	<u>NAME</u>	<u>AMOUNT (\$M)</u>
Middlesex	BFI/Monroe Twp.	\$ 1.0 **
Bergen	Cadmus/Westgate	2.5
Passaic	Givaudan	1.0
Monmouth	IFF	4.0
Gloucester	Matlack	2.5
Morris	Radiation Technology	0.8
Middlesex	Sayreville Landfill	0.9
Middlesex	Union Carbide	1.0

**TOTAL \$13.7 M**

\* Enforcement Administrative Consent Orders with Financial Assurance greater than \$100,000 since October 1, 1986

\*\* Responsible Parties have initiated work; ACO signed in this report period.

# Environmental Cleanup Responsibility Act (ECRA)

## Approved Cleanup Plans \* (Since October 1, 1986)

### Facility Name

Air Products & Chemicals, Inc	\$ 608,000
Burroughs Corp. Carlstadt Facility	144,000
CBS, Inc., CBS Toys Division	250,330
Continental Fiber Drum, Inc.	292,787
Seacoast Laboratories, Inc.	470,000
Union Precision Mfg., Inc.	280,000
Weston Instruments	151,625
	<hr/>
Total	\$ 2.2 Million

## Consent Order \*\*

	<u>Number</u>	<u>Amount</u>
April 1, 1986 - October 1, 1986	61	\$ 124 Million
October 1, 1986 - March 1, 1987	144	\$ 120 Million

\* Greater than \$100,000

\*\* With financial assurance greater than \$100,000

**ENVIRONMENTAL CLEANUP RESPONSIBILITY ACT (ECRA)**  
**ADMINISTRATIVE CONSENT ORDERS WITH FINANCIAL ASSURANCE**  
**GREATER THAN \$100,000**  
**SINCE 10-1-86**

<u>COMPANY NAME</u>	<u>FINANCIAL ASSURANCE AMOUNT (\$M)</u>
A.L. Hyde Co.	.5
Abex Corp	.5
Acme Tool & Machine Co.	.5
Advanced Process Supply Co.	2.0
All Purpose Roll Leaf Corp	1.0
Allamuchy Sanitary Landfill	.3
American Can Co. -Edison	1.0
American Can Co. - S. Brunswick	1.0
American Can Co. - Washington Twsp.	1.0
Art Copy and Print Division	.25
Art Metal-USA, Inc.	.25
Artisan Electronics Corp	.5
Bagcraft Corp. of America	.5
Bekelaar Machine Co	.25
BASF Corp.	1.0
Beattie Manufacturing Co.	.25
Beckley Perforating Co.	.5
Berton Plastics, Inc.	.9
Best Block Co., Inc, Edison	.5
Best Block of Camden	.5
Best Block of New Jersey	.5
Best Block of Toms River, S. Toms River	1.0
Best Block of Toms River, Belmar	1.0
Best Block of Trenton	.5
Bloomfield Metal Fabricators Corp.	.5
Brassbestos Mfg. Corp	1.0
Buckeye Pipe Line Co., Woodbridge	.5
Buckeye Pipe Line Co., Woodbridge	.5
Ceragraphic, Inc.	.5
Charles of the Ritz Group, LTD.	.5
Chem-Mark, Inc.	.25
Columbia Chemicals Co.	2.5
Connectron, Inc.	1.0
Continental Can Co., Inc.	1.0
Continental Precision Corp.	.5
Cooper Biomedical, Inc.	1.0
Coopermatics Inc.	1.0
Cortland Fashions, Inc.	.5
Craig Adhesives	1.0
Crest Foam Products Corp.	1.0
Custom Alloy Corp. - Califon	.15
Custom Alloy Corp. - Highbridge	.15
Deka Plastics Inc.	.5
Diversified Concrete Products, Inc.	1.0

Dorran Photonics, Inc.	1.0
Dynamit Nobel of American, Inc.	1.0
Edison Foam Processing Corp.	1.0
Electronic Measurements, Inc.	1.25
Esgraph, Inc.	.5
Esselte Pendaflex	1.0
Everlon, Inc.	.25
Fee & Mason Mfg. Co.	.2
Graphic Controls Corp, Cherry Hill	.5
Graphic Controls Corp., Newark	.5
Halcon Catalyst Industries	.8
Hampton Products Corp.	.5
Handy & Marman Electronic Materials Corp.	2.0
Hayden Publishing Co., Inc.	.25
Hygrade Printing Corp.	.2
Int'l Permalite, Inc.	1.5
Johnson & Johnson	1.0
Johnson Machinery Co., Inc.	.25
K-Tron Corp.Process Control Div.	.25
Kaysam Corp. of America - Totowa	1.0
Kaysam Corp. of America - Paterson	.25
Keystone Camera Corp.	1.0
Lab Glass, Inc. - Vineland	1.0
Lab Glass, Inc. - Vineland	.5
Lear Siegler Inc.	.5
Lipo Chemicals, Inc.	.5
Luna Machine Co.	.5
Lyco, Inc.	.2
Lydo Precision Products, Inc.	1.0
M.C. Canfield Sons - Edison	1.5
M.C. Canfield Sons - Union	.5
M/A Comlaser Diode, Inc.	1.5
Mack-Wayne Closures, Marlboro	1.0
Mack-Wayne Closures, Newton	1.0
Majestic Industries, Inc.	.5
Mark controls Reconditioning	.5
Melnor Industries, Inc.	.25
Mepco/Electra, Inc.	1.2
Meta Lite, Inc.	.5
Middletown Leather Co., Inc.	.5
Miranol Chemical co., Inc.	.5
Missbrenner Screen Engraving T/A Excel 4	1.0
Molins Machine Co.	.25
Monmouth Communications Corp	.25
Murray Tool & Manufacturing Co., Inc.	.5
NL Chemicals (USA) Inc.	1.0
North Atlantic Industries, Inc.	.5
Nova Medical Specialties Inc.	1.0
Onyx Chemical Company	3.0
Pantasote Inc., Printing	1.0
Pettit Paint Co.	.5
Polychrome Corp.	1.5
Pope Chemical Co.	1.0

Private Formulations, Inc.	1.0
PV/T Inc.	.15
Quartz Radiation Corp.	.5
R.B. Sandblasting, Inc.	.5
Rheem Textile Systems, Inc.	.75
Ridgewood Water Dept.	.25
RKO Tape Corp.	1.5
Roben Mfg. co., Inc.	.5
RTE Power/Mate Co.	1.0
Sealy Mattress Co. of New Jersey	.5
Shulton, Inc.	.25
Simmons manufacturing Co., Inc.	1.0
Sun Chemical Corp, Carlstadt	2.5
Sun Chemical Corp., General Printing Ink. E. Rutherford	1.5
Sun Chemical Corp., General Printing Ink Teterboro	.5
Sun Chemical Corp., Pigments Div. - Newark	2.5
Superior Fuse & Mfg. Co., Inc.	.5
Superior Tape Corp	.75
Supermarket Services, Inc.	2.0
Titan Corp., Indiana General Ferrite Div.	1.5
Toms River Publishing Co., Inc.	.25
Transamerica Corp. - Trenton	.75
Transamerica Corp. -Trenton	1.5
Transamerica Corp. - Florence	.75
Transamerica Delaval, Inc.	.15
Tri-Aerotech, Inc.	.25
Trontech, Inc.	1.5
Troy Lighting, Inc.	.5
United States Printing Ink Corp.	1.0
Universal Manufacturing Co., Inc.	.5
US Steel Corp. - American Bridge Div.	3.0
Versatile Metal Fabricators, Inc.	.5
Vinyl Building Products	1.0
Vonderahe Printing Services, Inc.	.5
W.R. Grace & Co. - Dewey & Almy Chem. Div.	1.0
Waltrich Plastic Corp.	1.0
Warner Manufacturing Corp.	1.5
Webcraft Technologies, Inc. - Metuchen	3.0
Webcraft Technologies, Inc. - Bldg. 3 North Brunswick	.5
Webcraft Technologies, Inc. - Bldg. 1 & 2 North Brunswick	1.5
Whippany Paper Board Co., Inc, - Clifton	.2
Whippany Paper Board Co., Inc - Hanover	2.5
Whippany Paper Board Co., Inc - Hanover	2.5
William Zinnser 7 Co.	1.0
Wilmad Glass Co., Inc.	1.0
Wilmad Glass Co., Inc.	.5
Yelof Corp	.5

\$120.1

New Jersey State Library

## APPENDICES

- A. Detailed Financial Information By Site (All Funds) as of December 31, 1986
- B. Major Site Status Information (Detailed)  
(April 1, 1986 - March 6, 1987)
- C. Hazardous Waste Management Program Organizational Chart

Detailed Financial Information by Site  
As of December 31, 1986

\*\*\*KEYS\*\*\*

SCF NJ Spill Compensation Fund Pre And Post Act  
GSF General State Funds And Capital Appropriations  
EPA US EPA Superfund  
CT - Contracts  
CP - Cooperative Agreements

\*\*\*NOTES\*\*\*

The "Net Authorized Amount" Column Is The Net Of Original  
Authorization Less Any De-Authorizations  
The "Expended Amounts" Column Includes Accounts Payable

(1) Includes The \$8M Radon Appropriation And The \$1.2M Woodland Twp  
Transfer

(3) Includes Only Amounts Authorized By The EPA

(4) Figures Unavailable

SCF-000 All Authorizations Codes "000" Are Those Sites That Amounts Were  
Expended At Prior To The Formal Authorization Process

MULTI All "MULTI" Site Authorizations Shown Are Summaries. The detail  
is on file with the Fiscal Integrity Unit.

APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
798-010	A O POLYMER	SCF-000	3,433	3,433
080-003	A O POLYMER	SCF-000	594,044	594,044
080-003	A O POLYMER	SCF-106	15,785	15,785
080-003	A O POLYMER	EPA-CP01	861,491	0
080-016	A-Z CHEMICAL	SCF-000	1,357,679	1,357,679
080-016	A-Z CHEMICAL	SCF-115A	8,340	8,340
MULTI	ABAND DRUM - CENTRAL POST-ACT	SCF-243-1	31,267	31,267
MULTI	ABAND DRUM - CENTRAL PRE-ACT	SCF-243	1,949	1,949
MULTI	ABAND DRUM - METRO POST-ACT	SCF-300-1	29,017	25,174
MULTI	ABAND DRUM - NORTH POST-ACT	SCF-270	25,000	20,794
087-046	ABERDEEN A D OLD BRIDGE	SCF-456	0	4,923
086-078	ABWAY FERTILIZER PLANT A D	SCF-411	5,000	2,507
086-025	ALBERT STEEL DM/PRENTISS DRUG	RP-001	26,000	0
086-025	ALBERT STEEL DM/PRENTISS DRUG	EPA-CP02	770,000	0
086-075	ALFRED PACKAGING A D	SCF-406	3,000	516
084-021	AMERICAN CYANAMID BOUND BROOK	SCF-197	2,285	2,285
084-020	AMERICAN CYANAMID LINDEN	SCF-198	7,000	1,555
084-038	AMR LABORATORIES	SCF-232	4,630	4,630
084-038	AMR LABORATORIES	SCF-232A	68,869	68,869
789-013	ARLINGTON WAREHOUSE NEWARK	SCF-000	1,239,634	1,239,634
086-031	ARTHUR BUNDAKER PROPERTY	SCF-345	20,000	12,713
085-126	ATLANTIC CITY ROW	SCF-274	1,000	1,000
798-014	ATLANTIC DEVELOP BAYREVILLE	SCF-000	50,586	50,586
080-007	ATLANTIC DEVELOP BAYREVILLE	SCF-000	306,998	306,998
085-156	ATLANTIC RESOURCES	SCF-348	7,000	5,681
085-156	ATLANTIC RESOURCES	SCF-348A1	40,000	35,600
085-156	ATLANTIC RESOURCES	SCF-348B	24,000	7,259
083-026	AYERS PURITAN	SCF-162	3,600	0
087-055	BAIRDSMORE ROAD WINSLOW	SCF-461	12,896	3,814
086-066	BALTIMORE AVE LINDEN A D	BSF-000	0	0
086-066	BALTIMORE AVE LINDEN A D	SCF-397	6,500	7,400
085-135	BARONE BARREL & DRUM KEARNY	SCF-291	5,697	5,697
082-081	BARONE BARREL & DRUM NEWARK	SCF-000	4,748	4,748
082-052	BARONE BARREL & DRUM PATERSON	SCF-000	276,872	276,872
080-010	BARRIER CHEMICAL	SCF-313	14,000	14,875
082-004	BAYONNE INDUSTRIES	SCF-000	16,213	16,213
084-006	BEACHWOOD/BERKELEY	EPA-CP03	632,540	158,696
086-008	BECKERVILLE ROAD A D	SCF-326	15,000	0

