

U B L I C   H E A R I N G  
before  
ASSEMBLY AGRICULTURE AND ENVIRONMENT COMMITTEE  
on  
HAZARDOUS WASTE CLEANUP OPERATIONS

Held:  
March 23, 1983  
Assembly Chamber  
State House  
Trenton, New Jersey

MEMBERS OF COMMITTEE PRESENT:

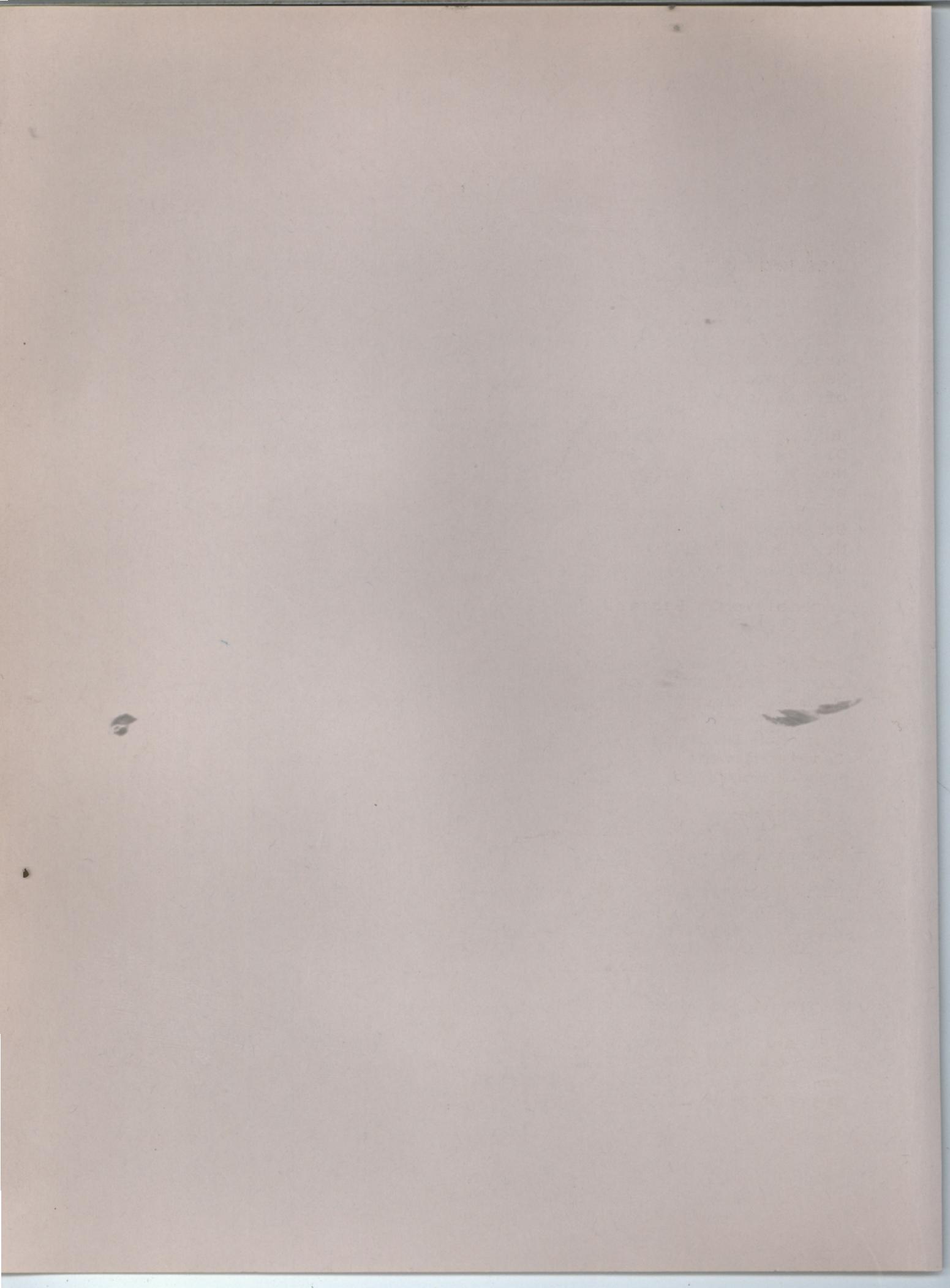
Assemblyman Raymond Lesniak, Chairman  
Assemblyman Anthony S. Marsella, Vice Chairman  
Assemblyman John O. Bennett

ALSO PRESENT:

Mark O. Smith, Research Associate  
Office of Legislative Services  
Aide, Assembly Agriculture and  
Environment Committee

New Jersey State Library

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New Jersey Department  
of Environmental Protection

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George J. Tyler  
Assistant Commissioner  
New Jersey Department  
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ASSEMBLYMAN RAYMOND LESNIAK (CHAIRMAN): I would like to call this public hearing of the Assembly Agriculture and Environment Committee to order. Assemblyman Bennett is here, and the notices have gone out in accordance with the law. The purpose of this hearing is to determine why so little has been done concerning the expenditure of funds for the cleanup of chemical dumps in the State of New Jersey.

In November, 1981, the voters overwhelmingly approved legislation which I sponsored authorizing the State to issue bonds for \$100,000,000 for the cleanup of hazardous sites. Pursuant to the people's mandate, I sponsored A-3699, which was signed into law on January 6, 1982, appropriating \$30,000,000 toward the cleanup of thirty-six sites throughout New Jersey. To date, over fourteen months later, not one dime has been spent toward this cleanup program.

In addition to the failure to expend money for the cleanups mandated by the public and the Legislature by the Hazardous Discharge Bond Act, I am gravely concerned about the lack of an aggressive cleanup program pursuant to the Spill Fund Compensation and Control Act, which through my legislation signed into law in January of 1980, taxed the petrochemical industry to clean up hazardous waste dump sites. While the Fund has been allowed to accumulate over \$13.5 million, less than \$6,000,000 from this Fund has been spent over the past fifteen months toward the cleanup of health threats caused by abandoned dump sites. This failure to pursue an aggressive cleanup program by the State has been compounded by the abject failure of EPA to utilize Federal Superfund monies in this regard, which brings me to my third concern, and that is what I believe to be the ill-conceived reliance on EPA by this State to provide cleanup funds for sixty-five sites in New Jersey, while just about everyone else believes that optimistically only ten sites will be attended to by EPA. In effect, what the Kean announced program, which was last month, to concentrate on some 150 non-Superfund sites will do, is place in limbo at least fifty-five of the most serious health threats affecting New Jersey residents.

I am concerned that Governor Kean had continued to praise EPA Administrator Ann Burford until a few minutes prior to her resignation. Last year, prior to the Congressional elections in November, Governor Kean again praised EPA Administrator Gorsuch for her commitment to cleaning up chemical dump sites in New Jersey. Any policies based on EPA's efforts in New Jersey are doomed to failure based on their record to date. On July 26, 1982, this Committee held a hearing in Marlboro Township to, and I quote from the transcript of that hearing: "determine the progress of cleanup efforts at the thirty-six hazardous waste dump sites designated under the \$33,000,000 Appropriations Act, and the status of other anticipated cleanup monies on both the Federal and State levels." At that time I further stated, "Last November 23," and that is in reference to November 23, 1981, "when I introduced the appropriation measure," and that is from the bond issue, I stated, "It is imperative and urgent that funds be made available promptly so that we can make substantial headway in our struggle to eliminate the legacy of poison affecting our environment due to the irresponsible dumping practices of the past. Time is literally running out, when you consider that many of the dump sites targeted for funding are posing an immediate threat and danger to the precious drinking water supplies of dozens of communities throughout New Jersey." And, I added at that time, and this was July of 1982, "Those words are even more appropriate today, seven months later." It is no longer seven months later, but sixteen months later, and still no money has been spent on this critical cleanup effort. I am referring to the bond issue.

At that hearing, EPA Region 2 Administrator, Jacqueline E. Schafer, stated that the target date for the completion of the feasibility study for Burnt Fly Bog was December of 1982. It was my understanding that we were still waiting for that feasibility study, but John Bennett has told me that that feasibility study is completed. I haven't seen it, and I don't believe the county health officer has seen it.

Also at that hearing, George Tyler, DEP Assistant Commissioner, invited this Committee to, and I quote: "Come back and revisit this in December and see what we have done." Well, we gave you three additional months, and the money is still piling up and is not being spent. The Committee was informed at that hearing that George Tyler would deliver an extensive written status report on site cleanups under the Appropriations Act. We are still waiting for that report.

I am concerned here today, Commissioner, that the program that was announced by Governor Kean, without consulting, quite frankly, with this Committee, has an undue reliance, number one, on EPA's ability to clean up the sixty-five Superfund sites, and number two, that DEP to date has not aggressively spent the money that this Legislature has appropriated toward that end. My position today is that with EPA's failure, and again I reiterate EPA's failure that we have all been talking about for quite a long time now, -- not just recently as you know -- the State has to be even more aggressive toward these cleanup programs. I am extremely concerned; I reiterate that we have not received all of the status reports that we were promised last July. I am concerned that the reason why we haven't received them is because nothing has been done. I would like very much to know whether the policies enunciated in February of 1983 by Governor Kean are written in stone, whether this Committee is going to have an opportunity to give our input into those policies, and whether those monies that have been appropriated back in January of 1981 and are available to be spent for cleanups are going to be utilized.

The Legislature has spoken; the people have spoken, and we're ready and need some action. That is the purpose of calling you here today.

ASSEMBLYMAN BENNETT: Mr. Chairman?

ASSEMBLYMAN LESNIAK: Yes, sir.

ASSEMBLYMAN BENNETT: If I could, I would like to make an opening statement.

ASSEMBLYMAN LESNIAK: Of course you can.

ASSEMBLYMAN BENNETT: Mr. Chairman, Mr. Commissioner, colleagues and ladies and gentlemen of the public: I serve as the ranking Republican on this Committee and have served for nearly a year and a half in that capacity. I have been a member of this Committee during my entire legislative career. This Committee is one where we have taken great pride, that when we see something that we feel is wrong, we have attempted in a bipartisan effort to set forward and go ahead to do corrections in that manner. About a month ago, the Chairman and I stood in this chamber and jointly called for the resignation of Rita Lavelle because of the way we felt the Superfund was being handled at the Federal level and, in fact, three days later after our announcement of a nationwide movement to have her resignation sought, she did resign.

We are all aware of what has been occurring at the Federal level, and the delays and the lack of decisions that have resulted in a slowness, in my personal opinion, of funds being released from Superfund. However, in dealing with

this matter on the State level, I feel that there has been a continuous bipartisan effort by both this Administration, as well as the previous Administration, in making New Jersey a forerunner and one that is ahead of many other states. The official notification for this meeting which I received in my office on March 15, however, which I did not get to see until I returned from vacation yesterday, said that we would be conducting a public hearing on the status of the cleanup operations of the State of New Jersey, and that we would also be looking into the status of the Bond Act, as well as the status of the Spill Compensation and Control Act. Certainly, there were questions that were raised in Marlboro Township that continued to result in additional questions to be asked, and this Committee is not only entitled, but has an absolute right to have these questions answered, I believe.

We have had the opportunity to receive written documentation to many of those questions that were answered, and copies of any questions that were raised by the public that Assistant Commissioner Tyler was not able to answer at that point, and copies of all that correspondence were received by the individual Committee members. However, also on March 21, an additional notification was received in my legislative office, which I again saw yesterday, which was specifically from the Chairman of this Committee and was directed to legislators representing districts included on the U.S. EPA Superfund priority list of hazardous waste sites. This statement, which included three paragraphs, was specifically written on Committee stationery which contained not only the Chairman's name, but also the Vice Chairman's, Assemblyman Pankok's, as well as Assemblyman Smith's and my own. I spoke to Assemblyman Smith, who returned from vacation this morning, and who will be present later this afternoon. The statements contained in that letter are those specifically of the Chairman as an individual, and do not reflect the philosophy nor the feeling of at least two members of this Committee. No discussion nor comments were solicited from any other members of the Committee with respect to this notification.

The definitions as to Governor Kean's program, as to whether it is shortsighted as contained in the letter, are the determinations and the editorializing of the Chairman specifically, and not the Committee. While Committee stationery was used, I would like to bring to the attention of the public that that, in fact, is from the Chairman and reflects his personal feelings, which of course -- and I certainly believe that every member of the Committee and every legislator is entitled to his personal feelings and his personal position. However, it would be a misstatement to say that this Committee meeting is held today with the philosophy that all of the statements contained by the Chairman are the philosophy of this Committee as a whole, and that, while there are questions to be asked, I for one am anxious to hear from the Department with respect to their position before drawing conclusions. I feel that it is imperative that the position and the work that has been done by the Department in the fourteen months of this Administration, as well as the carry-over work from the previous Administration, be brought forward to the public and that the legislators, as well as the entire public are aware of what is being done on the State level, as well as in cooperation with the Federal. If there is then criticism to be made, that should be the time to make the criticism, and I for one would again stand with the Chairman if I felt it was appropriate to give criticism in any direction at that point. However, to prejudge and to make criticisms prior to the fact is something that I as an individual am not going to do, nor is Assemblyman Smith and, although the Chairman is entitled to make any statements, they do not necessarily reflect the entire position of this Committee.