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
085-123	BEEF INTERNATIONAL	GSF-137	116	116
085-123	BEEF INTERNATIONAL	SCF-273	3,378	3,378
087-033	BELLEPLAIN STATE PARK	SCF-447	4,100	2,260
086-080	BELLEVILLE TURNPIKE A D	SCF-414	5,200	1,538
086-032	BELLMAR BORO ABAND DRUM	SCF-346	5,000	3,338
086-032	BELLMAR BORO ABAND DRUM	GSF-PEND	0	1,424
080-091	BERRY'S CREEK	RP-002	510,000	0
087-044	BIONDI AVE OLD BRIDGE	SCF-455	0	5,362
086-002	BLANCHARD ST ESSEX CO	SCF-384	132,500	106,934
086-074	BLANKE & BALTIMORE AVE A D	SCF-405	6,000	4,596
MULTI	BLANKET FIELD ANALY POST-ACT	SCF-375	100,000	5,103
MULTI	BLANKET PROPOSAL RI\FB	GSF-050	5,000,000	0
080-027	BLUE SPRUCE	SCF-000	12,940	12,940
080-027	BLUE SPRUCE	SCF-190	7,090	7,090
085-136	BODDER RESIDENCE	SCF-289	2,846	2,846
080-069	BOG CREEK FARM	EPA-CT01	1,350,010	0
080-069	BOG CREEK FARM EPA LEAD	GSF-033-1	0	0
084-007	BORNE CHEMICAL	GSF-002	2,375,000	82,662
084-007	BORNE CHEMICAL	SCF-250	11,000	8,815
086-003	BOXTER RESIDENCE	SCF-329	2,500	1,786
086-013	BRADLEY GARDENS WATER MAIN	GSF-003	119,621	74,881
084-034	BRADY IRON & METALS	SCF-225	41,133	41,133
084-034	BRADY IRON & METALS	SCF-225A	30,505	30,505
084-034	BRADY IRON & METALS	SCF-225B	16,517	16,517
084-034	BRADY IRON & METALS	SCF-225C	12,353	12,353
084-031	BRADY'S PUB BRANCHVILLE	SCF-223	4,074	4,074
086-016	BRASS CASTLE WATER MAIN EXT	GSF-016	2,800,000	1,905,337
086-053	BRICK TWP OCEAN COUNTY	GSF-047	875,000	0
080-028	BRIDGEPORT RENTAL (BROS)	SCF-000	30,867	30,867
080-028	BRIDGEPORT RENTAL (BROS)	GSF-011-1	969,000	0
080-028	BRIDGEPORT RENTAL (BROS)	GSF-077	3,160	0
080-028	BRIDGEPORT RENTAL (BROS)	GSF-078	3,260	56
080-028	BRIDGEPORT RENTAL (BROS)	SCF-151	807,800	807,800
080-028	BRIDGEPORT RENTAL (BROS)	SCF-151A	2,873	2,873
080-028	BRIDGEPORT RENTAL (BROS)	SCF-151C	2,220	2,220
080-028	BRIDGEPORT RENTAL (BROS)	EPA-CT02	12,593,631	0
080-028	BROS TANK REMOVAL EPA LEAD	GSF-030-2	0	0
080-002	BURNICK PISCATAWAY	SCF-000	13,505	13,505
086-042	BURLINGTON ENV MGT SERVICES	SCF-363	600,000	0

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-021	BURNT FLY BOG	SCF-000	74,659	74,659
080-021	BURNT FLY BOG	BSF-129	17,201,201	0
080-021	BURNT FLY BOG	SCF-177	2,320	2,320
080-021	BURNT FLY BOG	SCF-177A	2,629,574	6,614
080-021	BURNT FLY BOG	SCF-204	6,486	6,486
080-021	BURNT FLY BOG	SCF-350	4,759	4,659
080-021	BURNT FLY BOG	EPA-CP04	13,003,919	5,899,418
080-021	BURNT FLY BOG	BSF-PEND	0	3,365
080-021	BURNT FLY BOG REMEDIAL DESIGN	BSF-063	191,276	0
080-021	BURNT FLY BOG WESTERLY	BSF-105-1	0	0
080-021	BURNT FLY BOG/TYLER'S LANE	SCF-268	6,800	4,186
080-047	C P S MADISON	BSF-099	715,984	0
080-047	C P S MADISON	BSF-100	13,400	0
080-047	C P S MADISON	SCF-148	22,640	22,640
080-047	C P S MADISON	SCF-148A	34,016	34,016
886-020	CALDWELL TRUCKING	EPA-CT03	600,000	0
883-048	CALGON HAWTHORNE	SCF-192	2,000	2,000
887-041	CARBON PLACE ABAND LAB PACKS	BSF-108	25,000	6,651
887-041	CARBON PLACE ABAND LAB PACKS	SCF-377	0	0
080-075	CHEESWAKE STATE PARK	SCF-236	11,732	11,732
789-017	CHEMICAL CONTROL	SCF-000	24,797,107	24,797,107
789-017	CHEMICAL CONTROL	SCF-000	56,457	56,457
789-017	CHEMICAL CONTROL	SCF-114	3,198	3,198
789-017	CHEMICAL CONTROL	SCF-114A	17,321	17,321
789-017	CHEMICAL CONTROL	SCF-114B	0	0
789-017	CHEMICAL CONTROL	SCF-114C	4,735	4,735
789-017	CHEMICAL CONTROL	SCF-114D	40,715	40,715
789-017	CHEMICAL CONTROL	BSF-139	230,000	0
789-017	CHEMICAL CONTROL	EPA-CT04	782,500	0
080-065	CHEMICAL INSECTICIDE	SCF-188	48,718	48,718
080-065	CHEMICAL INSECTICIDE	SCF-188A	11,443	11,443
886-021	CINNAMINSON TWP	EPA-CT05	700,000	0
PENDING	COAL GAS LEVEL EFFORT	SCF-389	500,000	0
885-002	COMBE FILL NORTH	BSF-055	47,300	23,607
885-002	COMBE FILL NORTH	SCF-245-1	0	0
885-002	COMBE FILL NORTH	SCF-307	20,748	20,748
	COMBE FILL NORTH	EPA-CP05	470,513	512,713

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-068	COMBE FILL SOUTH	GSF-093	3,101	0
080-068	COMBE FILL SOUTH	GSF-119	117,991	4,400
080-068	COMBE FILL SOUTH	SCF-304-1	46,099	39,159
080-068	COMBE FILL SOUTH	SCF-304A	143,473	105,065
080-068	COMBE FILL SOUTH	EPA-CP06	813,673	377,085
080-068	COMBE FILL SOUTH (FS)	GSF-083	10,000	0
080-068	COMBE FILL SOUTH SAMPLING	GSF-120	100,250	59,050
084-027	COOPER RIVER ABAND DRUM	SCF-210	0	0
085-129	CODDEN CHEMICAL COATINGS	GSF-005	367,000	310,990
085-129	CODDEN CHEMICAL COATINGS	SCF-280	155,000	154,121
085-129	CODDEN CHEMICAL COATINGS	GSF-PEND	0	156
086-037	COTT BEVERAGE ABAND DRUM	SCF-357	25,000	0
086-037	COTT BEVERAGE ABAND DRUM	GSF-PEND	0	11,691
085-150	CURTIS PROPERTY	GSF-015	35,000	20,510
085-150	CURTIS PROPERTY	GSF-060	24,150	0
085-150	CURTIS PROPERTY	SCF-315	50,000	32,760
085-150	CURTIS PROPERTY	GSF-PEND	0	1,715
080-054	D' IMPERIO	SCF-132	374,797	374,797
080-054	D' IMPERIO	EPA-CT07	5,321,437	0
080-054	D' IMPERIO EPA LEAD	GSF-031-2	0	0
084-039	DALES TAVERN	SCF-235-2	100,000	50,446
080-084	DATA ACQUISITION	SCF-109	75,000	7,034
084-000	DATA ACQUISITION	SCF-109	60,000	515
080-094	DELILAH ROAD	EPA-CP07	677,630	100,451
086-052	DENZER & SCHAFFER	GSF-045	700,000	0
085-125	DEPTFORD DRUM DUMP	SCF-279	1,050	1,050
080-104	DEREWAL CHEMICAL CO	GSF-121	21,000	0
080-104	DEREWAL CHEMICAL CO	SCF-306	0	0
080-104	DEREWAL CHEMICAL CO	EPA-CT06	600,000	0
	DEVELOP HAZ MBT PLAN (ICF INC)	GSF-004	247,469	123,255
080-064	DIAMOND ALKALI	GSF-006	1,483	40,517
080-064	DIAMOND ALKALI	GSF-120	30,140	0
080-064	DIAMOND ALKALI	SCF-187	110,781	119,781
080-064	DIAMOND ALKALI	SCF-187A	40,517	0
080-064	DIAMOND ALKALI	SCF-242	0,111	0,111
080-064	DIAMOND ALKALI	SCF-266	120,450	120,450
085-114	DIAMOND SHAMROCK	GSF-095	20,000	0
085-114	DIAMOND SHAMROCK	SCF-344	17,500	16,250
085-114	DIAMOND SHAMROCK QUALITY REV	GSF-140	101,000	0

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
	DISPOSAL GUIDELINES	GSF-026	100,000	0
085-154	DONOHUE RESIDENCE	SCF-322	870	870
087-003	DOVER TWP WATER EXT	SCF-424	634,400	0
MULTI	DRUM DUMP ROUNDUP POST-ACT	SCF-238	91,985	91,985
MULTI	DRUM DUMP ROUNDUP PRE-ACT	SCF-238	0	0
080-066	DUCK ISLAND	SCF-189	17,305	17,305
080-101	EASTERN CHEMICAL	SCF-196	7,000	4,000
086-069	EDGEWATER INDUSTRIAL PARK	SCF-393	50,000	45,845
798-010	EDGEWATER PARK WILLINGBORO	SCF-000	16,273	16,273
081-001	EDGEWOOD BORO LF E BRUNSWICK	SCF-000	76,949	76,949
087-001	EDSAL BLVD ABAND DRUM	SCF-422	7,000	1,616
087-011	EGG HARBOR WATER MAIN	SCF-409	2,243,000	0
080-015	EL CID HOWELL TWP	SCF-000	25,515	25,515
085-152	ELIZABETH IRON WORKS	BSF-002	50,000	18,824
085-152	ELIZABETH IRON WORKS	SCF-316	8,000	5,000
082-000	ELLIS PROPERTY	EPA-CP09	450,000	26,210
MULTI	EMERGENCY SAMPLING POST-ACT	SCF-170	16,004	15,931
MULTI	EMERGENCY SAMPLING PRE-ACT	SCF-170	740	740
086-030	ENFORCEMENT SAMPLES	BSF-PEND	0	7,596
083-043	ETRA LAKE HIGHTSTOWN	SCF-184	1,177	1,177
080-051	EVOR-PHILLIPS	SCF-104	7,912	7,912
080-051	EVOR-PHILLIPS RIVRS	BSF-051	714,030	0
080-063	EWAN PROPERTY	SCF-103	12,747	12,747
080-063	EWAN PROPERTY	EPA-CT08	500,000	0
080-013	FABOCA JAMESBURG	SCF-000	10,459	10,459
086-049	FAIRCLOUGH OIL SPILL	SCF-378	12,000	8,977
087-010	FENO PROPERTY	SCF-420	10,500	8,754
087-013	FERGUSON RESIDENCE	GSF-050	6,100	830
MULTI	FIELD SAMPLING POST-ACT	SCF-374	100,000	4,895
798-016	FLORA ST ELIZABETH	SCF-000	25,961	25,961
080-100	FLORENCE LANDFILL	SCF-214	650	650
080-100	FLORENCE LANDFILL	SCF-290	0	0
080-100	FLORENCE LANDFILL	EPA-CP10	556,670	250,457
085-122	FOUNDRY STREET	SCF-272	7,262	7,262
080-000	FRANKLIN MINES FRANKLIN TWP	SCF-000	11,280	11,280
083-009	FRANKLINVILLE DRUM DUMP	SCF-153	6,490	6,490
085-147	FRELINGHUYSEN AVE (200) A D	SCF-310	25,000	7,890
085-142	FRELINGHUYSEN AVENUE	SCF-301	0.400	1,352

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-017E	FRIEDMAN PROPERTY	SCF-137	24,249	0
080-017E	FRIEDMAN PROPERTY	EPA-CP11	204,277	140,149
080-061	FRONTAGE ROAD	SCF-168	10,000	0
084-019	GAF CORP LINDEN	SCF-200	2,285	2,285
084-019	GAF CORP LINDEN	SCF-320	21,000	0
086-079	GAMERAL ELECT SUPP HILLSIDE	SCF-412	12,075	5,907
086-046	GARDEN STATE PKY EXIT 159	SCF-369	5,000	176
086-046	GARDEN STATE PKY EXIT 159	GSF-PEND	0	3,472
080-041	GEMS LANDFILL	SCF-000	22,333	22,333
085-128	GEMS LANDFILL	GSF-064	375,000	117,564
080-041	GEMS LANDFILL	GSF-107	250,000	162,901
080-041	GEMS LANDFILL	GSF-109	15,569	4,999
080-041	GEMS LANDFILL	GSF-110	75,000	54,924
080-041	GEMS LANDFILL	GSF-111	0	2,406
080-041	GEMS LANDFILL	GSF-112	0	0
080-041	GEMS LANDFILL	SCF-113A	250,000	250,000
080-041	GEMS LANDFILL	SCF-113B	33,500	33,500
080-041	GEMS LANDFILL	SCF-113D	85,000	85,000
080-041	GEMS LANDFILL	SCF-113E	3,729	3,729
080-041	GEMS LANDFILL	SCF-113F	0	0
080-041	GEMS LANDFILL	SCF-275	30,400	30,000
085-128	GEMS LANDFILL	SCF-276	5,294	5,294
080-041	GEMS LANDFILL	SCF-284	112,211	110,931
080-041	GEMS LANDFILL	SCF-284B	40,864	28,542
085-128	GEMS LANDFILL	SCF-366	124,251	46
080-041	GEMS LANDFILL	EPA-CP12	2,293,936	0
080-041	GEMS LANDFILL	EPA-CT10	472,500	0
085-128	GEMS LANDFILL	GSF-PEND	0	223,621
080-041	GEMS LANDFILL	GSF-PEND	0	400
085-128	GEMS LANDFILL EMER GAS COLLECT	SCF-351	600,000	373,261
080-041	GEMS LANDFILL EPA LEAD	GSF-034	5,325,000	212,938
PENDING	GENERAL SITE LEVEL OF EFFORT	SCF-388	500,000	0
084-023	GIVAUDAN CORP	SCF-199	7,000	3,300
087-036	GLASSBORO WILDLIFE	SCF-450	5,428	2,317
083-038	GOLD LION TAVERN	SCF-172	960	960
778-002	GOLDLEAF TRUCKING	SCF-000	143,022	143,022
080-017A	GOOSE FARM	SCF-000	5,032,100	5,032,100
080-017A	GOOSE FARM	GSF-132	15,405	0
080-017A	GOOSE FARM	SCF-136	0	0

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SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-017A	GOOSE FARM	SCF-136B	34,595	34,595
080-017A	GOOSE FARM	EPA-CP13	210,000	163,398
081-009	GORDON SERVICES JERSEY CITY	SCF-000	222,713	222,713
081-043	GRAND ST GARFIELD (44)	SCF-000	18,762	18,762
081-043	GRAND ST GARFIELD (44)	SCF-171	945	945
083-041	GRAND ST PATERSON (316)	SCF-182	25,332	25,332
080-095	GRAVEL PIT PLUMSTEAD TWP	GSF-061	700,000	0
080-044	GREEN ACRES LANDFILL WARREN	SCF-000	10,274	10,274
085-046	GREEN ACRES/FRELINGHUYSEN	SCF-264-1	90,000	64,389
085-046	GREEN ACRES/FRELINGHUYSEN	GSF-PEND	0	1,009
085-151	GREEN BROOK GETTY	SCF-314	2,036	2,436
087-019	GUND INDUSTRIES	SCF-432	12,050	2,442
789-001	HAMMONTON	SCF-000	49,762	49,762
789-005	HAMMONTON	SCF-000	195	195
083-013	HARLEIGH	SCF-163	2,192	2,192
087-020	HARRIS STEEL	SCF-437	3,450	918
080-025	HARRISON LANDFILL CAMDEN	SCF-000	12,162	12,162
084-025	HARVEY CEDARS DPW ARAND DRUM	SCF-216	482	482
086-076	HAWTHORNE PARK A D	SCF-407	3,000	1,004
087-050	HEALEY MUBPYG	SCF-PEND	0	1,045
087-026	HENRY HARRIS LANDFILL	SCF-448	0	11,430
085-077	HERBERT PLACE NEWARK	SCF-261	2,599	2,599
086-060	HIGGINS FARM FRANKLIN TWP	SCF-392	95,000	34,336
085-137	HIGH CROSS BRIDGE DRUM	SCF-290	1,899	1,899
085-049	HIGHPOINT SANITARY LANDFILL	GSF-000-1	3,700,000	3,397,072
085-049	HIGHPOINT SANITARY LANDFILL	SCF-297-1	2,185,000	826,200
085-049	HIGHPOINT SANITARY LANDFILL	SCF-402	77,050	0
085-049	HIGHPOINT SANITARY LANDFILL	SCF-429	70,000	0
084-035	HILDEMANN	SCF-219	51,198	51,198
084-035	HILDEMANN	SCF-219A	0	0
087-001	HILLCREST BLVD (200) A D	SCF-431	5,000	0
083-006	HOECHST HOUSE	SCF-161	3,860	3,860
086-012	HOLLY CHEMICAL	SCF-340	150,000	55,234
086-012	HOLLY CHEMICAL	GSF-PEND	0	20,607
080-086	HOPKINS FARM (RI/FB)	GSF-065	900,000	0
080-083	HORSESHOE ROAD SAYREVILLE	GSF-022	20,000	6,400
080-083	HORSESHOE ROAD SAYREVILLE	SCF-299	25,000	17,290
080-083	HORSESHOE ROAD SAYREVILLE	SCF-365	700,000	0
080-083	HORSESHOE ROAD SAYREVILLE	GSF-PEND	0	517

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SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
086-036	HUNTER BT PUMP STAT WOODBURY	SCF-356	6,031	6,372
087-027	HYLAND RESIDENCE	SCF-442	750	713
085-001	I-295 CONSTRUCTION SITE	SCF-246	14,880	14,880
087-040	IDAKAAR RESIDENCE ROXBURY TWP	SCF-457	4,810	0
080-035	IMPERIAL OIL	SCF-000	3,841	3,841
080-035	IMPERIAL OIL	EPA-CP14	842,614	0
086-011	INDUSTRIAL LATEX CO	SCF-336	15,000	14,295
087-034	INTER FLAVORS & FRAG RI/FS	GSF-141	700,000	0
MULTI	INTERDEPARTMENT SAMP POST-ACT	SCF-178	32,500	1,032
MULTI	INTERDEPARTMENT SAMP PRE-ACT	SCF-178	107,500	11,462
086-041	ISLAND BEACH STATE PARK	GSF-138	1,246	256
086-041	ISLAND BEACH STATE PARK	SCF-339	540	1,562
086-067	J T BAKER PHILLIPSBURG	SCF-382	70,000	0
086-057	JACKSON TWP LAB PACKS	GSF-133	6,066	5,040
086-057	JACKSON TWP LAB PACKS	SCF-380	0	1,018
082-061	JERSEY CITY	SCF-000	27,113	27,113
085-140	JERSEY CITY ABAND TANKERS	GSF-094	120,000	126,966
085-140	JERSEY CITY ABAND TANKERS	GSF-PEND	0	0,245
085-140	JERSEY CITY ABANDONED TANKER	SCF-308-1	714	714
084-036	JERSEY CITY CHROMIUM	SCF-229	13,282	13,282
084-036	JERSEY CITY CHROMIUM	SCF-254	2,425,500	94,178
087-015	JERSEY CITY STATE COLLEGE	BCF-420	66,000	23,100
087-016	JONES INDUST SERV (RI/FS) (J18)	GSF-067	700,000	0
080-062	KEARNY 1-5/KEARNY	SCF-164	5,520	5,520
080-062	KEARNY DRUM DUMP NO 3	GSF-042	100,000	0
086-081	KEARNY SEWER PLANT A D	SCF-415	0,400	3,769
080-102	KENILWORTH NORTH 9TH ST	SCF-241	1,454	1,454
080-043	KIN BUC	SCF-017A	0,463	0,463
080-043	KIN BUC	SCF-117	311,111	311,111
080-043	KIN-BUC	EPA-CT11	2,000,000	0
085-056	KINSLEY LANDFILL	SCF-256	25,000	0,184
084-032	KOOPERS COKE CO	SCF-226	25,000	0
080-037	KRAMER LANDFILL MANTUA	SCF-000	424,013	424,013
080-037	KRAMER LANDFILL MANTUA	EPA-CT12	2,425,000	0
080-037	KRAMER LANDFILL MANTUA EPA	GSF-029-1	0	0
086-007	KRUZ RESIDENCE	SCF-334	2,500	2,461
080-038	KRYSOWATY	SCF-000	10,092	10,092
080-038	KRYSOWATY	GSF-071	3,540	1,917
080-038	KRYSOWATY	SCF-105A	30,000	30,000

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SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-038	KRYSOWATY	BCF-105B	28,479	28,479
080-038	KRYSOWATY	BCF-204	7,614	7,614
080-038	KRYSOWATY	SCF-282	800,127	800,127
080-038	KRYSOWATY	BCF-282A	2,929	1,012
080-038	KRYSOWATY	SCF-390	360,000	360,000
080-038	KRYSOWATY	EPA-CT13	3,990,000	0
080-038	KRYSOWATY WATER MAIN EXT	GSF-036	372,261	359,660
086-063	LAKE OWASSA OIL SPILL	GSF-062	0	0
086-063	LAKE OWASSA OIL SPILL	SCF-390	14,100	12,579
085-131	LAKE STOCKHOLM	SCF-285	2,100	1,728
086-064	LAKEHURST EXXON STATION	GSF-081	0	0
086-064	LAKEHURST EXXON STATION	SCF-400	250,000	235,805
086-009	LAKEHURST NAVEL AIR STATION	GSF-114	100,000	17,395
086-009	LAKEHURST NAVEL AIR STATION	SCF-337	74,000	63,141
086-009	LAKEHURST NAVEL AIR STATION	SCF-362	0	62,119
086-009	LAKEHURST NAVEL AIR STATION	GSF-PEND	0	10,962
081-004	LAKELAND REG HS SM ABAND DRUM	BCF-000	282,403	282,403
081-004	LAKELAND REG HS SM ABAND DRUM	BCF-143	5,000	3,979
081-004	LAKELAND REG HS SM ABAND DRUM	SCF-143A	300,000	165,121
087-021	LALOR ST ABAND DRUM	BCF-434	3,450	2,742
087-006	LANDFILL & DEVELOP LF (L & D)	GSF-125	13,940	12,025
084-020	LAVELLETTA ABAND DRUM	BCF-220	990	990
082-080	LEONIA PETROLEUM	BCF-128A	106,000	93,355
082-080	LEONIA PETROLEUM	BCF-128B	200,000	0
080-014	LIBERTY STATE PARK	BCF-000	42,832	42,832
080-055	LIPARI LANDFILL	BCF-133	279,630	279,630
080-055	LIPARI LANDFILL	SCF-133A	5,265	5,265
080-055	LIPARI LANDFILL	EPA-CT14	5,150,744	0
080-055	LIPARI LANDFILL EPA LEAD	GSF-020-2	0	0
084-024	LITTLE EGG HARBOR ABAND DRUM	BCF-215	3,000	2,750
083-040	LITTLE SILVER	BCF-185	8,392	8,392
081-015	LITTLE SILVER CLEANERS	BCF-000	33,067	33,067
086-027	LODI WELLS	GSF-038	53,000	27,730
086-027	LODI WELLS	GSF-115	700,000	700,000
086-027	LODI WELLS	EPA-CT15	0	0
080-049	LONE PINE LANDFILL	BCF-110	33,333	33,333
080-049	LONE PINE LANDFILL	SCF-110A	2,060	2,060
080-049	LONE PINE LANDFILL	GSF-122	7,940	356

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SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-049	LONE PINE LANDFILL	SCF-359	3,205	3,205
080-049	LONE PINE LANDFILL	EPA-CT16	300,000	0
080-049	LONE PINE LANDFILL EPA LEAD	BSF-032	14,016,000	0
086-059	LOVELAND CORP A D	SCF-386	10,000	3,166
086-059	LOVELAND CORP A D	GSF-PEND	0	3,364
087-007	LOWER MILL ROAD	SCF-335	138	0
087-007	LOWER MILL ROAD	GSF-PEND	0	138
086-033	LUTHERAN HOME DENNIS TWP	SCF-352	13,500	187
086-033	LUTHERAN HOME DENNIS TWP	GSF-PEND	0	8,081
080-011	MADISON CIRCLE RD EAST RUTHER	SCF-000	16,071	16,071
083-044	MALGA TRAILER PARK	SCF-181	1,863	1,863
083-037	MANASQUAN WILDLIFE REFUGE	SCF-173	10,000	1,250
084-029	MARMORA GROUNDWATER	SCF-222	20,852	20,852
084-002	MATCHAPONIX RD	SCF-206	600	600
086-010	MEADOW RD WOODBRIDGE	SCF-338-1	34,000	29,259
087-017	MEDFORD ABAND DRUM	SCF-433	4,600	7,661
PENDING	METALGRAPHIC	SCF-PEND	0	125
086-023	METALTEC/AEROSYSTEMS	EPA-CT17	500,000	0
086-039	MIDDLE TWP WATER SUPPLY SYS	BSF-043	725,000	0
087-022	MIDDLESEX BORO HALL A D	SCF-436	4,025	1,344
086-070	MILLER PARK DRUG DUMP	SCF-394	10,000	6,380
080-079	MILLMASTER ONYX, GULF	BSF-039	7,500	2,400
080-079	MILLMASTER ONYX, GULF	SCF-191	5,000	3,300
087-008	MINSEI KOSYO SHOJI	SCF-408	10,000	0
080-085	MIREX	SCF-210	3,500	1,950
080-085	MIREX	SCF-269	50,000	16,074
084-001	MOBIL OIL	SCF-205-2	60,206	60,206
085-141	MODERN TREND AUTO BODY	SCF-206	2,898	2,898
086-051	MONITORING DEVICES	BSF-044	700,000	0
084-018	MONSANTO CHEMICAL CAMDEN	SCF-213	1,000	1,000
080-099	MONTGOMERY TWP	EPA-CP16	643,434	240,127
087-002	MONTVILLE TWP MORRIS CO	SCF-443	719,400	0
087-013	MOVIE LABS ABAND DRUM	SCF-417	15,000	7,216
085-050	MT LAUREL DRUM DUMP	SCF-251	1,702	1,702
086-004	MULLICA TWP POLICE BARRACKS	SCF-330	10,000	4,388
086-004	MULLICA TWP POLICE BARRACKS	BSF-PEND	0	53
082-058	MYERS PROPERTY PITTSTOWN	SCF-000	4,000	4,000
082-058	MYERS PROPERTY PITTSTOWN	EPA-CT18	525,000	0
086-001	Mc GRIRE AFB (BONARC)	SCF-358	50,000	32,641