ASSEMBLYMAN LESNIAK: Assemblyman Bennett, you are not indicating that I implied that you signed that letter, are you?

ASSEMBLYMAN BENNETT: Absolutely not. It was sent on stationery that contains all the names of the Committee, but it is specifically from the Chairman.

ASSEMBLYMAN LESNIAK: Thank you very much. And, have you had an opportunity to discuss Governor Kean's announced cleanup program prior to his announcement with him, or with the Commissioner?

ASSEMBLYMAN BENNETT: I spoke with the Commissioner and members of the Department prior to the announcement of the four-year plan personally on my own incentive of picking up the phone and calling them. We did not have a briefing beforehand, but I called and became aware that there was going to be an announcement and what it would contain. But, I did that as an individual legislator.

ASSEMBLYMAN LESNIAK: How did you find out about it?

ASSEMBLYMAN BENNETT: By making the phone calls. I do a continual status report of those -- I, unfortunately, happen to have more sites listed on the hazardous waste list than any other legislator or any other district in the State of New Jersey. That is not something to be proud of. I feel that it is my duty as an elected official to continuously attempt to maintain a status as to what is the direction of those individual sites in my district, so that I am informed as to the direction they are going, and I have kept in communication with Dr. Sadat's office, as well as with Assistant Commissioner Tyler and Commissioner Hughey and became aware that there would be an announcement of the four-year plan, but it was not briefed specifically as to the specifics of it prior to the announcement by the Governor.

ASSEMBLYMAN LESNIAK: Are you at all concerned that monies appropriated by this Legislature back in January of 1982, monies approved by the public in a public referendum, have not been spent?

ASSEMBLYMAN BENNETT: I am concerned, not so much as to whether or not money is spent, but I am concerned as to whether work is being performed. Burnt Fly Bog specifically called for an appropriation in January of 1981 of \$2,000,000. It was estimated at that time, under the Department headed by Jerry English, then Commissioner, that the cleanup of Burnt Fly Bog would be between \$20,000,000 and \$40,000,000. I believe our feasibility study that has been completed by the private contractor Dames and Moore will show that, in fact, the figure is substantially less than half of what the lower estimate was. I for one believe that it is necessary to move ahead and clean up the hazardous waste sites in the State of New Jersey. I believe, however, that we should clean them up with the proper management and by expending the proper amount of monies. I do not believe that the only answer is to expend monies and not expend them properly, resulting in lesser dollars available to clean up the sites we have in the State. I feel that it is necessary that we move forward as rapidly as possible, but in an organized manner, and direct that these cleanups be done in the most cost efficient manner to ensure the safety of not only the people in my district, but the people of the entire State of New Jersey.

ASSEMBLYMAN LESNIAK: You cosponsored that appropriations bill, did you not?

ASSEMBLYMAN BENNETT: Yes, I did, with the information that was available from the Department at that time, where the estimate was that it would be

\$20,000,000 to \$40,000,000. I believe we will hear today the status as to what has been ongoing at many of the different sites. I believe there are legitimate concerns and questions that should be answered. I agree with you that, in fact, the four-year plan, or any plan, should be made in conjunction, and that the various branches of government should work together to ensure that there is going to be the proper cleanups done throughout the State. I totally agree with you that, in fact, it is necessary for this Committee to work and to have the legislation drafted to make the proper appropriations in order to effectuate that plan. I am happy that we are having the opportunity today to hear from the Department. I would agree with you that we should continue to have the input from the Department, so that this Committee can take the appropriate steps and make those monies available as we have historically.

ASSEMBLYMAN LESNIAK: One further question. You were not implying that I was being political in criticizing the Kean Administration and the Commissioner, were you? Was I political, for instance, when I called for Beatrice Tylutki's resignation under the Byrne Administration, and criticized the Byrne Administration under their cleanup program?

ASSEMBLYMAN BENNETT: Well, whether or not --

ASSEMBLYMAN LESNIAK: Does it make a difference whether it is a Democrat or a Republican if you think that there is something wrong?

ASSEMBLYMAN BENNETT: If you think that something is wrong, it makes no difference who is sitting in the office that is doing something wrong.

ASSEMBLYMAN LESNIAK: Okay. If I am a Democrat, and he is a Republican, and I criticize that person -- then I am being political? If that person is a Democrat, is that okay with you?

ASSEMBLYMAN BENNETT: No. I think that what is important, Mr. Chairman, is that before criticism is directed, the answers or the entire story should be made available. If the answers are not satisfactory, and you feel that an individual is doing something wrong, such as I felt in the case of Rita Lavelle with you in a non-partisan, bipartisan effort -- I did not feel that that was a political act on your part. I joined with you. And, in fact, I feel that there are many things that I disagree with, and I do not feel that the cleanup of hazardous waste should be political. It is the wrong form to have political arguments, and I am proud that you and I have been able to work together closely in sponsoring and cosponsoring various pieces of legislation to ensure that this Committee would not be used in a political manner. I feel that we have perpetuated that to date, and if we feel that something is wrong, we will go ahead, no matter who is sitting in the Governor's chair, to get that corrected. I personally would like to have the complete story before I make a valuation judgment. But, you are certainly entitled to make your decision and you may, in fact, have your information beforehand, and that is perfectly all right too, as an individual. I just want to make it clear that there may be at this point in time a difference of opinion until the entire story is brought forward. At that time, we may both agree that things are right, or we may both agree that things are wrong, and that will not be a decision based on any partisan politics, but because it is the right or the wrong thing to do.

ASSEMBLYMAN LESNIAK: Thank you very much. I appreciate that. Commissioner Hughey.

C O M M I S S I O N E R R O B E R T E. H U G H E Y: Mr. Chairman, with your indulgence, what I would like to do -- we have a long and a short version of testimony. I would like to make a presentation that will last about thirty minutes, in

terms of summary of the plan, which I think directs itself to the questions at least that you asked in your letter to me asking us to appear. The letter that Assemblyman Bennett and you have been discussing, of course, is not a letter that I received.

What I would like to do is make that presentation and then, of course, we are open to questions. We have -- (Assemblyman Lesniak interrupts to ask Commissioner Hughey to adjust microphones) So, with your permission, we will do about thirty minutes and then take questions on any subject.

ASSEMBLYMAN LESNIAK: You can take an hour.

COMMISSIONER HUGHEY: We have enough information to last five hours, so we leave it up to your discretion. We have been before this Committee before and I have obviously had a long working relationship -- fourteen months is as long as it has been with anybody -- with you and other members of this Committee. I have specifically not made anything that we do in terms of cleanup partisan in any way and, at least until today, I have seen no indication that anybody else has.

ASSEMBLYMAN LESNIAK: I would in no way accuse you of doing that, and do not see it as being possible that you would be involved in a political way with the cleanup program.

COMMISSIONER HUGHEY: I think the problem of remedying past uncontrolled and flagrant discharges of hazardous and toxic substances is one of the most important health and environmental issues confronting New Jersey today. The answer to the problem is basic enough -- clean it up. However, perhaps the most significant lesson I have learned in my first year as Commissioner of DEP is that developing and implementing a successful cleanup program is extremely difficult and sometimes frustrating.

From its inception to the present time, the New Jersey Department of Environmental Protection has done more to develop viable solutions to the problem than any other environmental agency in the nation. The State of New Jersey has made substantial progress since last May when the Department reorganized its Division of Waste Management to better manage hazardous waste problems. We have brought with us today as an exhibit, which we will turn over to the Committee, an Administrative Order which reorganized the Department, and the Organizational Chart which now constitutes the Department.

We have restructured our program to develop a multi-disciplinary team to handle highly complex problems associated with hazardous waste cleanup. Never before have these issues been addressed on a scale of this magnitude. Through this program, we intend to deal with high priority hazardous waste sites in a timely fashion while maintaining the stringent fiscal and managerial controls necessary for the proper expenditure of public monies. Those managerial controls have taken us a good deal of time to develop. We have, as our second exhibit today, the Administration of Hazardous Waste Cleanups package, which has been put together by the Department in the last year. Our goal is to eliminate or lessen potential public health and environmental impacts from these sites in the most effective and efficient manner possible. Among the wide variety of factors which have made rapid progress difficult, there appear to me to be three basic needs which perhaps only New Jersey has addressed:

The first is the need for a comprehensive and predictable long-range cleanup strategy. This is a need, by the way, which has also been recognized by this Committee.

The second is the need for a sophisticated priority and contract system, and the third is the need to provide the public with a clear understanding of program objectives and complexities.

In the first instance, the Federal government clearly has had difficulty in coming to grips with the need for a long-term commitment. There are many ways to look at this Federal indecision, but virtually all of them lead to the conclusion that environmental agencies are not the proper place for budgeting decisions. EPA's assumption that the current Superfund program of \$1.6 billion is adequate to effect a national cleanup, has made an overall strategy impossible. Realistically, the present \$1.6 billion Federal commitment is nothing more than a start-up fund, and I think Congress recognized that when it marked up the first bill. EPA's past contention that this funding is adequate has made an already difficult situation more difficult. This limited perspective leads to inevitable delays in Superfund site selection, needlessly complicates already complex contract and cooperative agreement negotiations, and seriously flaws the national contingency planning process. The Department has not settled for a watered down Superfund as some in EPA envisioned, but rather we have insisted through the courts that EPA fulfill its legislative responsibilities.

During the Congressional hearings in 1979 and before, we supported -- and, again, I think members of this Committee supported -- a more comprehensive Superfund than that which became law in 1981. We have repeatedly testified about the problems the current law presents, and, as you know, the State of New Jersey was the first to challenge EPA's failure to publish the mandated National Contingency Plan. Furthermore, when the court-ordered plan was finally released, it was New Jersey which challenged, and today we continue this appeal.

Finally, last week, members of my staff assisted New Jersey Senators Bradley and Lautenberg in their work in developing new Superfund legislation to more adequately address the hazardous waste problems faced by New Jersey and other states in this country.

We have pursued the optimum solution, i.e., an extensive and effective Federally-financed national cleanup effort.

The second issue, the need to prioritize, presents difficulty for all levels of government and has certainly been complicated by the unpredictability outlined above. If anything, the nature of this hearing today is a graphic exposition of the difficulty in developing priorities and the consequences of a legitimate priority system. In the realm of hazardous and toxic waste cleanup, every site deserves to be first, every project should start today and caution is viewed as inexcusable delay until, of course, the contract is found to be inadequate, until the solution doesn't work because there was no feasibility study done, and until everyone being first makes it impossible for anyone to really be first. I would submit to you that while it may be popular to attack from both directions, -- and I am not suggesting that you are -- it is neither intellectually honest nor realistic. In this field, you can't have it both ways.

We are, in fact, the only State to have a comprehensive four-year cleanup strategy. That is Exhibit III, which we would offer to the Committee today, and I apologize for not having that to you sooner. We have a new response contract with excellent controls which took eight months to put together -- just coincidentally, that eight months is the same as it took to put together the original legislation at the State level. That is Exhibit IV; it's called the X-213 Emergency Contract, and it went on the street last week.

There are other supporting documents to that contract which are still under development with the Department of the Treasury, and I would give you as an example of what is going to come out of that, Exhibit V, which is the North Bergen RFP for cleanup, and Exhibit VI, the Friedman Property RFP for feasibility study -- just to give the Committee some idea of the extent of the impacts of the contract. We have a multi-disciplined project management approach which incorporates outside ongoing auditing. The auditors that we have selected for the program are those who completed the first review of the hazardous waste program in the State. All of these ingredients took time to develop and all of them are necessary for a successful long-range program.

The last broad issue is fundamental, namely the need for a clear public understanding of where we are going and what the complications are that we face. The easiest position to take with regard to hazardous and toxic cleanup is to fail to list objectives, and I think EPA did that, which in turn rules out a priority list, which EPA was hesitant to do, and finally makes it unnecessary to establish true time frames. EPA has and will continue to pay for this non-strategy but it is, in a way, understandable. Having a set of objectives and a plan, obviously leaves one open to criticism. Unlike EPA, however, we believe it is an acceptable price to pay for direction and predictability.

Real programs don't survive long in a world of could haves, should haves, and would haves. But, no matter how convenient a target, we do have a program and it is a doable program. It is a real-world undertaking. Exhibit VII is the Hazardous Waste Management Strategy in New Jersey, and Exhibit VIII is the Hazardous Waste Regulations, which led to the development of that strategy. Finally, one of the most complicating factors is that all the money everyone so freely discusses is not so freely spent. There are, and probably should be, restrictions, and there are legislative conflicts which should be fully understood by those who stand and watch.

At this point, let me say that we are all aware that the Hazardous Waste Cleanup Program was not, and is not now a perfect program, but it has come a long way in the last fourteen months, and indeed a long way since its inception. Today, we intend to outline for you the changes made, the new directions taken, and the adjustments still needed.

To begin that process, I would like to call Assistant Commissioner George Tyler, who will outline a few of the steps we have taken to improve our cleanup program, and then introduce you to our Division of Waste Management senior staff. Thank you.