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SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
087-017	N L INDUSTRIES	RP- 003	50,000	22,240
086-054	NABISCO ABAND DRUMS	SCF-372	6,100	1,067
086-054	NABISCO ABAND DRUMS	GSF-PEND	0	3,180
086-016	NASCOLITE	GSF-007	40,000	0
086-016	NASCOLITE	EPA-CP17	540,000	587,550
087-024	NATIONAL DIAGNOSTIC WATER MAINS	GSF-046-1	1,467,000	0
087-024	NATIONAL DIAGNOSTICS	SCF-439	11,000	0
085-127	NAVEL WEAPONS STATION EARLE	GSF-113-1	41,635	2,000
085-127	NAVEL WEAPONS STATION EARLE	SCF-271	18,315	19,453
087-023	NAYLON AVE A D	SCF-441	39,000	26,440
086-065	NEWARK BAY ACID DRUM	GSF-069	0	0
086-065	NEWARK BAY ACID DRUM	SCF-395	6,200	3,711
086-020	NEWARK DRIVE-IN DIOXIN	SCF-341	4,320	2,160
080-012	NEWARK STAMP & DYE	SCF-000	113,934	113,934
085-003	NEWTON CREEK	SCF-240	1,843	1,843
086-035	NINTENDO AMERICA A D	SCF-354	5,000	1,904
086-035	NINTENDO AMERICA A D	GSF-PEND	0	1,174
087-035	NINTH AVE AD	SCF-449	4,500	2,102
MULTI	NON-SUPERFUND INVEST POST-ACT	SCF-176	64,000	7,916
MULTI	NON-SUPERFUND INVEST PRE-ACT	SCF-176	8,000	0
MULTI	NON-SUPERFUND SAMPL PRE-ACT	SCF-175	89,000	18,493
081-002	NORTH 25 HOUSING TRENTON	SCF-000	31,141	31,141
080-022A	NORTH BERGEN DRUM DUMP	SCF-000	8,836	8,836
080-022A	NORTH BERGEN DRUM DUMP	SCF-134	62,103	62,103
087-011	NORTH HOOK ROAD ABAND DRUM	GSF-104	48,000	4,310
080-009	NORTHERN FINES FRANKLIN TWP	SCF-000	157,348	157,348
086-029	NORTHVALE DPW ABAND DRUM	SCF-342	5,000	2,754
085-078	OAKLAND MILLS RD	SCF-259	2,024	2,024
087-049	OAKRIDGE SCORE SERVICE STATION	SCF-450	3,300	0
084-010	OLD BRIDGE ABAND DRUM	SCF-212	480	480
086-002	OLD DELSEA DR MALAGA A D	GSF-134	273	273
086-002	OLD DELSEA DR MALAGA A D	SCF-328	0	0
MULTI	OSR SITE PLAN REVIEWS PRE-ACT	SCF-174	4,010	2,984
086-015	OTTILLIO LANDFILL	GSF-006	510,664	0
086-043	OYSTER SEED BED (RUTBER'S)	SCF-364	15,000	6,000
080-059	P J P LANDFILL	GSF-010-1	19,090,550	17,085,221
080-059	P J P LANDFILL	GSF-090	19,021	8,786
080-059	P J P LANDFILL	GSF-091	200,000	0
080-059	P J P LANDFILL	GSF-096	4,366,003	4,243,314

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SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-017D	PIJAK FARM	EPA-CP19	292,500	167,895
080-017D	PIJAK FARM - SAMPLING	SCF-360	0	0
085-146	PILOT WOODWORKING DRUMS	SCF-310	1,219	1,219
084-009	POMONA OAKS	GSF-098-1	2,595,973	141,345
084-009	POMONA OAKS	GSF-117	700,000	700,000
084-009	POMONA OAKS	SCF-239	1,485,027	1,469,470
084-009	POMONA OAKS	EPA-CT19	0	0
	POTABLE WELL SAMPLING	GSF-041	100,000	0
082-096	POWER TEST	SCF-141	25,404	25,404
087-051	POWERS FARM OCEAN CO	SCF-454	60,000	0
085-065	PRATT GABRIEL	SCF-324A	180,000	0
085-065	PRATT GABRIEL	SCF-324	50,000	40,000
085-065	PRATT GABRIEL	SCF-347	6,000	3,598
MULTI	PRE-AUTH SITES **** POST-ACT	SCF-000	189,024	189,024
MULTI	PRE-AUTH SITES **** PRE-ACT	SCF-000	20,146	20,146
080-039	PRICE'S LANDFILL	SCF-000	37,471	37,471
080-039	PRICE'S LANDFILL	SCF-146	1,236,265	10,692
080-039	PRICE'S LANDFILL	SCF-146A2	2,065	2,065
080-039	PRICE'S LANDFILL	SCF-146B	2,087	2,087
080-039	PRICE'S LANDFILL	SCF-146C	0	0
080-039	PRICE'S LANDFILL	SCF-146D	214,000	214,000
080-039	PRICE'S LANDFILL	EPA-CP20	6,035,736	4,876,539
080-039	PRICE'S LANDFILL	EPA-CT20	225,000	0
080-039	PRICE'S LANDFILL #2 & #3	GSF-110	300,935	0
084-009	PRINCETON TWP WATER DEPT	SCF-211	1,125	1,125
084-034	PUBLIC INFO DIOXIN BRADY I &	MSCF-244A	502	502
080-064	PUBLIC INFO DIOXIN DIA ALKALI	SCF-244	503	503
085-143	PULASKI SKYWAY	SCF-303	4,000	3,601
085-054	PYRAMID TRUCKING	SCF-250	6,766	6,766
082-057	QUANTA	SCF-000	980	980
082-057	QUANTA	SCF-169	448	448
082-057	QUANTA	EPA-CT21	2,839,500	0
082-057	QUANTA - STATE SHARE	GSF-017	0	0
084-042	RADON CONSTRUCTION MBT	GSF-035	6,500,000	2,080,136
MULTI	RADON PILOT SOIL REM POST-ACT	SCF-253	652,509	658,866
MULTI	RADON PILOT SOIL REM POST-ACT	SCF-349	0	0
VARIOUS	RADON PILOT SOIL REMOVAL	GSF-092	89,151	0
VARIOUS	RADON PILOT SOIL REMOVAL	GSF-130	47,491	47,964
084-042	RADON PILOT SOIL REMOVAL	GSF-000	8,000,000	3,102,362

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SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
000-059	P J P LANDFILL	GSF-097	23,067	41,281
000-059	P J P LANDFILL	SCF-201	5,979	6,792
000-059	P J P LANDFILL	SCF-201A	11,732	11,732
005-130	P J P LANDFILL	SCF-203-1	356,933	315,652
005-130	P J P LANDFILL	SCF-203A	0	0
005-130	P J P LANDFILL	SCF-203B	1,133,996	1,626,935
006-077	P P 0 ABAND DRUM	SCF-410	3,000	630
006-053	P B E & 0 ROW HAMILTON TWP	GSF-135	944	944
006-053	P B E & 0 ROW HAMILTON TWP	SCF-376	0	35
006-072	PALISADES AVE A D (1650)	SCF-401	6,000	5,353
006-043	PARSIPPANY-TROY HILLS A D	SCF-360	3,000	0
006-043	PARSIPPANY-TROY HILLS A D	GSF-PEND	0	1,023
007-031	PATERSON MAINT YARD	SCF-446	9,100	1,909
006-044	PATTERSON ROAD JACKSON TWP	GSF-059	5,000	1,699
006-044	PATTERSON ROAD JACKSON TWP	SCF-367	90,000	90,923
005-132	PENN AVE 1500 BLOCK/LINDEN	SCF-287	1,420	1,420
000-090	PEPE FIELD	EPA-CP10	652,924	200,767
005-140	PERICE PROPERTY HILLTOP	SCF-294	3,021	3,021
005-155	PERILLO RESIDENCE	SCF-327	1,076	1,076
007-012	PERONA TIRE FIRE HAMMONTON	SCF-413	12,500	10,953
007-012	PERONA TIRE FIRE HAMMONTON	SCF-459	60,000	0
770-001	PERRINEVILLE	SCF-000	11,307	11,307
001-007	PERTH AMBOY FIRE	SCF-000	17,046	17,046
001-020	PERTH AMBOY PCB (WITCO)	SCF-000	95,474	95,474
001-020	PERTH AMBOY PCB (WITCO)	SCF-193	25,000	24,444
001-020	PERTH AMBOY PCB (WITCO)	SCF-193A	470,000	305,505
001-020	PERTH AMBOY PCB (WITCO)	SCF-193B	350,000	40,016
001-020	PERTH AMBOY PCB (WITCO)	SCF-193C	0,000	0
001-020	PERTH AMBOY PCB (WITCO)	SCF-203	6,000	0
001-020	PERTH AMBOY PCB (WITCO) (RI/FS)	GSF-040	1,200,000	90,000
MULTI	PHASE II DIOXIN INVEST BLANKET	GSF-054	50,000	3,150
MULTI	PHASE II DIOXIN POST-ACT	SCF-240	141,575	141,344
MULTI	PHASE II DIOXIN POST-ACT	SCF-240A	174,780	171,074
MULTI	PHASE II DIOXIN PRE-ACT	SCF-240	6,425	6,425
MULTI	PHASE II DIOXIN PRE-ACT	SCF-240A	4,212	4,212
007-005	PHILADELPHIA AVE ABAND DRUM	SCF-426	4,100	2,653
000-017D	PIJAK FARM	SCF-000	966	966
000-017D	PIJAK FARM	GSF-072	25,000	0
000-017D	PIJAK FARM	SCF-135	25,603	0

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
884-040	RADON/GLEN RIDGE	GSF-103	26,605	5,865
884-040	RADON/GLEN RIDGE	SCF-234	27,371	28,209
884-040	RADON/GLEN RIDGE	EPA-CT23	700,000	0
884-042	RADON/MONTCLAIR	GSF-102	46,670	37,349
884-042	RADON/MONTCLAIR	SCF-233	67,945	70,200
884-042	RADON/MONTCLAIR-WEST ORANGE	EPA-CT22	700,000	0
884-041	RADON/WEST ORANGE	GSF-101	117,672	2,619
884-041	RADON/WEST ORANGE	SCF-227	7,737	8,059
887-023	RAND RD DRUM DUMP	SCF-435	12,050	1,867
887-032	RARITAN & VAL ST BAYREVILLE	SCF-445	6,500	3,926
881-018	RENORA	SCF-202	656	656
883-047	RESEARCH ORGANIC/INORGANIC	SCF-383	11,000	0
883-047	RESEARCH ORGANIC/INORGANIC	SCF-421	700,000	0
883-047	RESEARCH ORGANIC/INORGANIC	GSF-052	55,000	0
883-047	RESEARCH ORGANIC/INORGANIC	SCF-186-1	95,000	70,581
883-047	RESEARCH ORGANIC/INORGANIC	SCF-277	1,260,000	1,167,969
883-047	RESEARCH ORGANIC/INORGANIC	SCF-277A	142,000	108,153
884-022	RHONE POULINE	SCF-194	1,000	1,000
885-139	RICCARDI OIL SPILL	SCF-295	5,000	3,187
885-010	RIDGEFIELD	SCF-265-1	32,456	32,456
887-004	RINGOES ABAND DRUM	SCF-425	8,700	4,389
881-014	RINGWOOD WEST MILLFORD	SCF-000	1,097,482	1,097,482
886-005	ROBBINS RESIDENCE	SCF-332-1	50,000	23,652
886-005	ROBBINS RESIDENCE	GSF-PEND	0	4,945
885-052	ROBERTS RD/WATERS NURSERY	SCF-255	5,635	5,635
884-004	ROCKAWAY BORO WELLS	SCF-296	0	0
884-004	ROCKAWAY BORO WELLS	EPA-CP22	421,447	284,445
887-012	ROCKAWAY TWP RI/FS	GSF-106	857,000	0
886-026	ROCKY HILL WELLFIELD	EPA-CP23	620,192	182,408
882-039	ROEBLING COMPLEX	SCF-000	215	215
882-039	ROEBLING COMPLEX	SCF-247	7,353	7,353
882-039	ROEBLING COMPLEX	EPA-CT24	500,000	0
887-029	ROUTE 1 & 9 DRUM FIRE	SCF-430	7,000	5,608
884-026	ROUTE 22 LAKEWOOD A D	SCF-217	892	892
881-000	ROUTE 35, MILE MARKER 49	SCF-000	2,078	2,078
881-000	ROUTE 35, MILE MARKER 49	SCF-312	2,237	2,237
887-060	ROUTE 9 LABPACKS BERKELEY	SCF-453	5,000	2,464
884-043	S C P CARLSADT	SCF-237	0	0
885-134	S C P NEWARK	SCF-292	12,987	12,987

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
885-134	B C P NEWARK	SCF-292A	247	247
886-038	SAMPLE DISPOSAL ENFORCEMENT	SCF-355	96,672	30,904
798-017	SAMPSON TANK CONRAIL YARD J C	SCF-000	140,007	140,007
880-026	SAYREVILLE LANDFILL	SCF-000	1,960	1,960
880-026	SAYREVILLE LANDFILL RI/FS	GSF-021	901,202	0
887-003	SCHUESSLER RESIDENCE	SCF-460	7,735	0
886-058	SECOND RIVER OIL SPILL	SCF-385	5,000	3,615
884-037	SERIN PROPERTY FRANKLIN BORO	SCF-231	2,000	0
886-071	SERVICE RD "F" A D	SCF-396	8,000	241
880-070	SHARKEY LANDFILL	EPA-CP24	600,000	627,418
880-070	SHARKEY LANDFILL (LAB ANALY)	GSF-127	144,300	144,647
886-017	SHARON RD H2O MAIN MERCER CO	GSF-013	0	0
886-017	SHARON RD H2O MAIN MERCER CO	SCF-423	401,500	126,213
885-124	SHIRLEY AVENUE	SCF-278	1,189	1,189
886-030	SHOTMEYER MOBIL/LABAR RESID	SCF-343	25,000	0
887-002	SHUNPIKE RD ABAND DRUM	SCF-419	3,520	1,799
886-034	SIGNAL STAT A D	SCF-353	5,000	881
886-034	SIGNAL STAT A D	GSF-PEND	0	2,494
885-057	SIGNO SOMERVILLE JANR WARE	SCF-257	250,000	247,623
885-057	SIGNO SOMERVILLE JANR WARE	SCF-257A	2,970,000	2,793,424
885-057	SIGNO SOMERVILLE JANR WARE	SCF-257B	32,500	0
885-057	SIGNO SOMERVILLE JANR WARE	SCF-257C	47,500	0
884-003	SIGNO TRADING	GSF-014	90,000	41,140
884-003	SIGNO TRADING	SCF-207	49,000	48,840
884-003	SIGNO TRADING	SCF-207A	5,000	4,532
884-003	SIGNO TRADING	SCF-207B	625,000	625,000
884-003	SIGNO TRADING	SCF-207C	850,000	850,029
884-003	SIGNO TRADING	SCF-207D	2,500,000	2,433,592
MULTI	SMALL DRUM ROUNDUP POST-ACT	SCF-156	39,133	39,133
MULTI	SMALL DRUM ROUNDUP POST-ACT	SCF-156A	121,929	119,200
MULTI	SMALL DRUM ROUNDUP PRE-ACT	SCF-156	74	74
MULTI	SMALL DRUM ROUNDUP PRE-ACT	SCF-156A	9,071	9,071
MULTI	SMALL SITE METRO	GSF-PEND	0	1,530
MULTI	SMALL SITE NORTH	GSF-PEND	0	507
880-048	SOUTH 13TH STREET NEWARK (610)	SCF-000	91,676	91,676
887-014	SOUTH RIVER SAND PIT A D	GSF-053	10,000	4,828
880-017C	SPENCE FARM	SCF-000	12,673	12,673
880-017C	SPENCE FARM	GSF-074	25,000	0
880-017C	SPENCE FARM	SCF-138	0	0

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
080-017C	SPENCE FARM	EPA-CP25	301,741	249,000
080-017C	SPENCE FARM - SAMPLING	SCF-361	0	0
885-133	SPRING VALLEY EXXON	SCF-288	500	270
887-045	ST CHARLES ST NEWARK	SCF-452	5,000	0
885-058	ST CHARLES STREET	SCF-260-1	5,184	5,184
886-019	STAFFORD TWP WATER MAIN EXT	BSF-023	1,860,000	929,400
080-042	STORER DUMP	SCF-179	230,000	0
882-078	STORM DITCH PLAINFIELD	SCF-120	1,200	1,200
886-048	STRATHMORE SCHOOL MATAWAN	SCF-371	13,000	8,264
886-062	STUMPTAVERN RD A D	BSF-057	0	0
886-062	STUMPTAVERN RD A D	SCF-399	5,000	2,509
080-004	SWOCO HILLSBORO	SCF-000	39,528	39,528
798-012	SWOCO HILLSBORO TWP	SCF-000	101,297	101,297
080-040	SWOPE OIL	SCF-000	439	439
080-040	SWOPE OIL	SCF-119	7,530	7,530
080-040	SWOPE OIL	SCF-119A	3,241	3,241
080-040	SWOPE OIL	EPA-CT25	215,000	0
080-040	SWOPE OIL DESIGN EPA LEAD	08F-027-2	0	0
080-056	SYNCON REBINS	08F-001	19,433	0
080-056	SYNCON REBINS	SCF-150	7,500	7,500
080-056	SYNCON REBINS	SCF-150A	108,486	92,450
080-056	SYNCON REBINS	SCF-150B	2,100	1,205
080-056	SYNCON REBINS	SCF-150C	0	0
080-056	SYNCON REBINS	EPA-CP26	3,075,179	2,606,126
883-043	SYNFAX INC	SCF-180	1,029	1,029
884-013	TABERNACLE DRUM DUMP	EPA-CT26	375,000	0
887-014	TAMARACK DIESEL SPILL	SCF-410	5,600	2,251
789-014	TEANECK	SCF-000	16,756	16,756
887-009	THEATRE EFFECTS	SCF-427	16,400	6,946
080-005	THOMAS COOK NEWARK	SCF-000	18,233	15,233
886-006	THOMAS ST (67-69) ABAND DRUM	SCF-333	15,000	5,757
885-153	TIDAL CREEK RTE 35 CLIFTWOOD	SCF-321	4,817	4,099
885-153	TIDAL CREEK RTE 35 CLIFTWOOD	BSF-PEND	0	718
885-138	TOWNE & COUNTRY GROUNDWATER	SCF-293	50,000	18,582
885-144	TYLER AVENUE	SCF-302	5,000	4,592
789-008	UNITED CHEMICAL JERSEY CITY	SCF-000	673,836	673,836
884-030	UPPER DEERFIELD TWP LF	BSF-116	700,000	700,000
884-030	UPPER DEERFIELD TWP LF	BSF-131	20,000	0
884-030	UPPER DEERFIELD TWP LF	SCF-224	0	0

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APPROVED AUTHORIZATIONS  
AS OF DECEMBER 31, 1986

SITE NUMBER	SITE NAME/DESCRIPTION	AUTH NO	NET AUTHORIZED AMOUNT	EXPENDED AMOUNTS
884-030	UPPER DEERFIELD TWP LF	EPA-CT27	0	0
887-047	UVA RESIDENCE ORANGE	SCF-444	11,200	4,906
888-058	VINELAND STATE SCHOOL	SCF-167	9,955	9,955
888-057	VINELAND STATE SCHOOL DESIGN	BSF-020	75,000	0
888-057	VINELAND STATE SCHOOL RI/FS	BSF-019	650,000	0
886-060	W ORANGE RESERVOIR OIL SPILL	SCF-381	75,000	59,870
887-018	WADE AVE ABAND DRUM	SCF-438	12,050	1,851
886-024	WALDICK AEROSPACE	EPA-CT28	700,000	0
886-082	WALECK RESIDENCE OIL SPILL	SCF-416	25,000	5,753
884-033	WASHINGTON VALLEY AUTO	SCF-228-1	45,322	45,322
887-040	WASHINGTON/TEWKSBURY WATER MN	SCF-451	5,330,000	0
882-063	WAYNE ABAND DRUM	SCF-000	11,430	11,430
886-014	WEST MILFORD WATER PROJECT	BSF-037	2,300,000	0
886-056	WHEELER PARK OIL SPILL	SCF-379	30,000	17,042
885-045	WHEELER POINT ROAD	BSF-136	1,113	1,113
885-145	WHEELER POINT ROAD	SCF-305	9,530	11,272
884-014	WHITE CHEMICAL	SCF-195	7,000	3,000
798-015	WILLIAMS PROPERTY	SCF-000	149,711	149,711
798-015	WILLIAMS PROPERTY	BSF-075	48,405	4,620
798-015	WILLIAMS PROPERTY	SCF-108A	21,617	21,617
798-015	WILLIAMS PROPERTY	SCF-267	14,733	13,885
798-015	WILLIAMS PROPERTY	SCF-267A	11,595	16,373
798-015	WILLIAMS PROPERTY	EPA-CP27	628,646	339,108
798-015	WILLIAMS PROPERTY RI/FS	BSF-040	88,000	0
886-047	WILLIAMS/THOMPSON PROP A D	SCF-370	4,025	1,951
886-047	WILLIAMS/THOMPSON PROP A D	BSF-PEND	0	462
888-017B	WILSON FARM	SCF-000	122,108	122,108
888-017B	WILSON FARM	BSF-060	700,000	0
885-051	WISSE PROPERTY	SCF-252	200	0
888-072	WOODLAND TWP (532 & 72)	BSF-012-1	1,195,843	1,104,891
888-073	WOODLAND TWP (532 & 72)	BSF-C002	1,200,000	0
888-073	WOODLAND TWP L F ROUTE 532	SCF-262	0	0
888-072	WOODLAND TWP L F ROUTE 72	SCF-263	0	0
888-072	WOODLAND TWP PETIT VEHICLE	SCF-309	7,702	7,702
TOTALS			9286,264,212	9118,426,516

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Appendix A

## HAZARDOUS WASTE REMEDIAL ACTION PROGRAM HIGHLIGHTS (April 1, 1986 - March 6, 1987)

Status Change as of March 6, 1987  
 New Site Since September 30, 1986

SITE NAME	PUBLIC FUND			PRIVATE FUND			COMMENTS
	NPL STATE	FED	OTHER STATE	NPL STATE	FED	OTHER STATE	
RI/FS STUDY STARTS			II				
Bert Steel/Prentiss			X II				
American Cyanamid			II	X			
D. Polymer	X		II				
g Creek Farm		X	II				Incremental funding
ick Township Landfill			II	X			
rent Fly Bog	X		II				
dsus Corporation			II			X	
nzer & Schafer	X		II				
ver Well #4	X		II				
or -Phillips	X		II				
A Technical Center			II			X	Additional 6 sites added to original 5 being investigated
vaudan Corporation			II			X	
avel Pit			X II				
rcules, Gibbstown			X II				Preliminary RI results being evaluated
okins Farm	X		II				
			X II				
ial Oil	X		II				
ckson Twp Landfill			II	X			Delay due to judicial proceedings
sey City Sewers (GW Invest-NJ Trans)			II			X	
hes Industrial Service (JIS) LF	X		II				
oppers			II			X	
g D Landfill	X		II				
Carpenter			II	X			
onia Oil Spill			X II				
i		X	II				
lack Trucking			II	X			ACD signed February 18, 1987
T DeLisa			II		X		Supplemental Work Plan
onitor Devices	X		II				
Industries			II	X			RI Workplan reviewed by DEP
illio Landfill			X II				
ona Oaks		X	II				
iation Technology			II	X			
earch Organic/Inorganic			X II				
ckaway Township Wells	X		II				
ckland Chemical			II			X	
outhland Corporation			II			X	
pe Oil & Chemical (off-site)			II		X		RD reimbursed EPA for RI/FS cost
g/Chemsol			II	X			Deep Aquifer RI
on Carbide-Possuntown Rd			II			X	ACD signed 2/5/87
versal Oil Products			II	X			
er Deerfield		X	II				
and Chemical		X	II				
land State School			II	X			
son Farm	X		II				
co Corp (on site)			II			X	

Publicly Funded Starts = contracts awarded or expected to be awarded by the end of March

Privately Funded Starts = ACD signed and/or financial assurance provided to initiate study

## HAZARDOUS WASTE REMEDIAL ACTION PROGRAM HIGHLIGHTS (April 1, 1986 - March 6, 1987)

- Status Change as of March 6, 1987  
 •• New Site Since September 30, 1986

SITE NAME	PUBLIC FUND			PRIVATE FUND			COMMENTS
	MPL	OTHER	STATE	MPL	OTHER	STATE	
<b>RI/FS STARTS PENDING</b>							
••Atlantic Cnty Improvement Authority						X	Pending ACO signing
••BENS			X				Contract award expected in May
••Caldwell Trucking (Supplemental) Cooper Road		X					Awaiting funding
	X						Site being evaluated to determine if RI/FS is necessary
••Elizabeth Coal Gas Site						X	Pending MOU with DOT
••Manhies Avenue		X					RI/FS necessary; EPA negotiating with PRP; Workplan due end of March
							Awaiting funding
••Metaltec Aerosystems (Supplemental) ••JP Landfill		X					RI/FS delayed to adapt Scope of work to SARA
	X						Additional investigation to confirm source Awaiting federal funding expected March State procurement to begin after funding
••Rockaway Boro (Supplemental)	X						
<b>RI/FS COMPLETIONS</b>							
Caldwell Trucking		X					
Combe Fill North Landfill	X						
Combe Fill South Landfill	X						
••Economics Laboratory Inc. Edgewater PCB's						X	Post Excavation Sampling Approved
Essex County Resource Recovery						X	
••Fairlawn Wellfield (Sandvik)				X			
Florence Land Recontouring LF	X						
••JCP & L Belmar						X	
Metaltec Aerosystems		X					
Price's Landfill	X						
Rockaway Boro Wells	X						
Sherkey Landfill	X						
••Shield Alloy				X			Groundwater Pumping only
Syncon Resins	X						