A S S T. C O M M I S S I O N E R G E O R G E J. T Y L E R: Thank you, Commissioner; Mr. Chairman, Assemblymen, thank you. I would like to just begin as I guess I ended last time, and invite again your continual revisiting of this issue. We will be glad to come before you at any time to answer questions and provide documentation. I think that the documentation we will provide to you today will answer the final question from the Marlboro Township hearing. I did try to respond to all of the site-specific questions, and I also wish that we could have been a little earlier with this presentation.

ASSEMBLYMAN LESNIAK: George, where is --

ASST. COMMISSIONER TYLER: It's coming.

ASSEMBLYMAN BENNETT: George, there are some people who can't hear you. Could you talk a little louder?

ASST. COMMISSIONER TYLER: I think we agree that New Jersey has been on the cutting edge of technology in the hazardous waste cleanup area. Our pioneering work at sites throughout the State has been used as an example for other states. We have developed techniques for personal safety, environmental risk assessment, land-use control in the environs of a hazardous waste site, and the like. These standards and procedures have been used by private industry and by government agencies throughout the nation.

The Commissioner has asked, as a backdrop to the plan we will be discussing in depth today, that I explain our reorganization in the Division of Waste Management, how it is shaped up today, and how we hope it will work to serve our mutual interests.

First, we have integrated all of our hazardous and solid waste programs together into one operating division. That has resulted, of course, in the integration of our planning programs because, quite frankly, it is difficult to deal with one waste disposal problem without reference to another. Thus, a coherent long-range strategy for hazardous waste management must include, and will include, the proper management of garbage, the promotion of resource recovery, recycling to minimize our waste streams, and control of those waste streams, as well as effective regulation and enforcement in the industrial and hazardous waste generation areas.

Secondly, we have merged three enforcement units which were previously utilized to deal with landfill type facilities, hazardous waste generator type facilities and Spill Fund and emergency response type actions, under one head in that division.

Thirdly, we have merged our permit and licensing programs, so that we have pulled together again under one chief engineer, several statutorily mandated programs so that all the new waste management facilities developed in New Jersey are permitted properly in a manner which reflects a total program integration approach.

Finally, and most importantly for today, this new organization established the Hazardous Site Mitigation Administration as an element of the Division of Waste Management. This Administration includes four bureaus and a Fiscal Integrity Unit. The Bureau of Environmental Evaluation handles the technical complexities of site assessment, the development of feasibility studies, and the selection of the most cost effective and environmentally sound alternatives. The Bureau of Site Management takes the alternative of choice and shepherds it into the design and construct stage. The Bureau of Site Operations manages the cleanups in the field. The Bureau of Contract Management is responsible for the development of a wide range of contractual support, some of which we have submitted to the Committee today, to support our cleanup program. In addition, this unit will be responsible for the final development of site-specific requests for proposals for all major and minor cleanup operations. Finally, we have established a Fiscal Integrity Unit, which monitors the cash flow situation and, as Director Stanton will show, a constant monitoring of the funding sources and the availability of dollars in those various funding sources available to us, is a necessary ingredient to make the cleanup program work.

ASSEMBLYMAN LESNIAK: You're getting further away from the mike, George.

ASST. COMMISSIONER TYLER: I'm sorry. The last area I would like to just touch on briefly before turning this over to the division staff, is to note

that one of the reasons we are sometimes faced with apparent delays in the cleanup program, is that both the Superfund and the Spill Fund were designed to be used interchangeably with other regulatory statutes, such as the New Jersey Solid Waste Management Act or the State Water Pollution Control Act. Thus, we often begin to deal with a hazardous discharge site in an administrative enforcement mode, only to shift to a cleanup mode to ensure that proper cleanup occurs whether or not our enforcement action is immediately successful. However, once faced with the possibility of treble damages as provided for in both the State and Federal laws, many defendants "see the light" and begin their own cleanup efforts. One of the numbers that will be in our report today is a documentation of the independent private cleanups that are being undertaken by operating companies where spills or discharges have occurred, and the actions are being taken, not with public monies, but at private expense pursuant to enforcement actions. We will provide that information to you.

At this point, I would like to introduce Mr. Jack Stanton, Director of the Division of Waste Management, and Dr. Marwan Sadat, Administrator of our Hazardous Site Mitigation Administration. These gentlemen work directly in the front line and will provide you with an in-depth look at our current program. Thank you.

JOHN J. STANTON: Thank you George. Mr. Chairman, Assemblymen: As George stated, my name is Jack Stanton and I am Director of the fairly newly-formed Division of Waste Management. I will keep my remarks brief. Basically, I would like to just discuss four areas of the program with you.

First is the interaction of the funding sources that are available to do cleanups; secondly, some of the contracting procedures that we go through, just so that you are aware of what is involved in even starting a cleanup; and, thirdly I would like to give you a very brief overview of what the four-year plan looks like, which Dr. Sadat will then go into further detail on. I will give you the status, as of today, of where we are on the four-year plan, and then I would just like to close by stating what we have done in the area of spill responses, as well as cleanup. Although everybody is talking about the Superfund, we tend to forget that the Spill Act was to address spills also.

The first area I would like to talk about is the interaction of the funding sources that are available to do cleanups of hazardous sites. Basically, there are three funding sources -- three major funding sources available within the State -- or to the State, that can be utilized. The first funding source is the Federal Superfund. The sites that qualify for Federal Superfund funding -- what that means is that they are on the national priority list. Superfund preempts us from using State funding for those particular sites.

ASSEMBLYMAN LESNIAK: Excuse me, can you be more specific? That is not accurate.

MR. STANTON: I'll get to that in the testimony, if you will just let me go through it.

ASSEMBLYMAN LESNIAK: No, let's clarify that point right now. That is not accurate.

MR. STANTON: We have an opinion from the Attorney General's Office.

ASSEMBLYMAN LESNIAK: And it precludes any State funding?

MR. STANTON: No. As I said, if you will let me explain -- I'll continue and explain. It says that we have to go to Superfund first, to ask if it qualifies for Superfund funding, and if it is on the Superfund list. If it is, then

the funding is 90/10 and we get the 10% funding out of the Spill Fund to make up the match. If a site does not qualify for Superfund, we can fund it totally 100% out of the Spill Fund or out of any other source.

ASSEMBLYMAN LESNIAK: We are not preempted from using another source of revenue on any Superfund site, are we?

MR. STANTON: That is what the opinion from the Attorney General's Office to the Treasurer has said. The administrator of the Spill Fund, which is in Treasury, requires that if we have a site, before we spend Spill Fund money on it, we go to EPA --

ASSEMBLYMAN LESNIAK: Spill Fund money -- Spill Fund money, not any other source. If we have a source that comes out of general revenues, we are not precluded from spending it. Is that not correct? We are preempted from using Spill Fund because Spill Fund is a tax on the petrochemical industry.

ASST. COMMISSIONER TYLER: We are required to access to Spill Fund by applying to EPA first, getting a readout, and then using the Spill Fund dollars, yes.

COMMISSIONER HUGHEY: I think the question raised is going to be covered by Jack, because there is also an interrelationship between the Spill Fund and the Bond Fund, so it's --

ASSEMBLYMAN LESNIAK: Right. I just want to make it clear. We are preempted by Federal law from using any other source other than the Spill Fund on Superfund sites.

COMMISSIONER HUGHEY: Except, as Jack will go into, there is an interrelationship between all three funds, each one of which complicates the issue.

ASSEMBLYMAN LESNIAK: Sure, I know it's complicated, but let's not further complicate it by not making it clear. We can use any other source other than the Spill Fund, as long as it is not an industry-generated source for Superfund sites.

COMMISSIONER HUGHEY: Actually, I think we are going to try to make it very uncomplex and very simple, and Jack is going to do that in about three minutes, if I remember his notes.

MR. STANTON: Basically, starting again, the first funding source that we look to is the Federal Superfund. Considering the fact that some of these sites, particularly sites that are buried, sites that are landfilled or abandoned sites, that we don't even know what is in there or how long it is going to take to clean up, the cleanups could literally end up costing millions of dollars, well into \$20 million, \$30 million, \$40 million -- \$50 million in some cases when you consider the long-range impact of trying to clean up the ground water or pumping and treating ground water, so it was decided that we would make an effort to bring as much Federal money into these big sites as we possibly could. So, the first funding source that was looked to was the Federal Superfund source. For sites that were on the Superfund list, the funding level is 90% Federal, 10% State. We, to date, have used Spill money in every case for the 10% max that we have gotten on the sites we have on the Superfund.

New Jersey has sixty-five sites on the Superfund list. We worked very hard getting data, collecting data to get those sites on the list so that we would qualify for this level of funding.

The second level of funding that we look at is the State Spill Fund. Once again, I would just cite the legal opinion from the Attorney General's Office

to the Treasurer, which states that we must look to the Spill Fund first -- excuse me, we must look to Superfund first before we can use Spill Fund money for sites that are on the Superfund list and that qualify for Superfund funding and, once again, in all cases the 10% match -- we go to the Spill Fund for that.

ASSEMBLYMAN LESNIAK: That's better. I mean, you said State funding first. That is accurate and I would agree with that in terms of the Spill Fund.

MR. STANTON: I would like to point out that we do use the Spill Fund, and are currently using the Spill Fund. Our four-year plan calls for using the Spill Fund for sites, number one, that are not on the national priority list, that are State sites. We will look to using the Spill Fund 100% for those sites. Also, we use the Spill Fund for the 10% match. We use the Spill Fund for the drum dumps that we are cleaning up. We are just in the final stages of the last of thirty-three small drum dump sites being cleaned up, and that was 100% State Spill Fund money.

We have what we call a "larger drum dump cleanup." These are sites that have 1,000 or less drums pretty much on the surface -- possibly some buried, we're not sure, and possibly with limited ground water contamination -- not real major problems. Those will all be cleaned up with State Spill Fund money. They are in the plan. Dr. Sadat will discuss how that is going to be done.

So, we are looking at sites and using only Spill Fund money for them. Also, we still, on a daily basis, respond to spill emergencies and clean up spill emergencies. These are spills where a truck turns over, where an oil company has a leak out of a tank or in some cases that we are involved in today, where we have gasoline stations with leaking underground tanks that are causing pollution problems in people's wells. We involve ourselves in those emergency type cleanups, totally using Spill Fund money.

The third source of money that is available to the State for cleanups is the Hazardous Discharge Bond Act. Once again, this same AG's opinion -- and, once again, I just want to point out that the opinion is from the Attorney General to the Treasurer, because the Spill Fund is administered in Treasury and we have to go to them first whenever we try to authorize or obligate money out of the Fund. The opinion tells the Treasurer, and in turn the Spill Fund administrator, that in order to tap the Hazardous Discharge Bond Act, we must first of all go to Superfund for consideration.

ASSEMBLYMAN LESNIAK: The Spill Fund.

MR. STANTON: First, we have to go to Superfund, because Superfund and Spill Fund relate, and it relates to the Hazardous Discharge Bond Act. If we are rejected from Superfund --

ASSEMBLYMAN LESNIAK: The Superfund sites.

MR. STANTON: Right. If we are rejected from Superfund, then we next have to go to the Spill Fund, and we have to show that the Spill Fund is depleted, that the money in the Spill Fund is gone, before the Hazardous Waste Discharge Bond Act can be activated. The legal opinion also shows a complicated fiscal dynamics, if you will allow, that because of arbitrage laws and, once again, I am not a lawyer; we will have to have lawyers explain to us. When we go to the Spill Fund, in order to get to the Bond Act, not only do we have to show that the Spill Fund has no money in it right now, but that we will have obligated that money for over a three-year period, that we have enough going on that the Spill Fund, even at the rate that it generates, will not regenerate, because the interpretation of the law is that we

would then have to go back and use the Spill Fund money, rather than the bond money. It deals with this arbitrage certificate that requires that bonds be used within three years of the date of issuance.

Once those things are done, we can go to the Hazardous Waste Discharge Bond Act. I would like to point out one area where we see this happening possibly as early as 1984 -- you gentlemen on this Committee I know understand the Bond Act is the "pre-act/post-act" area. As you know, there is a \$3 million "Cap" on pre-act discharges.

ASSEMBLYMAN LESNIAK: That are not imminent hazards. We went through this three years ago -- that are not imminent hazards. If they are imminent hazards, there is no "Cap." Is that correct?

MR. STANTON: If we can show that it is not an imminent hazard and not an emergency. I am basically just trying to show you the way that we could get to it for the sites we have on the list.

ASSEMBLYMAN LESNIAK: Let's be very clear on that. There is only a "Cap" when it is not an imminent hazard.

COMMISSIONER HUGHEY: I think, Ray, what Jack is leading to is to tell you how we think how quickly that Bond Act would be dissipated because of the complicated set of regulations that we deal with and, more specifically, because of the ratio between expenditures on capital costs as opposed to maintenance. Both Jack and Marwan are going to be giving you some site-specific examples of the spread after the feasibility study is done of what the obligation of the State is where there is obviously no other source of money but the Bond Act to get concerned with.

ASSEMBLYMAN LESNIAK: Do you have current plans to use the Bond Act at all?

COMMISSIONER HUGHEY: Yes.

ASSEMBLYMAN LESNIAK: And they are going to be --

COMMISSIONER HUGHEY: And we are going to explain it on a site-specific basis.

MR. STANTON: Gentlemen, my intent here was just to show the complexity of the three different funding levels and the interaction between them. And, as you can see --

ASSEMBLYMAN LESNIAK: As the sponsor of two of them, I am well aware of the complexities.

MR. STANTON: Fine. As I was going to say, as you can see, even a simple piece of legislation as the Bond Act is -- it was a one-page piece of legislation -- well intended by the Legislature, and meant to do well for the people of New Jersey, the legal complications in getting to it are really kind of giving us problems.

ASSEMBLYMAN LESNIAK: I have to admit that I was not the proponent of the clause in there that we had to utilize the entire Spill Fund. That was put in by the Senate -- a Senator who is no longer here, so you can't answer that. But, in any event, there are certainly ways to get around that, as I hope you are aware of, and as you have indicated you probably are.

MR. STANTON: The second area that I would like to just briefly discuss with you are the methods that we use for contracting for cleaning up these abandoned sites -- hazardous sites. Basically, for the Superfund sites, there are two methods of contracting. One is what's called the "Federal contract," and that's

a case where EPA takes the lead in cleaning up the site. They award all the contracts. The State has a role of overview -- oversight, and approving at decision points along the road. So, while EPA takes the lead on certain sites and they award the contracts to their contractors who are what they call "zone contractors," who are preselected and prequalified, -- they are able to, as soon as they make an award, start the work almost right away -- although they take the lead, the State still has a say and the State still approves decision points along the line, and still approves final actions.

The second way Superfund cleanups are done is where the State takes the lead. We take the lead and we award all the contracts. In this case, EPA provides oversight and EPA has a concurrent approval on actions and decision points along the path.

As the Commissioner and George alluded to, we have established new contracting procedures, which are detailed in part of the blue book that was handed to you on our Policy and Procedure Section 3.11. Basically, what this does is, it changes the emergency contracting mode, putting better managerial controls on how emergency funding is authorized and how it is monitored in the field and, also, sets a very clear policy that all nonemergency contracts must be competitively bid, fixed-price contracts. So, in other words, all of the cleanups that are not done as emergencies or spill emergencies have to go through the State bidding process. It doesn't mean that we have to take the lowest bidder; we have to take the lowest qualified bidder. However, it is a very involved process; it takes a fair amount of time. But, this is a result of the audits of the Chemical Control cleanup, of the audits called for by the Attorney General's Office, in recommending better fiscal controls, and that the State go to a competitive bidding process.

So, we have changed our mode of doing nonemergency cleanups to an operation that gives us better managerial control and tighter fiscal control, but at the cost of it taking a little longer for contracts to wind through.

ASSEMBLYMAN MARSELLA: May I ask you a question? You said the State goes through a bidding process. Are there many contractors available to do cleanups in this State?

MR. STANTON: Yes, and what we are starting to find out is that, because of the economic times -- difficult economic times, a lot of companies come in to bid -- sometimes we get thirty, forty, fifty bidders on a job. The first step we have to go through -- we have to go through and weed out the nonqualified contractors, particularly in this feasibility area, because the feasibility area is quite a complex area where you do a lot of underground work, hydrogeology, ground water modeling. Just because you are a construction company and you have a bulldozer, doesn't qualify you to do this type of work. So, yes, there is a fair amount of qualified contractors within the State of New Jersey, and the number of people bidding on the jobs that we're moving forward on now has slowed down the process to some degree, because we have to, under State law, evaluate every bid that comes in.

The third area of contracting for cleanups is when we use the Spill Fund ourselves to do cleanups. In that case, there is no Federal involvement at all. We do the cleanups. We move forward. We do the contracting. We don't have to bring them in at all. We use the Spill Fund, as I said before, on hazardous waste sites that do not qualify for Superfund funding and in those cases where they are not emergencies, we have to follow the 3.11 procedure and bid the contracts out. As one of the exhibits Commissioner Hughey gave you this morning indicates, we also have a new emergency contract which we will now be using, called the X-213 Contract,

which provides better fiscal control than we had in the past contract. That money comes totally out of the Spill Fund and, once again, that is for emergency spills or emergency cleanups.

I would just like to point out, so you are aware of them, several problems we have right now with the way EPA is doing contracting. These problems will continue in the future, and we are working toward resolving them. A major issue we have with EPA in the contracting mechanism is the long-range maintenance issue. This is an issue that will surface more and more as we get from the feasibility, which is another reason why you are not seeing money flow as quickly as you would like to. The feasibility studies are probably, let's say, the cheapest part of the overall phase of the contracting approach. Once a feasibility study is finished, we then move into a design/construct mode and that is where there will be a lot of money committed. The feasibility studies cost, depending upon the complexity of the site, anywhere from \$30,000 to maybe \$300,000 or \$400,000, and then the related construction afterward can be anywhere from \$3 million, to \$5 million, to \$10 million, to \$12 million. So, once we get out of the feasibility phase and start to move forward on the hard construction, you will see that the money that is building up in the State fund will be used quite quickly.

The long-range maintenance issue is one that the Superfund says -- The Superfund says that the funding level for most sites is 90% Federal, 10% State. Sites that are publicly owned, and by publicly they mean owned by a state or any political subdivision of it, which could be a county, a municipality or a city -- if it is State owned or operated, the funding level is 50/50 -- at least 50% State, maybe more depending upon how involved they think the State, or county, or city was in letting this occur. So, basically what EPA says is the 90/10 or the 50/50 funding level is for capital expenditure only. It is for the building of the slurry wall, the building of the treatment plant, the building of the pumping, whatever is necessary to abate the situation. Their basic position is that the State then takes any other action that is necessary, for as long as is necessary, at 100% State cost. We strongly object to this. We objected to it in the National Contingency Plan. We are on record as objecting to it all along, and other states are now starting to come on board on this issue.

In one of the feasibility studies that is now being finished, that will be made public probably in a week or two -- as a matter of fact, we are meeting with EPA on Friday to finalize the final options -- in this one particular feasibility study, thirteen different options were evaluated as to the best way to clean it up. The cost could range anywhere from \$9 million to \$11 million in capital expenditure for the actual beginning of the solution and the construction of a treatment plant, and there is a possibility -- possibility once again, because you don't know until you start doing it and you keep monitoring -- of having to pump ground water and treat it for thirty to forty years at a cost of a million dollars a year.

This is the area that EPA is saying that the State has to assume. We are differing from that position, and we are working toward having it resolved.

Another contracting difference we have with EPA is, as I mentioned, on the cost sharing of 50/50 or greater. We feel that they have not been very clear on how they are going to determine what is greater than 50% and why, and we would like to see that cleared up. The third area that we are involved in is the "no reimbursement for work performed before a Superfund site receives an award." In

other words, if the State were to go in and do work on a site that is either on the Superfund list or is later qualified and gets on the Superfund list with State money, presently we would not get any reimbursement for that money at a later date if Superfund money became available. We are objecting to that. We are trying to make it possible to go in and do some of the sites that are on there with State money, and then get reimbursed as Superfund money becomes available.

Basically, those are the three Superfund areas that we have concerns about, and presently we are working with Senator Bradley's staff and Senator Lautenberg's staff in developing amendment packages that they will attach to the bill they have introduced to double the money and double the time. We will be working very closely with them in the next week or two to have the lawyers really hammer out the legal language of those amendments.

Now, I would like to give you a very quick overview of the four-year plan and the status of where it stands. As was pointed out, we consider the four-year plan a three-pronged attack on the hazardous waste problem of New Jersey. The first prong was the small drum dump cleanup, which involved thirty-three individual sites throughout the State, which in total had approximately 400 drums, a couple of catch basins, some tanks. Basically, this is about 95% completed. There are three to five more sites that have to be cleaned up. This cleanup was done totally with State Spill Fund money at a cost of approximately \$250,000 for the package. Once again, when Dr. Sadat gives his talk, he will explain a little bit about each one of these types of cleanups just to show you what is involved and the technical complexity and the time-consuming actions that have to be taken before cleanup can even begin.

ASSEMBLYMAN LESNIAK: All of these programs are very involved and technically complex, and require a lot of staff to complete. Is that correct?

COMMISSIONER HUGHEY: Do they -- of course.

MR. STANTON: The second prong of the cleanup is the major drum dump cleanup, and this involves eleven major drum dump sites around the State. These all have fifty to sixty or more drums, some up to close to a thousand. They will involve surface cleanup, possibly excavation of limited amounts of contaminated soil, and a look to see whether or not ground water is contaminated. The four-year plan allows for more drum dump sites to be integrated into it, if we find others as we go along. I would like to point out again that the major drum dump cleanup program is being carried out totally with Spill Fund money; no Federal money is involved at all.

The third prong of the State's hazardous waste program is the long-range Hazardous Site Cleanup Program, starting with the sixty-five sites that are on the national priority list. It contains twenty-three more sites that did not make the Superfund priority list, but which the State had miterized, as they call it, using the National Hazard Ranking Form to assess the severity of the pollution. We have these twenty-three sites on the list to be cleaned up with State Spill Fund money, not with Federal money. This list, I would like to point out, includes sixteen sites from the original Hazardous Defense Bond Act. Three other sites from the Bond Act are part of the major drum dump cleanup. Four sites that were on the Bond Act have been cleaned up, and two, upon detailed inspection, were found to contain no hazardous waste. So, I could point out that the plan covers totally all of the sites that were on the original Hazardous Bond Act. The status of the plan to date is as follows.

Presently, we have seventeen sites within the State that have some form of Federal/State funding commitment, either for feasibility studies or feasibility studies and related work. For example, at the Bridgeport Oil and Rental site, which I am sure a lot of you are familiar with, we have approximately \$1.4 million, a million of which is to be used to immediately drain down that lagoon, drain down and empty the lagoon. So, action is taking place immediately, with roughly \$400,000 being set aside for a feasibility study to see the best way to clean the whole site up totally.

Another site where we have some combined funding is the Syncor Resin site, for which we received a \$2.2 million Superfund award. Two million dollars of that is to clean up drums on the surface, while \$200,000 is being used to do a feasibility study to assess, once again, the severity of the entire site and the best method of cleaning it up.

I would like to point out that, while most of our activity, true, is in the feasibility area right now, there are other things going on. We expect to finish twelve to eighteen new feasibility studies by the end of this year, phased over approximately one or two a month for the rest of the year. What this will do is get us into the Federal system to have design/construct money committed by, we hope, early in 1984 to go into the next phase of these programs.

ASSEMBLYMAN LESNIAK: How many feasibility studies?

MR. STANTON: Well, we hope to have twelve to eighteen more through EPA by the end of the calendar year. We expect, of the seventeen sites that are presently ongoing, that six to eight of these, which are feasibility studies now, will be moving into the design/construct phase by either sometime in July or August, or early September, with Federal funding. We hope to have them to EPA by July and have them move through Washington and have Federal funds committed for the design/construct phase. Once again, this is where the big dollars start to come in, by the end of their fiscal year, which is September 30. So, we hope to move ahead with more feasibility studies and, also, move ahead with the feasibility studies that are presently ongoing to bring them into the design/construct phase.

Once again, I know that a lot of the questions concern the need for feasibility studies. I could just say that these sites are very complex, and at almost all sites there are questions of ground water contamination, questions of where are the pollutants going, how are they traveling and what is the best way to clean them up if they have moved off site or if they are still moving off site. These major sites, particularly I say again, the landfills which New Jersey has a fair amount of, are very complex. The movement of the material out is virtually impossible. You cannot just go in and excavate sixty feet down, twenty acres across, and expect to take it someplace else. So, these solutions are going to have to involve some kind of intrinsic treatment, which is either improvement in the pumping of the water -- research in that area is looking into new ways of washing chemicals through.

Basically, I would just ask you to understand that there is a need for feasibility studies. Large sums of money will be expended, and it is really necessary to see that they are expended properly before going forward in some of these areas.

ASSEMBLYMAN LESNIAK: I don't believe that there is any question by anyone on this Committee that there isn't a need for feasibility studies. I think we may have some questions concerning how these feasibility studies are obtained

and the time in getting them. Now, I wish you could be more specific in terms of --

MR. STANTON: Dr. Sadat will be specific.

ASSEMBLYMAN LESNIAK: In terms of feasibility studies, Dr. Sadat is going to cover them?

MR. STANTON: Yes.

ASSEMBLYMAN LESNIAK: Okay, then I will hold my questions until then.

MR. STANTON: I just have about one or two minutes more. Once again, I would like to point out that we are spending most of our time here today discussing Superfund and abandoned site cleanup, but we all know that the Spill Fund also is used for cleaning up spills and emergency incidents. In 1982, DEP responded to 774 spills with Spill money and resources from the Spill Fund. Thus far in 1983, we responded to 210 emergency spill calls. From January, 1982 until the present, we cleaned up six major spills, not including the 1982 or 1983 drum dump cleanups, which totaled approximately \$200,000. These are the type of cleanups where you have the leaking underground tanks that threaten people's individual wells.