Note: Lipari Landfill-Amended Record of Decision (ROD)  
 Mascolite-Feasibility Study Complete/ROD not signed

Publicly Funded Completion equals signing of ROD

Privately Funded Completion equals completion of Feasibility Study by Responsible Party

## HAZARDOUS WASTE REMEDIAL ACTION PROGRAM HIGHLIGHTS (April 1, 1986 - March 6, 1987)

\* Status Change as of March 6, 1987

\*\* New Site Since September 30, 1986

SITE NAME	PUBLIC FUND			PRIVATE FUND			COMMENTS
	NPL STATE	FED	OTHER STATE	NPL STATE	FED	OTHER STATE	

## DESIGN STARTS (Projects where design contracts have been executed)

Bog Creek Farm (On-site)		X					
Fairlawn Wellfield - Fisher Sci					X		
**SEMS (long term)	X						
Helen Kramer		X					
**Lang Property		X					
Lipari (Treatment Systems)		X					
*Mirex (Viking Terminal)						X	Soil removal design complete
Pomona Oaks (New Supply Well)	X						
**Tang/Chemsol (Main)				X			Shallow pumping design
Vineland State School (PCB)				X			

## DESIGN STARTS PENDING

Jaldwell Trucking (main)		X					Funding expected by end of March
**CombeFill North	X						Cooperative Agreements awaiting funding at EPA; grant awards expected end of March; Procurement of contractor will be initiated when funding received
**CombeFill South	X						Comments same as CombeFill North
**Florence Land Recontoring	X						Comments same as CombeFill North
**Goose Farm	X						Comments same as CombeFill North
**Metaltec (main)		X					Funding expected by end of March
**Price's Landfill	X						Comments same as CombeFill North
**Sharkey's Landfill	X						Comments same as CombeFill North
**Syncon Resins	X						Comments same as CombeFill North

## DESIGN COMPLETIONS

American Cyanamid (3,5,9A)				X			
Burnt Fly Bog (Uplands/Main)	X						
D'Imperio Property		X					Design for soil removal complete; groundwater treatment design still underway
**Fairlawn Wellfields (Fischer Sci.)				X			
*SEMS (IRA - Partial Cover)	X						To be incorporated into long term design

## HAZARDOUS WASTE REMEDIAL ACTION PROGRAM HIGHLIGHTS (April 1, 1986 - March 6, 1987)

Status Change as of March 6, 1987  
 \*\* New Site Since September 30, 1986

SITE NAME	PUBLIC FUND			PRIVATE FUND			COMMENTS
	NPL STATE	FED	OTHER STATE	NPL STATE	FED	OTHER STATE	
<b>CONSTRUCTION STARTS (Contracts Awarded)</b>							
American Cyanamid (3,5,9A)				X			
**Bridgeport Rental & Oil (Tank Farm)	X						
D' Imperio Property	X						
**Economic Laboratory Inc.						X	Post excavation sampling approved
Edgewater PCBs						X	
**FAA Technical Center (Fuel Spill)						X	Construction 66% complete
**Fairlawn Wellfield (Fischer Sci)				X			
**GEHS (fence & water hook-ups)	X						See Special Note 1
Kearny Drum Site			X				
NJ Dept of Human Services - (NJ DHS) Sites (Throughout State)			X				See Special Note 2
Storer Site			X				
**Toms River/Ciba Geigy (Basin Closure)				X			RCRA Basin Closure 56% complete

## CONSTRUCTION APPROACHING COMPLETION

**PCB Transformers (through State)			X				See Special Note 3
Landfill	X						See Special Note 4
Signo Trading, Inc. Newark			X				See Special Note 5

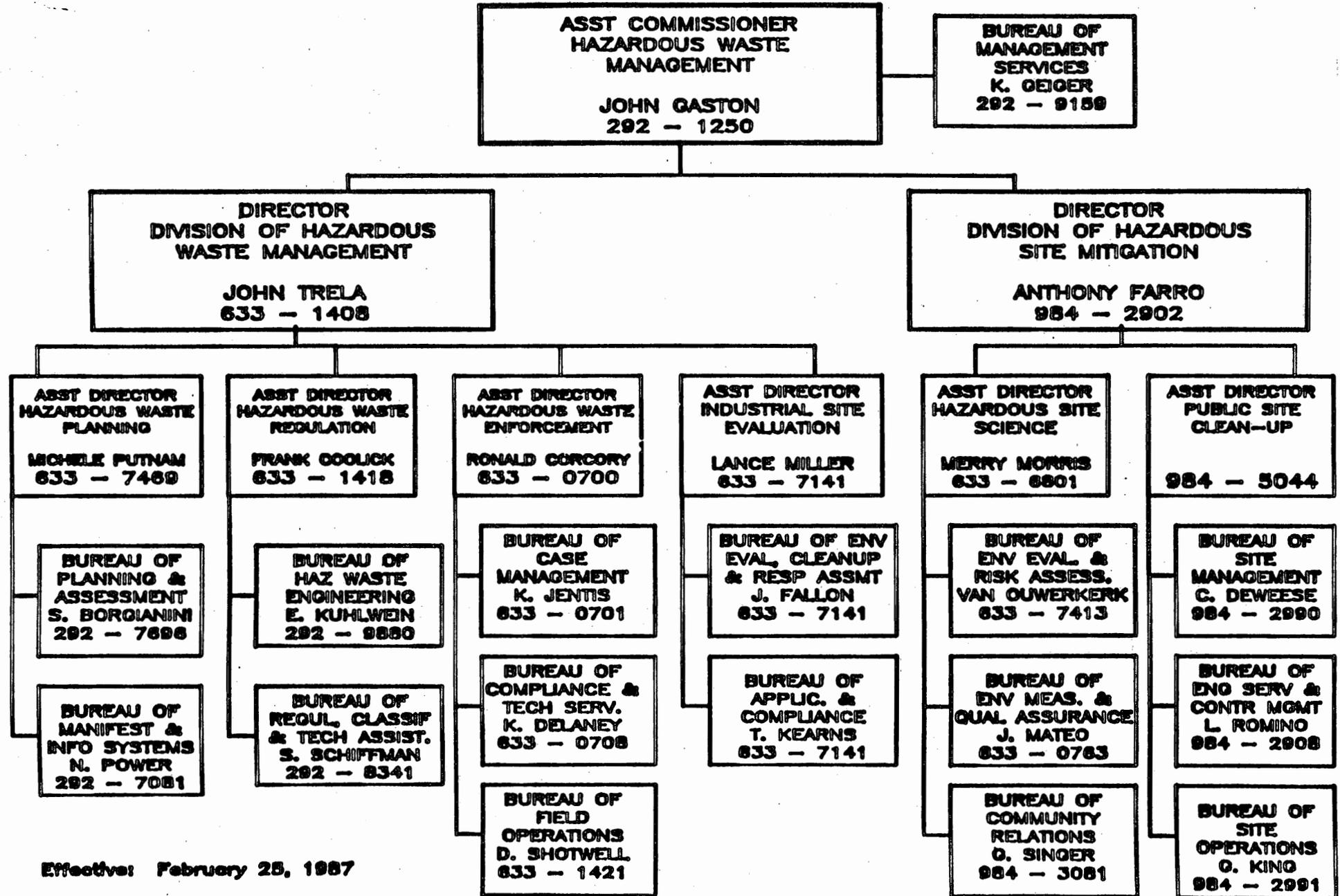
## CONSTRUCTION COMPLETED

**Fairlawn Wellfield (Water Treatment)				X			
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## SPECIAL NOTES

- 1 - 6,000 feet of fence installed of 8,000 needed. Access problems preventing completion. Six (6) homes remain to be connected to public water
- 2 - A number of State institutions have been identified by NJ DHS that contain small amounts of hazardous material, such as outdated pesticides and used solvents. A contract has been awarded to a cleanup contractor who will sample, characterize, repackage and dispose of these materials.
- 3 - Project complete except for post excavation sampling at one location
- 4 - Landfill reconstruction was completed on September 9, 1986. Reconstruction consisted of excavation and compaction of landfill site, removal of hazardous materials (drums, cylinders, etc), installation of a clay cover and revegetation. Approximately 75% of hazardous waste material removed. Remaining hazardous material on site has been sampled, characterized and staged for removal.
- 5 - Removal of remaining hazardous waste was accomplished during June. Disposal of this material was difficult due to its nature (highly reactive, explosive, poisonous, etc.). Warehouse has been sampled for residual contamination and the results are being evaluated

# HAZARDOUS WASTE MANAGEMENT PROGRAMS



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Effective: February 25, 1987

STATEMENT

of

MARLENE LYNCH FORD

Chairwoman

Assembly Special Committee to Investigate

Hazardous Waste Practices at Military Installations

(1985-86)

before the

Assembly Environmental Quality Committee

May 11, 1987

Mr. Chairman, I commend you and the Environmental Quality Committee for recommencing the unfinished business of investigating and forcing cleanup of toxic and hazardous waste sites at military bases located in this State.

As you know, in September, 1985, the General Assembly, by unanimous Resolution sponsored by Assemblyman Doyle, created a Special Committee to Investigate Hazardous Waste Practices at Military Installations (A.R. 168, September 12, 1985.) The Assembly Special Committee, which I was privileged to chair, was endowed with all the powers available to such legislative committees under Title 13, including but not limited to the power to subpoena witnesses and compel the production of documents and other relevant information.

In addition to myself, then Speaker Karcher appointed Assemblywomen Kalik, Walker, and Assemblymen Baer, Albohn and yourself to serve on the Special Committee. Knowing of your own personal commitment to this State's environment and associated issues of public health, it was with great disappointment at the time that I learned of your decision not to participate in the work of the Special Committee. However, it was with

an equal measure of gratification that I learned, this past January, that you had placed the question of military dumping near the top of the list of this State's principal environmental concerns. -

The Special Committee identified over 200 toxic waste sites at 11 federal facilities scattered throughout New Jersey. Based on a vast quantity of information collected mainly from DEP, EPA and the various federal military branches, we documented environmental problems at the following locations: Army facilities at Fort Dix, Fort Monmouth, the Picatinny Arsenal, the former Raritan Arsenal (Raritan Center), the Bayonne Marine Terminal, and the Pedricktown Support Facility; Navy facilities at Fort Earle, the Lakehurst Naval Air Center, the Ewing Jet Propulsion Laboratory, and former facilities now located on the grounds of the Federal Aviation Administration Technical Center in Pomona; as well as Air Force facilities located both at McGuire Air Force Base and on property leased to the Air Force at Fort Dix (i.e., the Bomarc missile fire site).

The Special Committee identified then present or potential threats to groundwater associated with military toxic sites at and/or around Lakehurst, Picatinny, Dix, McGuire, Earle, Monmouth, FAA Pomona, Ewing, and Pedricktown. We identified existing or potential threats to surface water associated with Earle, Picatinny and Bayonne. We found radiological problems at Dix-McGuire (Bomarc), several sites at Fort Monmouth, and the Raritan Center.

Of the 11 bases investigated, evidence presented to the Committee indicated that as many as 10 posed environmental concerns of a Superfund level of seriousness. During and subsequent to the course of our investigation, several of the bases were designated or proposed for inclusion on the federal National Priorities List.

A principal finding of the Special Committee was that leadership in compelling enforcement of applicable environmental laws at military bases and other federal facilities is sadly lacking. While DEP consistently testified it looks to EPA for such leadership, the severity of EPA inaction on this front, and the gravity of federal-State uncoordination, are, in a word, outrageous.

During the course of the Special Committee's investigation, this administrative debacle was characterized by the DEP Assistant Commissioner then responsible for federal facilities as follows: the DEP is " ... the last to know about environmental problems at military bases in New Jersey." (EPA Regional Administrator Daggett testified that legislative oversight was critical to progress in addressing the military dumping issue.)

Mr. Chairman, I am afraid the reality is that, in the absence of ongoing and vigorous legislative oversight, you may find yourself in a similar position of being "the last to know."

Less than three weeks ago, DEP disclosed to residents of Montclair and Glen Ridge that the site of the Bomarc nuclear missile fire at Fort

Dix -- a two-acre concrete slab structure located in Plumstead Township -- is, according to a 1986 Air Force Report, contaminated with plutonium giving off between 100,000 and 250,000 pico-curies per gram of radiation. This, and the DEP's reported estimate that cleanup of the site could cost as much as a quarter of a billion dollars, prompted the New Jersey Network to call the Bomarc site possibly the worst single hazardous site in the country.

Mr. Chairman, the lack of information and communication relative to such military sites at every level is atrocious.

The case of the Bomarc site is particularly illustrative in this regard. The nuclear missile fire occurred in 1960, and resulted in significant discharges of deadly plutonium into groundwater and the air. New Jersey did not learn even of the existence of the site until July, 1985, when the Air Force wrote to Governor Kean and disclosed it for the purpose of offering the site as a dumping ground for the Montclair-Glen Ridge radium soil. Apparently the Governor and/or DEP turned this offer down when it was learned the quid pro quo for the offer was the military's condition that the State assume the cost of cleaning up the Bomarc site. You will note DEP's current estimate of the cost of that cleanup is roughly equal to one-half of this State's five-year budget for civilian toxic cleanup under "Bennett-Dalton."