In closing, I would just like to point out, as Commissioner Tyler alluded to in his statement, that the four-year plan, in addition to the Superfund and State-funded sites, includes sixteen to eighteen sites where either DEP or EPA, or both, are negotiating on consent orders and enforcement actions with companies to do voluntary cleanups and pay for them themselves. Also, the Division of Water Resources --

ASSEMBLYMAN LESNIAK: Who is going to answer questions on that, because I have some questions on those matters too?

COMMISSIONER HUGHEY: We'll all try.

ASSEMBLYMAN LESNIAK: Okay, I'll wait until you finish.

MR. STANTON: The Division of Water Resources has thirty-nine cases that are voluntarily being cleaned up and, just for the record, thirty-six sites had either been cleaned up by Spill Fund or other State funds before Superfund was started. Now, I would like to just turn the last part of the discussion over to Dr. Sadat who, as the Commissioner and George have stated, is the new Administrator of the Hazardous Site Mitigation Administration, which was created specifically to address the hazardous waste abandoned sites as part of the new Division. Dr. Sadat is totally in charge of that operation, and will try to give you a little more detail on the type of things you are asking for. Thank you.

ASSEMBLYMAN BENNETT: Mr. Chairman, may I ask him a question?

ASSEMBLYMAN LESNIAK: Sure.

ASSEMBLYMAN BENNETT: Director Stanton, will we be able to get a copy of the Attorney General's opinion that was given to Treasury reference the source of funding?

MR. STANTON: Yes, I have a copy with me.

ASSEMBLYMAN LESNIAK: It's not your contention, Commissioner, that the statutory scheme is insurmountable in terms of spending the money, is it?

COMMISSIONER HUGHEY: No, but what we are going to show, I think pretty clearly, Ray, is that the plan which we came forward with has always been fundamental to being able to get through the funds. You had to be able to schedule that three years, on the Spill Fund particularly, so that you could show how you were going to get through in that time frame. We are now able to do that for the first time. Marwan?

DR. SADAT: With your permission, Commissioner --

ASSEMBLYMAN LESNIAK: I'm sorry; I have one other question right now for Director Stanton. How long have you been with the Department?

MR. STANTON: I have been with the Department now for about three and a half years.

ASSEMBLYMAN LESNIAK: Would you say that the Department is being asked to do more and more in terms of cleaning up chemical dump sites than it ever was asked to do before?

MR. STANTON: Yes, I would say that the problem is finally getting the recognition that it deserves. As both Commissioner Hughey and Assistant Commissioner Tyler pointed out, New Jersey has been a leader in this area for several years. One of the reasons we have as many sites on the list, is because we moved out aggressively to identify them. What's happening is that people are now realizing that these sites are out there and, as the Commissioner pointed out, everyone wants to be first and everyone wants to be number one. I would say "yes," that the demands being put on the Department for cleanups of these sites is certainly an increasing demand.

ASSEMBLYMAN LESNIAK: Doctor?

D R. M A R W A N M. S A D A T: Mr. Chairman, Commissioner, with your permission, I am going to take more than ten minutes. As we mentioned before, the Division of Waste Management was reorganized, and this has helped us to improve our fiscal, as well as our technical management of hazardous waste sites. One of the first tasks tackled by the new reorganization was providing a systematic approach to cleanup, which combined Superfund sites with non-Superfund sites or State-funded sites. We developed a four-year plan which listed approximately 100 sites, and we developed a schedule at the time indicating which sites would be -- when the sites would be dealt with.

ASSEMBLYMAN LESNIAK: Where is that schedule?

DR. SADAT: If you will bear with me for a minute.

ASSEMBLYMAN LESNIAK: Will we have that schedule?

DR. SADAT: If you will bear with me for a minute. That plan, which was a proposed plan, was submitted to EPA. We were requested by EPA at the time to hold off until the National Priority List was finalized. It is my understanding that EPA will release the National Priority List sometime toward the end of this week, and will give approval to our schedule. Now, --

ASSEMBLYMAN LESNIAK: My question hasn't been answered yet. Can we have a copy of that schedule that you submitted to the EPA?

COMMISSIONER HUGHEY: The answer to that is "yes," but until the end of this week when they incorporate it, it is a draft schedule.

ASSEMBLYMAN LESNIAK: Fine. Is it available right now?

COMMISSIONER HUGHEY: I'm sure we have it in one of the packages we brought over today.

ASSEMBLYMAN LESNIAK: I looked for it, but I haven't seen it.

COMMISSIONER HUGHEY: You haven't gotten half of our information yet.

ASSEMBLYMAN LESNIAK: Can somebody dig it up? I'm anxious to see it.

COMMISSIONER HUGHEY: Go ahead, Marwan.

DR. SADAT: The plan that we developed is a three-pronged attack on New Jersey's hazardous waste problems. It is the result of a review process which started with an original list of sites ranked by DEP and EPA according to the

Federal Hazardous Ranking System (HRS) or the mitre system. The mitre system is a numerical system which is based on potential danger to public health and the environment, and considers surface and ground water pollution, as well as releases of hazardous chemicals into the atmosphere.

From the list, EPA identified a total of sixty-five New Jersey sites as eligible for Superfund monies through the issuance of its National Priorities List (NPL). New Jersey was allocated the largest number of sites on the list. We must note, however, that the number of sites per state does not accurately reflect the actual number of hazardous sites in that state. That is to say, there are roughly 14,000 sites nationwide, and if one makes a quick calculation, this number is about 500 sites per state. Therefore, the National Priority List does not reflect the actual number of hazardous sites in this State. Rather, it is a reflection of the State's environmental agency's effort in early identification and prioritization of hazardous sites.

Presently, we have feasibility studies on seventeen sites throughout the State, and I will give you a rundown on these sites:

Lipari Landfill - Plans and specifications for a containment slurry wall have been completed, and are being reviewed by DEP. Construction will begin in July, 1983.

ASSEMBLYMAN LESNIAK: We're going to have to go slowly now. Are you going over each site where you have a feasibility study completed?

DR. SADAT: Or, where we expect to have a feasibility study completed this year.

ASSEMBLYMAN LESNIAK: Okay. The first one is the Lipari Landfill?

DR. SADAT: Lipari Landfill, Price's Landfill --

ASSEMBLYMAN LESNIAK: No, no -- could you repeat what you said about Lipari Landfill?

DR. SADAT: Lipari Landfill - Plans and specifications for a containment system (slurry wall) have been completed. These plans are being --

ASSEMBLYMAN LESNIAK: What about a feasibility study?

DR. SADAT: The feasibility study is concurrently going on at the same time. We are going to contain the leachate prior to completion of the feasibility study.

ASSEMBLYMAN LESNIAK: When do you expect the feasibility study to be completed?

DR. SADAT: Prior to the end of 1983.

ASSEMBLYMAN LESNIAK: Who is doing the feasibility study?

DR. SADAT: CDM, Camp, Dresser and McKee.

ASSEMBLYMAN LESNIAK: So, Lipari is on Superfund?

DR. SADAT: That is correct.

ASSEMBLYMAN LESNIAK: Okay.

COMMISSIONER HUGHEY: It's his own contract, Ray.

ASSEMBLYMAN LESNIAK: That means that we can contract out for the feasibility studies?

COMMISSIONER HUGHEY: No, it means that EPA does through their zone contractor.

ASSEMBLYMAN LESNIAK: EPA does?

COMMISSIONER HUGHEY: Yes.

ASSEMBLYMAN LESNIAK: So, EPA selected the contractor?

COMMISSIONER HUGHEY: They selected their contractors on a regional basis throughout the country before they began the whole process, so if they have one in our region, they direct it to their zone contractor. One of the reasons, which Marwan will get into, why we have put EPA in the lead in a number of cases, is because of the arrangement they went through on zone contracting. We can actually start a job through EPA quicker than we can start it at the State, in many cases.

ASSEMBLYMAN LESNIAK: Why is that?

COMMISSIONER HUGHEY: Because they have a zone contractor lined up and, unlike that contract that you saw from the State today, they don't have to go through that process. Under certain terms and conditions, they can go right through to their contractor once they take the lead, and begin work on the site.

ASSEMBLYMAN LESNIAK: How many contractors are available to do this work for the region?

COMMISSIONER HUGHEY: For EPA Region 2? They have one contractor.

ASSEMBLYMAN LESNIAK: And one contractor is going to have to do all this work?

COMMISSIONER HUGHEY: It's not a bad contract, is it?

ASSEMBLYMAN LESNIAK: No, it's not bad for the contractor, but do you expect that this one contractor is going to be able to conclude all of the feasibility studies?

COMMISSIONER HUGHEY: I think, as Marwan will take you through today, they have been keeping pace with our ability to sign the contracts. They have been doing the feasibility studies.

ASSEMBLYMAN LESNIAK: We were told that the Burnt Fly Bog feasibility study was to be completed in December of 1982. Has it been completed?

COMMISSIONER HUGHEY: Marwan is going to cover that one too.

DR. SADAT: If you let me run through them, I will give you a status report.

COMMISSIONER HUGHEY: I know this is time-consuming, but I think you probably --

ASSEMBLYMAN LESNIAK: I don't mind the time-consuming aspect of it, but when questions arise I would like to ask them as they come up.

COMMISSIONER HUGHEY: Feel free.

ASSEMBLYMAN LESNIAK: Okay.

DR. SADAT: On Burnt Fly Bog, the original date of completion was the end of December. The sampling program which was conducted by the consultant was found to contain some cross contamination. We then requested the consultant to go back and resample, at their own cost, all of the areas which were originally included in the feasibility study. In addition to that, EPA imposed on all Superfund's feasibility studies what they call a "cost effectiveness matrix," which added about a month and a half of work on the consultant. The feasibility study was sent out to a limited number of local officials two weeks ago. The final report, which we understand will be approved by EPA, will be released Monday.

Price's Landfill - Finalization of the feasibility study is pending. It has been completed. We have asked that further selected alternatives be evaluated, and the reason for that was the extremely high maintenance cost -- operation and maintenance cost.

Burnt Fly Bog - The feasibility study is completed and was submitted to EPA on March 18 for approval.

Goose, Spence and Pijak Farms (Plumsted Sites) - EPA is currently developing a Remedial Action Master Plan (RAMP) feasibility study to start early Summer, 1983.

ASSEMBLYMAN LESNIAK: What is the average time for a feasibility study?

DR. SADAT: Six to nine months for a medium site; twelve to fifteen months for a complex site.

ASSEMBLYMAN LESNIAK: Go ahead

DR. SADAT: Friedman Property - RAMP was recently completed by EPA; the feasibility study will start in mid-April, 1983. The RFP was mailed to the consulting engineering firm by the Department of the Treasury last week -- this week. We submitted that as one of the exhibits.

Lone Pine Landfill - The feasibility study is completed in draft, and was submitted by the consultant to DEP for our review on March 8, 1983.

Bridgeport Rental and Oil Services --

ASSEMBLYMAN BENNETT: Could you slow down a little bit, please?

ASST. COMMISSIONER TYLER: These dates are all in the material we have provided, Assemblyman.

ASSEMBLYMAN BENNETT: I haven't been able to read everything that you gave me yet.

ASST. COMMISSIONER TYLER: I'm sorry.

ASSEMBLYMAN BENNETT: Okay, thank you.

DR. SADAT: Bridgeport Rental and Oil Services - We anticipate initial remedial action which deals with lowering the lagoon by June, 1983, that is, construction will begin in June, 1983. The feasibility study is ongoing and should be completed prior to the end of 1983.

D'Imperio Property - The feasibility study is completed -- I'm sorry. The feasibility study is ongoing, and we expect to have it completed before the end of 1983.

Kin Buc --

ASSEMBLYMAN LESNIAK: Excuse me, I'm sorry. Does that also apply to Bridgeport Rental? Do you expect it to be completed by the end of 1983.

DR. SADAT: Yes, by the end of the Federal fiscal year.

ASSEMBLYMAN LESNIAK: By October?

DR. SADAT: Yes.

MR. STANTON: October 1st.

DR. SADAT: October 1st.

Kin Buc - A laboratory consultant is performing a "treatability" study. This is to evaluate the impact of discharging pretreated leachate into the Middlesex County Municipal Utilities Authority's sewage treatment plant at Sayreville. EPA is negotiating with Kin Buc Inc. at this point to take over the operation of the leachate discharge treatment facility which is presently at the site. There is no ongoing feasibility study at Kin Buc.

ASSEMBLYMAN LESNIAK: Who is that?

DR. SADAT: That is an EPA lead, Mr. Chairman, and it is my understanding that EPA feels that they can negotiate a settlement with -- an acceptable settlement to both DEP and EPA with the owners/operators.

ASSEMBLYMAN LESNIAK: Are these the same owners/operators who have owned and operated the site over the last ten years?

ASST. COMMISSIONER TYLER: As far as we know, yes.

ASSEMBLYMAN LESNIAK: So, the same people who violated rules and regulations for that period of time are going to be the ones that we are going to negotiate with, and who we are going to expect to comply with any agreement?

COMMISSIONER HUGHEY: Wherever you negotiate a settlement, Ray, you are negotiating typically with the people who created the problems.

ASSEMBLYMAN LESNIAK: That is a serious problem, because that is what happened with the Department with Chemical Control. What happened was, we wound up wasting over a year, and I know you weren't here at the time, but the problem remains. I do not hold up very much prospect for people complying with an agreement when they didn't comply with the law in the past.

COMMISSIONER HUGHEY: Well, we don't wait long anymore either, as you are going to see today with a map, for example, just from the Water Resources Section of our Department. You are going to see how many compliances there have been this year.

ASSEMBLYMAN LESNIAK: That is what I am concerned with. I want to reiterate that any further extensions, if any voluntary agreement is entered into, ought to be very seriously not allowed.

COMMISSIONER HUGHEY: We have taken two positions this year for the first time with EPA. One is that all the things we have problems with, in terms of maintenance or shared costs, whether it's for the State or for one of our municipalities -- and I think you know that municipalities, particularly if they have ownership, have a particularly heavy burden in some instances. As we negotiated the contracts, and we are going to go over a summary of those contracts with you today, we have never given away the language that we thought was necessary for the State or the municipality. We have never given away our right to negotiate within the settlement conference.

ASSEMBLYMAN LESNIAK: Excuse me. What about your right to force the settlement?

COMMISSIONER HUGHEY: We always have. Even though they are in the lead, if they come for naught, we can ask them for removal of this, and we have done this.

ASSEMBLYMAN LESNIAK: How many are in existence now?

COMMISSIONER HUGHEY: What, in terms of settlements? We have an extensive list we are going to go through with you on all the negotiated settlements.

ASST. COMMISSIONER TYLER: It's in the package --

COMMISSIONER HUGHEY: It's in the package.

ASST. COMMISSIONER TYLER: In the package, there is a list of sites that are undergoing cleanup as a result of enforcement action. I also should point out, Assemblyman, on Kin Buc, there was a consent agreement reached with the present owner/operator -- former operator -- by the U.S. Attorney and EPA some years ago, which resulted in a partial cleanup, one that is being reevaluated at this point, as Marwan pointed out.

ASSEMBLYMAN LESNIAK: What is the current situation at Kin Buc in terms of its environmental threat?

DR. SADAT: Mr. Chairman, presently at Kin Buc, the leachate is -- the oily leachate is collected by Kin Buc, Inc. That operation previously was being done by EPA. The leachate then goes through a treatment process -- a somewhat primitive treatment process -- which separates the oily part from the aqueous

part. The oily part is PCB contaminated in some cases; that depends from day to day. That is drummed and being disposed of at the proper disposal facility. The aqueous part receives some pretreatment and is then sent to the Middlesex County Sewerage Authority treatment plant.

ASSEMBLYMAN LESNIAK: Are you satisfied that that containment process is not doing any further environmental damage?

COMMISSIONER HUGHEY: No, I think what Marwan is telling you is that a part of -- Kin Buc is one where we tried a dual track, where we took some immediate steps, which he has outlined, and we are also reevaluating the entire feasibility of the site. As an interim step, we are satisfied with what we have, but I think this is one where we dual tracked and we did it for a reason. Would you agree with that, Marwan?

ASSEMBLYMAN LESNIAK: How soon can we have a completed reevaluation of this?

COMMISSIONER HUGHEY: Well, I think he has already outlined it.

ASSEMBLYMAN LESNIAK: No, I don't think so.

DR. SADAT: I haven't, Commissioner; I'm sorry. The Kin Buc feasibility study was not started as I outlined before. The containment system which we have right now is somewhat primitive. It is a containment system which was installed by EPA. It does prevent any further damage to the environment; however, it does not deal with the problem at Kin Buc itself. That would have to come out of a feasibility study.

I would like to point out, Mr. Chairman, that Kin Buc is a perfect case where we really need a feasibility study, --

ASSEMBLYMAN LESNIAK: Kin Buc is a pretty large site.

DR. SADAT: -- because if we were to attempt to remove all of the chemicals which were dumped at Kin Buc, we would probably bankrupt Superfund. In terms of magnitude of the cleanup job --

ASSEMBLYMAN LESNIAK: It's a large site.

DR. SADAT: -- it's a large site, and it is a complex site.

ASSEMBLYMAN LESNIAK: And a feasibility study is going to take from twelve to fifteen months to complete?

DR. SADAT: Twelve to fifteen months, that is correct.

ASSEMBLYMAN LESNIAK: So, we're looking way down the road for any remedial work on Kin Buc then.

COMMISSIONER HUGHEY: For long-term remedial work.

DR. SADAT: That's right. What we have is a containment system right now, and I can give you the actual financial figures on Kin Buc. I think we have over \$3 million allocated to that. On Kin Buc, we have \$3.1 million, and out of that \$700,000 would be spent roughly on the feasibility study. The additional monies would be used to continue the containment system and the treatment system at what we call "Pool C," which is a leachate, while we are completing the feasibility study. We do this at a number of sites. At Lipari, this is why we are putting in a slurry wall this summer. At Bridgeport Oil, we are spending roughly \$2 million. At Bridgeport Oil, we have a total amount of \$3.2 million. That contract was signed the end of November, and out of this \$3.2 million we expect to spend roughly two and a half million dollars in lowering the lagoon so as to prevent a discharge from the lagoon. That will involve pumping roughly 25,000,000 gallons out of the lagoon at Bridgeport, treating this material, the aqueous phase,

to a high level of treatment, and then disposing of the oily part at an appropriate incinerator.

ASSEMBLYMAN LESNIAK: When do you expect that work to begin?

DR. SADAT: Actually, construction will begin in June of this year.

Chemical Control - We have a contract under development for removal action. That will be an EPA lead.

ASSEMBLYMAN LESNIAK: What does that mean?

COMMISSIONER HUGHEY: He is going to explain it.

DR. SADAT: This would involve the construction of the sewers and the catch basins which were contaminated during the fire and which were plugged up. There are, additionally, some gas cylinders which need to be removed. We expect to have a contract signed with EPA in April of 1983.

ASSEMBLYMAN LESNIAK: For the construction and the removal?

DR. SADAT: That is correct.

ASSEMBLYMAN LESNIAK: And when would you expect that work to be done?

DR. SADAT: I don't have a schedule.

MR. STANTON: Once again, I would like to point out that EPA has its own contractors, and one thing that should have been pointed out before is that they have one, but they subcontract out a lot of the work. They'll go to local qualified firms. They are viewed more as contract managers -- the zone contractors.

ASSEMBLYMAN LESNIAK: For the feasibility studies?

MR. STANTON: For the feasibility studies, as well as for -- this would be a cleanup. The scope of work that we worked out with EPA on Chemical Control should be the final -- it calls for even putting in curbing, so that rain water can't run off at the site anymore -- for landscaping. It should be the final --

ASSEMBLYMAN LESNIAK: Are they going to build a park there?

MR. STANTON: Who knows. It should be the final piece of action to maybe having Chemical Control being one of the first sites removed from the Superfund list.

ASSEMBLYMAN LESNIAK: How many subcontractors are involved in doing feasibility studies? Do you know?

DR. SADAT: There are a large number of subcontractors who are working for NUS. NUS is a zone contractor for this year for EPA. They have the whole East Coast. However, there are a number of Jersey firms and New York firms which are subcontractors to NUS. NUS really acts as a clearing house for these feasibility studies.

Swope Oil - We have a cooperative agreement to perform a feasibility study, which we expect to sign toward the end of this month.

Syncon Resin - We have a cooperative agreement which was signed on December 20, 1982. We had a Request for Proposal for initial drum removal. This will be 10,000 drums. The removal itself should begin June, 1983 or late May, 1983. The feasibility study will be initiated after we complete the drum removal. We have to remove the drums in order to know the extent of contamination.

Krysowaty Farm - A contract was signed with EPA on December 20, 1982. It is expected that Krysowaty will be completed -- the feasibility study -- prior to the end of the Federal fiscal year.

GEMS Landfill - We requested from EPA an emergency action on GEMS in September, 1982. The emergency contract was finally signed in late February, 1983. We have begun some construction, mainly a fence at GEMS. In addition, there will be a slurry wall which is being proposed as well -- a combination slurry wall and

drainage system to prevent the leachate from moving off the site. We expect a feasibility study to also be initiated sometime in late spring of this year.

Kramer Landfill - A Remedial Action Management Plan, or RAMP, is currently under development by EPA, and we have a contract scheduled for completion in March, 1983. In addition to that, --

ASSEMBLYMAN LESNIAK: Wait, I'm sorry. Scheduled for contract signed -- What does that mean, I can't understand it -- "scheduled for contract signed in March, 1983?"

DR. SADAT: I'm sorry. That should be "scheduled for contract to be signed in March, 1983." I don't think that that is going to quite happen. It will probably be April.

ASSEMBLYMAN LESNIAK: And what will that contract entail?

DR. SADAT: The contract will entail a feasibility study to be performed by the zone contractor for EPA. In addition to that, we have scheduled the following action -- and I am not going to take you through all of the material we have put together, Mr. Chairman. We have an additional twelve sites which I will list for you, on feasibility studies, -- We expect to have agreements with EPA on the following sites: GEMS, Kramer, which I mentioned to you, Chemical Control, Swope, Combe-Fill South, Combe-Fill North, Rockaway Township Wellfield, Rockaway Borough Wellfield, Reich Farms, Fairlawn Borough Wells, Sharkey Landfill and Chemsol.

We expect to go into design and construction of the remedial action prior to October -- prior to the end of the Federal fiscal year at Burnt Fly Bog, Price's Landfill, D'Imperio, Krysowaty Farm, Lone Pine Landfill and Lipari Landfill, and probably also the Friedman Property, if we can get the feasibility study completed in time.

ASST. COMMISSIONER TYLER: That RFP was given to you this morning to retain a consultant for that feasibility study.

DR. SADAT: As Director Stanton mentioned before, we have a small drum dump cleanup action which we expect to complete in very early Spring, 1983. We have already cleaned up thirty-three of these sites.

Major Drum Dump Cleanups: One of these sites is actually a Superfund site; the others will be performed over the next two years at the rate of one every other month, approximately. These are: Cooper Road in Voorhees Township, Frontage Road in Newark City, Kearny Drum Dumps Nos. 1 through 5 in Kearny, Minsei Kogyo Shoji in Woodland Township, Myers Property, which is a Superfund site, in Franklin Township, North Bergen/Keystone in North Bergen Township -- we are about to award the contract on this, Storer Dump in Marlboro Township and the Tabernacle Site in Tabernacle Township.

ASSEMBLYMAN LESNIAK: I am starting to get a little bit bogged down. Let me try to clarify some important issues, because I want to call -- Is Assemblywoman Kalik still here, because she wants to testify? The Assemblywoman is at the Appropriations Committee Meeting; she will be here shortly.

Commissioner, I have one question right now. On Table 2 in Dr. Sadat's testimony, it clearly implies that you only intend to expend \$3 million per year from the Spill Act for abandoned dump sites. Are you saying that that these sites are not classified as imminent hazards and, therefore, you cannot spend additional money?

COMMISSIONER HUGHEY: No, that is not what we're saying, not necessarily. First of all, we have -- what we are showing you in the plan is what we

have called to date "a minimum plan." We are incorporating new things into that plan every day as our system, the mitre system which we employ, can be evolved for different sites. In addition to that, I don't think Dr. Sadat got to it yet, we wanted to give you some example of how much pressure is going to be on the Bond Act, just from the maintenance issues that we have addressed. Marwan, I don't know whether you gave the example yet or not, but let me give it. If I may use a specific example, Price's Pit is very near to being completed with the feasibility stage. I think it was suggested before that there were like fifteen alternatives at one point discussed for that site. The capital construction cost, the Superfund money, is approximately in the neighborhood of \$30 million from the alternative that looks like the selected alternative at this point.

The maintenance requirements on that site alone could be a \$40 million commitment on the State side. So, what you are seeing is the very minor part of the Bond Act that we are committing at this point to abandoned dump sites. We expect that there will be considerable pressure on the Bond Fund in addition to that kind of an area. I mean, we don't expect, we know. We have now gone through feasibility studies to the extent that we realize what the maintenance implications are. It is one of the reasons, Mr. Chairman, and I know you follow this -- it's one of the reasons why we challenge the National Contingency Plan. It's one of the reasons why we have negotiated around the concept of maintenance. We feel at this point that there will be so much pressure on the State's ability to pay just on the Bond Act, that the whole idea of Superfund may be negated if we can't successfully talk about maintenance as a long-range dual responsibility -- minimal dual responsibility.

So, what you are seeing now is a minimum draw down. Would you agree with that, Marwan?

DR. SADAT: I think, Mr. Chairman -- I would like to point out that at the end of 1982, when we were preparing to sign agreements on a number of sites with EPA for Superfund money, we actually had to change our usual contract form from sixty days, where we would have to actually give the Federal government a check within sixty days, to seventy-five days, because I would have never made it with respect to the \$3 million "Cap" which is imposed, and which most Superfund sites fall under.

ASSEMBLYMAN LESNIAK: Why is that?