Despite then Commissioner Hughey's representations to myself and Speaker Karcher that all relevant information pertinent to military hazardous waste sites had been turned over to my Special Committee in

1985, we never did receive the original July, 1985 exchange of correspondence among the military, the Governor and the EPA relative to the original Bomarc disclosure. These documents, plus the 1986 Air Force report and a "draft" DEP memorandum on the current status of the site, were acquired by staff only within the last several weeks, prompting now Minority Leader Karcher to establish an informal Assembly Democratic Task Force on Military Dumping, chaired by Assemblywoman Kalik, on which I, along with former Assemblywoman Walker, presently serve.

Mr. Chairman, I must caution you as to the travails of legislative investigation in this area. I have been informed that, despite your recent request of DEP, EPA, and all the relevant base commanders, for complete information pertinent to military hazardous waste sites, none of these agencies has provided your Committee with the 1986 Air Force Bomarc report, the original 1985 correspondence in respect of that site, or the recent DEP update expressing concern about the integrity of containment and security at the site. Our Task Force is also informed that there is a separate DEP memorandum relative to cost of cleanup of the site, which document has never been made available to us or, we gather, this Committee.

Echoing the past, I am also informed that your Committee is encountering difficulty obtaining accurate current groundwater results relative to Lakehurst from either that base or DEP. Frankly, in light of my experience with similar difficulties relative to Lakehurst, I find this not surprising in the least.

As to matters of substantive concern in respect of jeopardy to environmental quality and public health, the Bomarc case is, I am afraid, merely archetypal.

You are no doubt aware, Mr. Chairman, of recent reports regarding certain hazardous practices at the Army's advanced weapons research facilities located at Picatinny Arsenal, where plans to dispose of hazardous explosives have been called into question by local residents around the base. What has escaped publicity, Mr. Chairman, is the finding by the Special Committee in 1985 that groundwater underlying this base is severely contaminated with hazardous chemicals, including cancer-causing TCE.

It is vital that such information be brought to broader public light in aid of local legal efforts to stem the to-date unbridled tide of the military's historical abuse of vital natural resources. Picatinny was among three bases which failed even to show up to testify to my Special Committee's 1985 hearings, the other two being Fort Monmouth and Fort Earle. Information garnered from DEP at the time indicated the State was generally not allowed on the premises of Picatinny Arsenal for the purpose of inspecting State-permitted activities and sites!

This brings me, Mr. Chairman, to the core question of jurisdiction to enforce environmental laws at federal facilities including military bases.

At the start of my Special Committee investigation, DEP and the New Jersey Attorney General took the position that the doctrine of "sovereign immunity" likely precluded the State's ability to compel conformance with applicable laws, including the federal "CERCLA" (Superfund) statute and the Resource Conservation and Recovery Act ("RCRA"), as amended. EPA took the view that enforcement, including cleanup, was ultimately an exclusively military responsibility under an applicable Executive Order issued by President Reagan in his first days in office. The Meese Justice Department promulgated a controversial legal opinion to the effect that issues of enforcement were not "justiciable" as among the EPA and the federal Department of Defense.

All of these views, Mr. Chairman, are by now thoroughly discredited.

As a result of the Special Committee's 1985 investigation, the New Jersey Attorney General was provoked into joining a landmark lawsuit, brought by Ohio against the EPA, to clarify RCRA's applicability to federal facilities under Section 3004(u) of the Act. That lawsuit was mooted in favor of the plaintiffs, in March of 1986, when EPA promulgated replacement regulations making such facilities, including military bases, subject to the substantive and procedural requirements of RCRA.

This legal fact, together with the substantive and procedural applicability of CERCLA to federal facilities, has subsequently been codified in the federal Superfund Amendments and Reauthorization Act ("SARA") of 1986.

By now, Mr. Chairman, the view that the military is somehow exempt or immune from federal and State environmental jurisdiction is without colorable weight. I believe your Committee is presently in possession of a wide and compelling array of legal authority, recently compiled by Congressman Dingell's House Subcommittee on Oversight and Investigations, relative to this point. Those documents reflect the wisdom that SARA expressly waives any residual immunity of the military, including individual officers, from environmental enforcement jurisdiction at the State and federal level; and confirm that the States, as well as individual citizens, have standing to compel such enforcement. I am gratified that Congressman Dingell is following in the footsteps of Congressman Florio and Senator Lautenberg in continuing critical federal oversight of this issue.

You will note from the House Subcommittee's files made available to this Committee, Mr. Chairman, that at least three States -- Ohio, Minnesota and Washington -- have commenced or are contemplating commencement of legal action against federal facilities palpably violating environmental laws within their respective jurisdictions. Separately, I am informed that the National Association of Attorneys General is presently reviewing the overall question of civilian environmental jurisdiction over federal facilities.

I urge you, at the earliest possible date, to seek the testimony of the New Jersey Attorney General relative to these matters and as to this State's current legal position in respect of enforcement. As you may know, Assemblywoman Kalik has already publicly called upon Attorney

General Edwards to commence legal action against the military and the EPA in respect of non-enforcement of applicable environmental laws to date.

Finally, Mr. Chairman, a few points relative to a complete and thorough investigation of these issues by your Committee.

First, I would like to alert you that it appears that two of the military facilities investigated by my Special Committee have been overlooked in the course of your recent requests for information from respective base commanders, DEP and EPA. These facilities are the Army's so-called Pedricktown "Support Facility" in Salem County, which is administered under the auspices of Fort Dix, and whose toxic sludge disposal practices were the subject of our scrutiny in 1985; and the site of the former Raritan Arsenal, which, ironically enough, is currently owned by EPA.

The latter facility, where EPA presently operates its Region II laboratories, was found by us to contain two radioactively contaminated buildings formerly operated by the federal Atomic Energy Commission. Incredibly, although his own agency's files contained evidence of this finding, EPA Regional Administrator Daggett testified, in October, 1985, that he was unaware of this fact.

In addition, EPA suspects the presence of buried explosives, including 100-pound bombs, and buried cyanide and mustard gas, at the site. This parcel, Mr. Chairman, is adjacent to one of the proposed sites of a major hazardous waste facility currently under consideration

by the Dodd Commission. Responsibility for cleanup by the military is, I believe, under federal law to be coordinated by DOD and DOE officials at the Aberdeen, Maryland Proving Ground offices of DOD and the Huntsville, Alabama offices of DOE.

Second, Mr. Chairman, I must caution you that the question of hazardous waste practices at present or former federal military facilities located in this State falls short of addressing the full story of relevant environmental problems and practices at all federal facilities, including especially present or former DOE facilities.

I urge you to request of DEP, EPA and the federal DOE a full accounting of suspected and confirmed hazardous sites at such "other" federal facilities. I believe DEP is in possession of a list of radiologically active present and former federal non-military sites located in this State, many of which sites were associated with "Manhattan Project" research (i.e., the development of the atomic bomb) in the 1940's.

Finally, Mr. Chairman, I urge you to pursue all potential sources of relevant information with courage and with vigor. As you know, the work of my Special Committee effectively expired when Speaker Hardwick declined, after January 15, 1986, to appoint members from the new Assembly which took office on that date. At the time, two federal officials -- the base commander of Fort Monmouth and EPA Regional Administrator Daggett -- stood in potential contempt of this Legislature for failure to appear and testify as witnesses pursuant to legislative

subpoenas issued by the Special Committee. Although Speaker Hardwick took the view at the time that this Standing Committee has all necessary inherent powers to continue the work of my Special Committee, I understand this Standing Committee may lack similar authority.

In defense of the failure of these federal officials to appear and testify before the Special Committee, the U.S. Attorney at the time relied upon an obscure, outdated and inapposite Pennsylvania case which held essentially that State Legislatures may not engage in "random witch-hunts" of federal agencies in a manner interfering with the charge of such agencies.

My own position at the time was that the business of exposing federal abuses of New Jersey's environmental resources, and associated jeopardy to public health, hardly comprised a "random witch-hunt"; and moreover that the federal agencies and officials concerned were, and remain, expressly charged with enforcing applicable environmental laws. Since both of the officials in question were served within the territory of this State, no issue of personal jurisdiction was raised by the federal government. The objection to our subpoenas was in the nature of an attack on the legitimacy of State subject matter jurisdiction relative to hazardous waste practices at federal facilities.

Mr. Chairman, the subject of federal military and non-military hazardous waste practices in New Jersey is surely, as your present scrutiny affirms, the legitimate business of this State and this Legislature. If there were any doubts of this in 1985, disclosures

attendant to my Special Committee's investigation, and subsequent clarifications of applicable federal law, resolve any doubt in our favor.

New Jersey has an affirmative duty of the highest order to ensure that no party is immune from respect for the environment and an affirmative obligation to protect diligently the public health of our citizens. Federal disregard must no longer be allowed; continuing federal irresponsibility must be halted forthwith.

Mr. Chairman, blanket indulgence of the military must not be tolerated when it comes to domestic hazardous waste practices affecting nature's most precious gifts, this State's increasingly threatened natural resources; and when it comes to the longterm health of our people.

I applaud you and this Committee for taking up the gauntlet on this critical front. As you know, the entire files of the Special Committee are in the possession of the Office of Legislative Services, and are available through the auspices of the Special Committee's Secretary, who is also your own Committee Aide.

Thank you, Mr. Chairman, for this opportunity to assist in inaugurating your efforts in respect of curtailing military dumping in New Jersey; and for confirming the seriousness of this difficult issue, which has too long and too often been ignored.

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Let's protect our earth



STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
RICHARD T. DEWLING, Ph.D., P.E., COMMISSIONER  
CN 402  
TRENTON, N.J. 08625  
609 - 292 - 2885

Honorable John O. Bennett, Chairman  
Assembly Environmental Quality Committee  
CN-068  
Trenton, NJ 08625

Dear Assemblyman Bennett:

I am writing this letter in response to your request to provide an update of the status of waste management practices at the following military installations in New Jersey (please note that FAA is a federal facility, but is not actually a military installation):

- Fort Dix Landfill, Burlington County
- Fort Monmouth, Monmouth County
- Naval Weapons Station Earle, Monmouth County
- FAA Technical Center, Atlantic County
- Military Ocean Terminal, Hudson County
- McGuire Air Force Base, Burlington County
- U.S. Army Armament Munitions and Chemical Command (Picatinny Arsenal), Morris County
- Naval Air Engineering Center, Ocean County
- Trenton Naval Air Propulsion Center, Mercer County

A status report on the Hazardous Discharge Cleanup program was previously forwarded to the Environmental Quality Committee on March 18. In addition to providing an update of our program status and accomplishments, this report provided a description of some of the significant impact of the new Superfund Amendments and Reauthorization Act (SARA) on New Jersey's cleanup program.

Enclosed you will find updated status reports for the above facilities. These status reports reflect any information we have on these facilities' restoration plans. We believe that there is now better communication between DEP and EPA and between the regulatory agencies and the Department of Defense (DOD) facilities themselves. Additionally, SARA provides for a greater oversight role of the federal facilities by the states. However, there are three fundamental areas that concern our Department:

1. Although data on water quality is being collected through the Installation Restoration Program (IRP), this data must undergo a lengthy review and approval process within each DOD agency before the data is released. This process results in a substantial delay between the time the sample is taken and the point in time at which DEP is able to evaluate any potential impact to human health and the environment.
2. Although the Department will continue to issue permits to these facilities through State regulatory programs, we lack any strong enforcement authority at most of these facilities.
3. The "Superfund Amendments and Reauthorization Act of 1986" (SARA) was intended to broaden and clarify EPA's existing enforcement authorities at federal facilities, yet the Executive Order for Superfund Implementation dated January 26, 1987 gives the final authority for implementation of SARA to the Office of Management and Budget, not to EPA. It is not clear at this time what impact the Executive Order will have on the IRP/Superfund program.

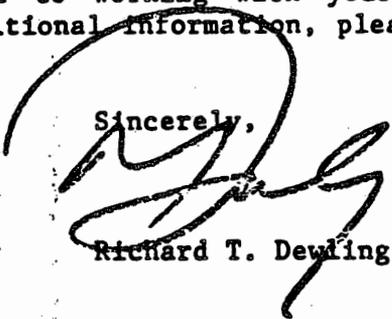
Enclosed please find monitoring well data for the FAA Technical Center (but please note that there is no previous data for comparison).

Data from the Fort Dix landfill is also enclosed. This includes the 1984-1985 monitoring well data as well as a potable well survey discussion, description of field activities and conclusions, and monitoring well and surface water data for 1986 extracted from "RI/FS Proposed Response, September 1986", U.S. Army Corps of Engineers/Camp, Dresser and McKee, Inc. We have included both the 1984-1985 data and the 1986 data for comparison purposes.

Should you have any specific questions on the data, please call Melinda Dower of the Bureau of Case Management at (609) 633-0701.

The Department looks forward to working with your Committee in the future. If you need any additional information, please do not hesitate to contact us.

Sincerely,



Richard T. Dewling

Enclosures

Site Description

The Fort Dix Landfill encompasses approximately 126 acres at the southwestern boundary of McGuire Air Force Base (MAFB). The natural geologic setting surrounding the landfill is a sandy coastal plain drained by numerous creeks, one of which originated northeast of the landfill and flows southward. In the past, the landfill was used for the disposal of municipal wastes that were generated at Fort Dix. From the 1970's to the 1980's, MAFB disposed of chemical wastes in the Fort Dix Landfill. The hazardous substances disposed of at this site included petroleum products, methyl ethyl ketone, methylene chloride and paints. The landfill was closed in July 1984. The recently filled landfill area is covered with a sand cap.