ASST. COMMISSIONER TYLER: I just offer that any site that we would make a case as an imminent hazard site, is at the top of our priority list and, therefore, we are forced into the EPA system by State law. So, we have to apply to Superfund, so in effect --

ASSEMBLYMAN LESNIAK: But, we don't have a "Cap." We can --

ASST. COMMISSIONER TYLER: That's right. We can breech the "Cap," but only for the 10% match, unless we have so many imminent hazard sites that we go beyond the 10% match status and beyond the Superfund list. We don't have that many imminent hazard sites, so any site that we can make a case, like the GEMS case, for example, that we believe constitutes at least in part an imminent hazard, we have pursued. The other complication I have to point out, is that Superfund has an emergency step too, so if we can make a case that it is an emergency and an imminent hazard, then we have to, again, try to make the case that it is 100% Federal response, and that is the case we were pursuing on the GEMS case. We recently, I think Marwan said in February, 1982, reached an agreement on an interim step. Typically, that interim step will abate the interim hazard, not the immediate

hazard. One of the recommendations that we have received to structure the program better and to operate at a site, for example, the Chemical Control site, is to switch from an emergency mode, then to go to a nonemergency mode in terms of responding. So, the imminent hazard option is there for us, but it does drive us to the Superfund application.

ASSEMBLYMAN LESNIAK: There are now some \$13.5 million available in the Spill Fund. Do you expect to allocate that money, or commit that money, in the near future?

COMMISSIONER HUGHEY: Yes. The four-year plan was constructed, Ray, specifically for that point, to get us off the dime in terms of showing commitment. Marwan has a chart which he can show you today, which shows the commitments spread out over four years, and the expected draw down over four years.

ASSEMBLYMAN LESNIAK: That conflicts with the written testimony submitted -- Table 2, which says, under the Total Estimated Costs for Projects Scheduled: "The Spill Compensation and Control Act stipulates that funds provided for cleanup actions taken at sites abandoned prior to the effective date of the Act, be limited to \$3 million per calendar year."

COMMISSIONER HUGHEY: Well, it is not a conflict at all. If you look further in the schedules you will see that that \$3 million is allocated for the four years.

ASSEMBLYMAN LESNIAK: That's all you're -- I'm not talking about the \$3 million; I'm talking about the \$12 million to \$14 million that we are getting in a year. You don't expect to spend that?

COMMISSIONER HUGHEY: No, no. The minimum commitment -- we want to show the draw down against the Spill Fund, which was your original question. To show the draw down, you have to show \$3 million a year. We have done that. That is a minimal commitment. What I said to you was, "That is the conservative side estimate based on the need to clarify the language in the Spill Fund." We have done that.

ASSEMBLYMAN LESNIAK: Do you expect to spend over \$10 million a year from the Spill Fund on cleanup work?

COMMISSIONER HUGHEY: And more.

ASST. COMMISSIONER TYLER: We have a cash flow analysis that lays that out. I think it is in the testimony; if it is not, it's what the Commissioner said we would get to you.

ASSEMBLYMAN LESNIAK: It's not, and the problem is that this indicates that it might be otherwise.

COMMISSIONER HUGHEY: That chart is on its way.

DR. SADAT: Let me just clarify one aspect which is, to me at least -- I find somewhat frustrating when I have to deal with "pre-act" and "post-act." When we applied for a Superfund site, except on the GEMS site, and possibly on Bridgeport, we have not been able to demonstrate imminent hazard, which means that the Spill Fund administrator in most cases makes the determination that we had a "pre-act" discharge. This means that the discharge occurred prior to the passage of the Spill Fund. Now, what happens when I go in front of EPA and I say, "I have an imminent hazard?" They say, "Demonstrate that you have bodies in the street;" in most cases we cannot do that. The only case where we were able to do that was in GEMS.

ASSEMBLYMAN LESNIAK: That is not what I recall the definition of an imminent hazard to be under the statute -- bodies in the street.

ASST. COMMISSIONER TYLER: We agree with your definition, but we have to convince EPA that we are right.

ASSEMBLYMAN LESNIAK: Are we having a problem with Mr. Hunt in defining these as imminent hazards?

ASST. COMMISSIONER TYLER: In the GEMS case, our problem was with the Federal Environmental Protection Agency, where we made, we thought, an adequate case that we had an emergency -- an imminent hazard if you will -- for at least part of that situation. They did not agree with that.

COMMISSIONER HUGHEY: Well, let's go beyond that, because I think every case is different, Ray. We have had cooperation from Mr. Hunt; he lives with the constrictions of the language and the legal opinion. In the case of GEMS, not only did we make the imminent health hazard recommendation, but initially Region 2 bought that classification. Washington, which is working on the National Contingency Plan, and at that point was trying to stretch the money as far as they could, came up with a new concept called "Planned Removal," which delayed us for about two and a half months.

At that point, we resubmitted it on an emergency, with increased data, which happens on each one of the sites as you collect the data, and it has now been approved in the first phase as an imminent hazard. I think by design at the State side, it is not an easy classification to make. I don't think it was intended to be just another priority list, and I think you would agree with that. So, Hunt has his own problems with that. EPA has had problems because they can't decide what they want to categorize various sites as, whether it is planned removal or imminent hazard, or long-term remedial, or whatever, and it is one of the reasons why New Jersey filed a challenge to the National Contingency Plan, and we have been joined on that challenge. We are the lead state in the country on the challenge; we have been joined by the Environmental Defense Fund and every other group that looks at the Contingency Plan list.

ASSEMBLYMAN LESNIAK: I think one of the things -- If this is the only thing that comes out of this hearing today, I think it will be profitable, and a lot is coming out as you can see, and after we stimulate this, I'm sure a lot more will. I think one of the things we can do, and should do, is remove that "Cap" immediately. If this is causing that many constraints on the Department in terms of getting approval from whomever, I think that this Committee can take an action on that as soon as possible.

COMMISSIONER HUGHEY: I think what that would do for us is, we're going to spend the money anyway.

ASSEMBLYMAN LESNIAK: At least you wouldn't have to develop that many fictions.

COMMISSIONER HUGHEY: You don't have to develop as sophisticated a strategy to spend the money. We have the strategy, we can spend the money, but it would help.

ASST. COMMISSIONER TYLER: The other major legislative change at the Federal level which we recommended to our United States Senators, was to remove the preemption provision, thus eliminating all of the financial contortions that we have to go through.

COMMISSIONER HUGHEY: Do you want us to stop for a minute so you can take other testimony?

ASSEMBLYMAN LESNIAK: I want to call Assemblywoman Kalik at this time, who has graced us with her presence.

MR. STANTON: Assemblyman, may I just point out one more thing, and I think it is very important. The removal of the "Cap" becomes even more and more important as we move into the design/construct phase, because right now the 10% match is \$40,000 on \$400,000, but once we go into projects that are \$10 million, \$12 million or \$15 million, it will be \$1.5 million as a 10% match.

ASSEMBLYMAN LESNIAK: Maybe we can get a bill in with eighty co-sponsors the next time we meet. Assemblywoman Kalik?

ASSEMBLYWOMAN KALIK: (from audience) -- I think I can be heard just as well back here.

ASSEMBLYMAN LESNIAK: We won't pick you up on the tape for the transcript, and that is important. Why don't you come down here?

Let me first state, Assemblywoman, -- thank you very much for taking the time out from the busy Appropriations meeting to testify on this very important subject today.

ASSEMBLYWOMAN BARBARA F. KALIK: Thank you, Mr. Chairman. Many of the questions, in fact, that you have asked the Commissioner, the Joint Appropriations Committee will be asking the Commissioner when he appears before the Joint Appropriations Committee, and they are, how much money has been spent? How come it hasn't been spent? Where is it going to be spent? And, what, in fact, is going to be done with it? So, I did take note of the answers, and we hope that we will be able to compare our notes. I would certainly urge you to have one of your staff aides come to that hearing when the Commissioner does appear.

I have a prepared statement, specifically about the Swope Company, because, of course, that one is in my district. But, I would like to speak generally about this problem, if I may, for just a moment.

This is the second instance, I would say, within a month where a list of priorities has been prepared at great expense, because nobody gets a list of priorities without expense. You have to go out and examine all of the sites, or all of the things that are on a list, and then decide which one is more important -- on a list, one, two, whatever. And, a list has been established, and it has been determined that this particular company is Number 58 on a priority list, which means there are fifty-seven more dangerous, more hazardous, more needing locations. I am going to zero in though on Number 58, just for the sake of argument.

The Superfund monies have not been delivered, and the Spill Compensation Fund cannot be used for this site. So, even though it is Number 58 on the list, we are going to ignore it and go to a site that has not been identified within the first fifty-eight most hazardous sites and, in fact, clean up, maybe, Number 472. That doesn't seem to make much sense and, although I know that that is what the law says today, and that is that the Spill Compensation Fund cannot be used for this, and this particular money cannot be used, I, as a legislator, make laws, and it seems to me that those laws have to be made, and changed, so that those things identified as most dangerous to the public, in terms of potable water in particular, will be taken care of.

Several years ago we, in fact, passed the Pinelands Preservation Act.

ASSEMBLYMAN LESNIAK: (interrupting) That is one of my problems, quite frankly. We appropriated money, and you voted for money back in January of 1982, for this particular site, and that is one of the reasons for calling this meeting.

ASSEMBLYWOMAN KALIK: And that is why I thought it was important enough for me to come and speak on the problem.

ASSEMBLYMAN LESNIAK: And that money can be used?

ASSEMBLYWOMAN KALIK: And should be used for those sites that have been identified on a priority basis and, in fact, if Swope is Number 58, certainly the fifty-seven sites that are preceding it ought to be taken care of first. That is not a parochial point of view, because if it was I would say, "Do Number 58 first." We have to take care of those things that are the most dangerous and the most damaging to our society.

Just let me say, several years ago we passed the Pinelands Preservation Act at great cost to the State, at great cost to people who live in the Pinelands area, and why did we do it? We did it because we wanted to preserve a potable water supply to the people of this State. Now, we are dealing with a water supply that is in danger of being contaminated. I think that is a situation that we cannot, in fact, tolerate, a situation which we must do something about. This particular one is contaminated or potentially contaminated by lead. We cannot have people within 100 yards of a well that can be contaminated by lead and not, in fact, be doing something about it. That is my appeal to you, to the Committee, to the Commissioner, and to anyone else who has anything to do with this particular project, to make some progress on the fifty-seven hazardous sites preceding Swope, and then you can take care of Swope.

ASSEMBLYMAN LESNIAK: Assemblywoman, one of the problems stated by the Department, I believe, is that they are being asked to do more and more because of the serious nature of the problem. Do you know at this time, or do you recall what the budget request for the Department is for the upcoming fiscal year?

ASSEMBLYWOMAN KALIK: Unfortunately, Mr. Chairman, I do not have my budget materials with me; I left them in the other room. I do not know what their -- I would say that they are budgeted for exactly the same figure, if I am not mistaken, as they were last year. That is notwithstanding the special funds, and the Superfund and other monies that come in.

ASSEMBLYMAN LESNIAK: Well, Spill Fund money can be used for administration purposes, and that is part of the appropriations process. I would ask that you look to that, and seriously question the Commissioner as to whether additional appropriations, which are available, can be made available, so that we will not have any further excuses. In many cases, they are legitimate, but they are not legitimate if we are willing and able to appropriate the money to beef up the staff to do the work.

ASSEMBLYWOMAN KALIK: By the way, Mr. Chairman, I understand the Commissioner's problem. We're dealing with something in figures so astronomical, that I don't think any of us can truly comprehend the dollars that we're talking about to do this as a total job. But, of course, it is a result of 200 years of neglect, and we are not going to make up 200 years of neglect in two years. There also may come a time when a project becomes prioritized over and above that list that is presently pending, because of an immediate or threatening danger, and I think that we have to be flexible enough to deal with that. But, I think that once having identified a list and put the sites in a priority ranking, to ignore that list and go to some other list seems to me foolhardy, and a waste of time, effort and capital.

ASSEMBLYMAN LESNIAK: Thank you.

ASSEMBLYWOMAN KALIK: Thank you.

ASSEMBLYMAN BENNETT: Assemblywoman, are you aware that there is an agreement to be signed this month for a feasibility study to be performed at Swope?

ASSEMBLYWOMAN KALIK: Yes, I am.

ASSEMBLYMAN BENNETT: And, do you feel that we should expend monies to go in and do work prior to the feasibility study being done?

ASSEMBLYWOMAN KALIK: It is my understanding that the drums are going to be removed. There are 100 to 150 drums that will be removed prior to the feasibility study being done. I would have to say to you, "Is that an attempt to appease me, to appease the Legislature, to show that there is some progress being made," when we know that that work is not going to be done until we get some money? If that be true, then it is not being very effective, because if that work isn't done, in five years you are going to have to come back and do another feasibility study. So, what is the point to it?

ASSEMBLYMAN BENNETT: Well, the question, I think really, is whether or not we should just go ahead and spend money for spending money's sake, or try to clean up and do something in an economically and environmentally sound manner.

ASSEMBLYWOMAN KALIK: Absolutely, take care of Number one first.