Environmental Impact

The U.S. Army conducted ground water sampling around the landfill which indicated the presence of chloroform, 1,1,1-trichloroethane, methylene chloride, toluene, and 1,1-dichloroethane. The landfill is in the recharge area of the Cohansey Aquifer. Approximately 7,300 people within a three-mile radius depend upon ground water for their potable water supply. Fort Dix has conducted a potable well survey to determine if any local potable wells are threatened by contamination from the landfill.

Status

A Remedial Investigation/Feasibility Study (RI/FS) is nearly completed. The closure plan for the landfill will be prepared after conducting the RI/FS. Preliminary review of remedial design alternatives has been completed, and final remedial design and closure options are now being studied.

Site Description

Fort Monmouth and the subposts, Charles Wood Area and Evans Area are located in Monmouth County. The main post (Fort Monmouth) is bounded by the boroughs of Eatontown, Oceanport, Little Silver and Shrewsbury. Charles Wood Area is located approximately 4 to 5 miles west of the main post. Evans Area is approximately 35 miles south of the main post.

Environmental Impact

All three installations are located within the Atlantic Coastal Plain, consisting of marine and continental sediments (composed of clay, sand and clay with minor amount of gravel). From the 1950s to 1970s a wide variety of industrial-type operations have been conducted for research and development. These industrial operations included metal plating (including gold, silver, platinum, chromium, nickel, cadmium, copper, zinc), motor vehicle maintenance (including body repair and painting), printing plant, woodworking, circuit board etching, painting, plastics, electronics, models, glassblowing, batteries, crystals, photo chemicals and radioactive material.

Status

An Installation Assessment Report (IAR) dated May 1980 was prepared by the Army. The IAR was limited in scope and identified the potential areas of contamination. In order to confirm/identify the problems at the sites, it was requested (September 15, 1986) that priority pollutant analysis of the existing monitoring wells, stream sediments and surface water be performed. USEPA indicated that a report from the Army was due the week of March 2, 1987 indicating the action the Army will take.

Site Description

Earle Naval Weapons Station (NWS) comprises 10,248 acres and includes two separate areas connected by a government owned highway and railroad. The main station contains the magazine area and the bulk of the administration, production, and personnel support facilities. The waterfront area includes a 2.9 mile pier-trestle complex. Wastes generated at the Earle (NWS) include ordnance materials, grit and paint, paint scrapings, solvents, paint sludges, ammonium picrate, lead bullets, zinc, lead and titanium. There are 29 suspected contaminated areas of various sizes on the Main Base.

Environmental Impact

The soil at this site is extremely permeable allowing for rapid migration to several aquifers including the Cohansey Sand, Kirkwood, Vincentown, Red Bank Sand, Wenonah, Marshalltown and Englishtown. Approximately 1200 base personnel depend on ground water from these aquifers for their potable water supply. The Monmouth county Health Department has sampled nearly all off-site potable wells and has not found any contaminants.

Status

The Navy has indicated that the Phase II Study is near completion and will be submitted to USEPA and the Department. Delays in resampling of the stream by DEP due to legal issues concerning use of Spill Fund for NPL sites has been resolved by SARA amendments. Sampling of the stream that indicated an elevated chlorobenzene level (ppb) will be re-done. The second sampling will be from the origin of the stream to its confluence with the Manasquan River in an effort to ascertain the source of contamination. Water quality testing data will be compared to past data when further testing by the Department is completed.

Site Description

This site is located on a 5,059 acre parcel of land which is owned by the Federal Aviation Administration (FAA). The FAA property is located to the west of the Garden State Parkway with Galloway Township to the north and Egg Harbor Township to the south. This area is widely used for aviation research and test activities. Jet fuel is stored on site and used for training, experimental and operations purposes. During the period of 1943 to 1958 the Navy conducted disposal and landfilling operations while occupying the site.

Environmental Impact

As a result of a study commissioned by the Atlantic City Municipal Utilities Authority (ACMUA), five potentially long-term problem spots were discovered on the FAA grounds. These include a salvage yard, an abandoned fuel farm, a photo lab, a fuel test area and a closed landfill. Conclusions from the ACMUA study indicated that two of the five sites pose a potential threat to the Atlantic City water supply. It is believed there is a greater probability of horizontal contaminant migration to surface water than vertical contaminant migration to the depths of the Cohansey Aquifer where potable ground water is obtained by FAA and also the ACMUA.

Status

Remedial activities were recommended at the five problem sites and the FAA initiated preliminary remedial measures including an inventory of all hazardous waste on site, the application of a polyvinyl cover at one problem site, and cessation of all testing at the other problem sites. The FAA has negotiated a contract to identify potential aircraft fuel pollution sources, and has initiated a Focus Feasibility Study (FFS) to determine the appropriate remedial actions at each of the five problem sites. A Remedial Investigation (RI) is being conducted for at least six additional sites at the Tech Center. During the FFS/RI Background Investigation, an additional seven sites were identified as areas where past land use suggests the potential for soil and/or ground water contamination. Sampling will be conducted at each of these sites. Should the preliminary sampling determine that contamination exists at one of these sites, a more detailed study will be conducted.

Site Description

The Military Ocean Terminal, Bayonne (MOTBY) is an active U.S. Army Ocean Terminal installation. It is situated on a man-made peninsula of approximately 274.7 hectares (ha), including land and water; adjacent to the City of Bayonne, New Jersey. The peninsula on which the terminal is located was originally constructed in 1939 as a result of a development plan initiated by the citizens of the City of Bayonne. In 1941, because of a need for additional facilities in the New York Harbor Area, the U.S. Navy Department purchased the Bayonne Port Terminal. Construction of the U.S. Naval Supply Depot began in 1941 and was completed in 1942. During World War II, the Depot supported operations in both the Atlantic and Pacific Ocean. During the Korean Conflict, the Depot was active in the reactivation of ships in the Reserve Fleet (Mothballed). In September 1959, the Depot was redesignated as the U.S. Naval Supply Center. MOTBY was established in July 1965 and organized to assume terminal operations performed by the Military Ocean Terminal, Brooklyn, New York and similar operations for the Navy. It was a tenant until July 1967 when the U.S. Naval Supply Center was disestablished, the installation transferred to Army control and the installation officially designated as the Military Ocean Terminal, Bayonne, New Jersey.

Environmental Impact

During the Installation Assessment for MOTBY conducted by the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), conditions were found that indicated a potential for contamination from past and present operations (USATHAMA, 1980). Possible areas of concern include, but may not be limited to, an approximately 10 acre landfill, 12 abandoned underground storage tanks, and a former storage area. Contamination from these sources may be present in ground water, wetlands, seeps, sediments, soils, and storm sewer outfall.

Status

The Installation Assessment Study was completed in September 1980. A Sampling Design Plan/Safety Plan for the Remedial Investigation to determine whether toxic or hazardous contaminants are present and migrating beyond the boundaries of the installation by surface or subsurface routes or if there is a potential for such migration has been prepared by Dames & Moore for the U.S. Army. This Sampling Plan is being reviewed by the USEPA and the NJDEP.

Site Description

McGuire AFB consists of the Main Base, which occupies 3,536 acres and the abandoned Bomarc missile area occupying 247 acres. Both are leased by the Air Force from the U.S. Army Training Center - Fort Dix. The principal mission since 1937 is to provide rapid air transport of military personnel and logistical support to any global location. Phase I (Problem Identification/Records Search) of the Department of Defense (DOD) Installation Restoration Program identified 21 potential contamination sources, 15 on the Main Base and six at the Bomarc Missile site.

Environmental Impact

The Base is located within the confines of the environmentally sensitive New Jersey Pinelands. The Cohansey Sand, Kirkwood and Vincentown formations are present at the Base, generally within a few feet of the ground surface. The highly permeable soil permits rapid movement of ground water through saturated and unsaturated zones. There are five well locations on the main base. Within a three mile radius of the Bomarc Missile Site, 1,379 people rely on individual potable wells.

Status

A Phase II (Problem Confirmation and Quantification) Stage I report was issued October 1984 which investigated the 11 high and medium priority sites identified. A magnetometer survey was conducted at the drum burial site. The results confirmed the existence of all but one of the sites, but the extent and degree of contamination is not fully known. A Phase II, Stage II, Investigation Work Plan is currently being implemented at all 21 sites. An initial round of sampling was conducted in February 1987 and a second round scheduled for March. The Air Force has continuously monitored the radiation contamination at the Bomarc Missile site. The most recent survey was completed in June of 1986 and sampling results suggest that the radiological contamination is confined to near surface soils and is not migrating vertically to ground water. Monitoring wells were installed at the site in December of 1986. These wells, with the exception of 6 wells at the accident site, were sampled as part of the Stage II, Phase II work. Sampling dates for the 6 accident site wells have not been determined. It should be noted that Stage II, Phase II work was conducted without consideration of comments from NJDEP. Also, McGuire AFB personnel have stated that regulatory personnel (NJDEP, USEPA) may not have access to sampling results until the receipt of a final report which may not be available until February 1988.

Site Description

Picatinny Arsenal consists of 6,491 acres in the Town of Dover and the Township of Rockaway in Morris County. The Arsenal was established as a powder depot in 1899 and was utilized from 1906 until 1945 to produce armaments. Following World War II, the facility was converted to its primary role of research and development of new ordnance. The Arsenal houses the U.S. Army Armament Research and Development Command (ARRADCOM). The installation has virtually total responsibility for research and development of all armament items. This includes pilot plant production of explosives, propellants, metal parts and total assemblies.

Environmental Impact

Picatinny Arsenal overlies the Upper Rockaway sole source aquifer. In addition, it is in the stream flow source zone of the Buried Valley sole source aquifer. Surface water drains from the facility through Green Pond Brook to the Rockaway River. All environmental media have been sampled at various locations at the Arsenal and contamination has been detected in all media at each location. There is no indication of off-site contamination of drinking water wells or the Boonton Reservoir from the migration of these contaminants.

Status

The Installation Assessment Study was prepared in 1976. The Study identified eight discrete locations of contamination as well as large areas containing unexploded ordnance and many contaminated buildings. The number of waste sites was expanded to 26 in 1983. On-site drinking water is obtained from Picatinny Lake. Production wells near Buildings 24 and 95 have shown contamination which is suspected to be coming from adjacent lagoons (which were closed without NJDEP approval). NJDEP and Picatinny officials met in February 1987 to discuss plans for an investigation of the plume near the lagoons. DEP is also preparing a plan for sampling and analysis of several residential wells in the area off Route 15 near the southern part of the site.

## Lakehurst Naval Air Engineering Center

Lakehurst Borough  
Ocean County  
Manchester Township  
Jackson Township

### Site Description

The Naval Air Engineering Center (NAEC) at Lakehurst consists of 7300 acres within a 43,000-acre expanse of contiguous military installations that include Fort Dix and McGuire Air Force Base. Although over the years the size and functions of the Lakehurst facility have changed, its major function has always been development and testing of weapons systems. Adjacent properties include agricultural lands, landfills and a state wildlife refuge. Improper waste disposal practices have led to soil, ground water and surface water contamination. The dumping took place near water wells, a working cranberry bog and two creeks flowing off the base which borders Jackson, Manchester, and Plumstead Townships. Forty-four sites potentially contaminated with hazardous materials have been identified.

### Environmental Impact

The site constitutes a major portion of the Toms River drainage basin within the general area of the New Jersey Pinelands. Several headwater tributaries of the Toms River arise on site, and there are several ponds of both natural and man-made origin on site. The highly permeable nature of the soil and the presence of a shallow aquifer contribute to the potential for contaminant migration. In addition, all three base landfill sites appear to have involved filling wetland areas.

### Status

A Confirmation Study by the Navy contractor of 12 areas of the site, which includes all 44 potential sites, has been initiated. On the basis of these results, the initial phase of a Verification Study has been completed to fully define the extent of contamination. Extensive off-site potable well sampling has been performed by the Department and the Navy. Low levels of benzene were intermittently detected at the wellfield and were traced to a nearby gas station. No impact on drinking water quality has been found and no contamination was found to be attributable to the facility. Water quality testing was performed as part of the Verification Study. These results will be compared with past results when the Study is released by the Navy to USEPA and the Department.

Site Description

The Naval Air Propulsion (NAPC) is an active facility encompassing 67 acres on Parkway Avenue in Trenton. NAPC was created in 1949 on land previously used by General Motors to produce torpedo bombers. The facility consists of an administration building; blower, test and exhaust wings for testing jet engines, a R&D area; jet fuel storage area, a unique wastewater collection point called a "Baromatic Well", an outdoor test site, and an industrial wastewater treatment plant. The records search conducted for the Installation Assessment Study, May 1986, show that at one time the facility also included a fire fighting training area and a landfill for disposal in industrial sludge. The study suggested that numerous coolant and fuel spills have occurred at the facility.

Environmental Impact

The Installation Assessment Study suggests that it is likely that on-site soils and ground water are contaminated with cooling compounds and petroleum hydrocarbon compounds. The presence of these compounds will be addressed in the Verification Phase of the Confirmation Study.

Status

The Installation Assessment Study was prepared in 1986. The Navy has awarded a contract to prepare a Plan of Action for the Verification Phase of the Confirmation Study. Water quality test results performed as part of the verification Phase will be compared to past results when the Study is completed and submitted to USEPA and the Department.