ASSEMBLYMAN BENNETT: Where there is an immediate concern as to an immediate threat, wherever there are barrels on some of the different sites, they should be moved expeditiously, but for an overall cleanup task we should have our studies in place and have them done. If we are now in March of 1983 getting to a feasibility study on Number 58, if you will, the whole process, as far as I am concerned, is too slow, no matter who is responsible for doing it. I see that we apparently have at least a manner of dealing -- When we did the appropriation in January, 1981, according to the testimony that we received today, two sites that we appropriated money for to do cleanups, don't even have anything to clean up. I don't know if there was a lack of data available at that time, or exactly why those sites were included, but at least we see, particularly with yours, that our notes do not reflect the removal of the barrels. Now, Dr. Sadat is here and could possibly, while you are still here, be able to --

Dr. Sadat, dealing with the Swope Oil, which is located in Assemblywoman Kalik's district, on your listing in your testimony you have that "there will be a cooperative agreement to perform a feasibility study and it is scheduled to be signed in March, 1983." It is Assemblywoman Kalik's understanding that there is also going to be some immediate remedial cleanup or removal of approximately 100 drums that are an immediate threat. Is that what you said?

DR. SADAT: I must apologize. The information that we gave the Committee is incorrect. We do have in a proposal to EPA, and I will be glad to provide the Committee with the scope of work, which we put together which will -- I just sent for it -- remove 120 drums. That will be done before the end of this year. It will be done concurrently with the feasibility study to remove the imminent hazard.

ASSEMBLYMAN LESNIAK: Dr. Sadat, you are a director of a division?

DR. SADAT: No, I am not.

ASSEMBLYMAN LESNIAK: A bureau chief?

DR. SADAT: No, I am a little bit more than that. I am an Assistant Director or an Administrator.

ASSEMBLYMAN LESNIAK: More than a director of a division?

DR. SADAT: No, I am less than a director of a division. I report to Jack Stanton.

ASSEMBLYMAN LESNIAK: Bigger than a bread box? (laughter) Were you involved in the budget request making process for your Department?

DR. SADAT: Mr. Chairman, when the budget request was made, I was not in my present position, so I was not. I was involved, however, in preparing the administrative budget which was submitted to the Spill Fund.

ASSEMBLYMAN LESNIAK: Are you satisfied that the Department, in terms of its budget that it submitted to the Appropriations Committee, is sufficient in that it is exactly what was budgeted in the prior fiscal year?

DR. SADAT: Mr. Chairman, I can only deal with the area I'm working in, which is the administration of the Spill Fund and the Superfund. That is the only area that I deal with. The budget that --

ASSEMBLYMAN LESNIAK: Are you aware that the Spill Fund can be used for administrative purposes?

DR. SADAT: And it is being used.

ASSEMBLYMAN LESNIAK: Are you satisfied with the amount of money that is being used for administrative purposes?

DR. SADAT: I am.

ASST. COMMISSIONER TYLER: I just note that we made a presentation, as we have to, to draw down the Spill Fund for administrative purposes, to the Treasurer --

ASSEMBLYMAN LESNIAK: You're not speaking loud enough; I'm sorry.

ASST. COMMISSIONER TYLER: I'm sorry. We made a presentation, as we have to, to the Treasurer and the Spill Fund administrator, on the draw down from the Fund for our administrative budget for this year. I believe we requested funding for 110 positions, roughly budgeted at about \$3.5 million and, with two or three position exceptions, I believe that budget was approved.

ASSEMBLYMAN LESNIAK: And how much of that was an increase from your prior fiscal year request?

ASST. COMMISSIONER TYLER: In terms of spending -- approximately a 33% increase. I think we spent about \$2.5 million for administrative expenses. In terms of the request, it would be a \$2.5 million increase. The year before the request had been \$1 million, with any overrun coming out of the Spill Fund on a voucher kind of basis.

ASSEMBLYMAN LESNIAK: Assemblywoman Kalik?

ASSEMBLYWOMAN KALIK: Yes.

ASSEMBLYMAN LESNIAK: Since this is your area of expertise, I would probe, as I am sure you will, into the Department's capability of doing these clean-ups administratively in the type of manner that the public and the Legislature has mandated by instituting these programs, because, quite frankly, I know there are problems and I know there are complications. But, one does get somewhat weary with excuses, some of them very legitimate, but I don't want to hear that we can only do so much in a certain period of time, or we're being asked to do more and more, and yet the request to the Legislature for appropriations is only the same as was requested for the prior fiscal year. You can't have it both ways.

ASST. COMMISSIONER TYLER: I agree, and I think our budget request reflects our management judgment as to what we can manage and, as the need and the ability to manage a bigger program is apparent and upon us, you can count on the Department to submit those kinds of requests.

ASSEMBLYMAN LESNIAK: That will be up to you.

ASSEMBLYMAN BENNETT: Dr. Sadat, when do you anticipate the work on the 120 barrels to commence at this particular site?

DR. SADAT: Assemblyman, I couldn't give you an exact date, but certainly before the end of the calendar year 1983, these drums should be removed. That, we have absolute certainty of.

ASSEMBLYMAN BENNETT: And that would almost be simultaneous with the feasibility study?

DR. SADAT: It will be simultaneous, yes.

ASSEMBLYWOMAN KALIK: Again, let me say I appreciate that effort for the district and for Pennsauken, and for the people involved. I must reiterate, though, that there are fifty-seven others that come before, and it worries me that they may be, in fact, in more danger, and what are we doing about them? That is why a priority list was developed and, although I am here speaking on behalf of Pennsauken, I am also here speaking on behalf of a priority list that is developed for some specific reason and, if we have a limited number of funds, it seems to me, as I do in my office everyday -- I go from priority one to priority ten, and if I can't get beyond priority two, well, that is the way the day goes, and then we start all over again on the next day.

I would urge the Committee, and in particular the Chairman, to come before the Joint Appropriations Committee and state the case for this particular fund and the need for additional monies for administrative purposes. That is, in fact, what we do, and why we have hearings, as you have in fact come across something that can be very helpful, and that is the removal of the "Cap," which you can bring to us. Are there any further questions? (no response) Thank you very much for hearing me.

ASSEMBLYMAN LESNIAK: Is the Commissioner gone? I thought he was staying with us. (The Commissioner is with the press.) Dr. Sadat, I guess I could ask you this question. There are sixty-five Superfund sites, right? Give me a ball park figure -- I'm sure you can give me a ball park figure, or at least a minimum figure as to what the total -- a minimum figure, I won't even ask for a ball park figure -- give me a minimum ball park figure, or a ball park minimum figure as to the total amount of money it will cost to clean up, I'm talking about operation and maintenance, the remedial work as approved by Superfund under the current law -- we have to deal with the current law and not rely on it being changed, for those sixty-five sites.

DR. SADAT: Completion of forty-three sites, which we have in our four-year plan, will require \$197 million. Completion of all sixty-five sites, between private and public monies, we estimate will require roughly \$500 million.

ASSEMBLYMAN LESNIAK: Forty-three sites?

DR. SADAT: One hundred and ninety-seven million dollars.

ASSEMBLYMAN LESNIAK: Okay. What was the second figure?

DR. SADAT: For all sixty-five Superfund sites, and that includes private and public monies, because we have some private cleanups also, will be roughly \$500 million. We really cannot have a very good estimate --

ASSEMBLYMAN LESNIAK: I understand. Forty-three is one to forty-three, or is that, you know, Numbers 53 --

DR. SADAT: No, it is not one through forty-three. It is a number of Superfund sites, in addition to non-Superfund sites, twenty-three non-Superfund sites. We expect to almost be completed on twenty-three non-Superfund sites within the four-year period.

ASST. COMMISSIONER TYLER: Major sites, Marwan.

DR. SADAT: Major sites.

ASSEMBLYMAN BENNETT: How can you determine what the cost is before the feasibility studies are done?

DR. SADAT: We are doing estimates on what we think based on our experience with other cleanups, and based on the extent of the site, how large the site is, and based on whether we have ground water contamination, drum removals, contaminated soil removal -- we can only give you an estimate. We will not know the exact figures until we have the feasibility studies completed. So, if you want, I can give you rough estimates; I cannot give you exact figures.

COMMISSIONER HUGHEY: In the chart that we show you later, John, we will have rough estimates of ball parking through four years, but I think that directly flows to Ray's question originally, "How do you get through to the various accounts?" We now can do that. If you can chart it out for four years, even in approximates, you can do it.

ASSEMBLYMAN BENNETT: But, it could be one-fifth the amount or five times the amount?

COMMISSIONER HUGHEY: Depending on the alternatige chosen, and if you get one site and it has fifteen alternatives, then you have to decide which piece of it you want to pay for. The capital construction, as we know, could be exceeded by the maintenance, or the reverse could happen. We could select an alternative which -- where we're forcing, and this has resulted in some of the delays of the feasibility studies. As we push for alternatives that are not in the terms of the Federal statute, or the guidelines developed by EPA cost effective, we may be pushing for a very much higher capital construction cost -- the up-front cost.

ASSEMBLYMAN LESNIAK: I still have that question. In terms of the Superfund sites, just the Superfund sites, an estimated ball park minimum figure for just the Superfund sites -- you don't have that?

DR. SADAT: I would have to split them up.

ASST. COMMISSIONER TYLER: We can get it for you. We would have to split the twenty Superfund and the twenty-three non-Superfund from the \$197 million total, to come up with that.

ASSEMBLYMAN LESNIAK: Do you have an idea?

ASST. COMMISSIONER TYLER: I don't know.

ASSEMBLYMAN LESNIAK: Well, can we have that shortly?

COMMISSIONER HUGHEY: Yes, you can have that shortly.

ASSEMBLYMAN LESNIAK: How soon is shortly?

COMMISSIONER HUGHEY: Well, shortly would be by the end of this week. I mean, shortly wouldn't be -- Everything else you've asked for, I promised you would get within the next two hours.

ASSEMBLYMAN LESNIAK: Isn't it just a question of adding them up and subtracting?

COMMISSIONER HUGHEY: No, because we have to go through our analysis of sites too.

ASSEMBLYMAN LESNIAK: All right, that I would like to have. Okay? And you'll have that by the end of the week. Let me ask you, Commissioner, how much money do you think, under the current law, we can realistically expect to get from Superfund?

COMMISSIONER HUGHEY: Ray, we may be the only state, and I know this has been a concern to you -- we may be the only state that could ever say anything

nice about EPA, and the way that Superfund has worked. The aggregate totals for last year --

ASSEMBLYMAN LESNIAK: You are not including me in on that, I'm sure.

COMMISSIONER HUGHEY: No, of course, you haven't said anything nice, but let me tell you why you may have a reason to say something nice. The aggregate totals for last year in this country for District 2, which is New York, including New York and New Jersey, -- District 2 received over 50% of the total contracts signed in the country. Of that number, 80% went to New Jersey. To give you an example of what that means in numbers, the number of cooperative contracts signed in District 2 last year was seventeen. The next closest district in the country, out of ten, was six. Fourteen of those were signed for New Jersey sites.

Now, one of the things that we have always acknowledged, beginning in April of last year when we developed a very concentrated strategy, and we have shared this with the Committee before -- we developed a strategy which consisted of putting together two task forces in the Department. One task force had one job from April until November, and that was to do the mitre forms, or to help Region 2 do the mitre forms for submittal to Superfund. We developed forms on ninety sites, all of which are in the now four-year program, sixty-five of which made it to Superfund. We had a second task force which did nothing but line up and negotiate around the contracts that we wanted to sign in New Jersey. Those contracts are very important, and they relate directly to your question. We signed contracts with EPA. We made a decision as a state that in many instances we would put them in first place, which a lot of states were hesitant to do. We made a second decision that we would incorporate the Army Corp whenever we could.

We know that those contracts lead to design/construction phases and, if you look at Superfund today -- and we have made this point repeatedly. Let's assume that what we are talking about is considerably more than \$200 million over four years. We think that we can easily pull that from Superfund. Again, you may be skeptical, but let me put this in --

ASSEMBLYMAN LESNIAK: Do you seriously think that this trend is going to continue in the same percentage?

COMMISSIONER HUGHEY: What I am saying to you is, that no matter what state begins to sign into contractings, at this stage we are clearly a year ahead of them in terms of the funding. Now, the current Superfund is designed to go to 1985. It is going to be extended. Is it 1985?

ASST. COMMISSIONER TYLER: Yes.

COMMISSIONER HUGHEY: There is no other state that is going to be in a position, just as there was no other state sitting there with contracts. I mean, there has been a lot of discussion about why New Jersey got contracts, and why they didn't -- favoritism or nonfavoritism. I would submit to you that you can't have favoritism unless you have contracts ready to sign.

We are going to get a major significant portion of Superfund. We have to. We have already started the process. I really believe that. I believe that when every other state, and we were having meetings with other states early last spring, and for all the reasons that I pointed out to this Committee -- the question of 50/50 allocations, the question of 90/10, the long-term maintenance questions, states which are without Legislatures such as ours and which are not providing the match money, and which were not entering the negotiations because they didn't see any way around the hard issues -- We made a decision to go in and negotiate

contracts around the hard issues, neither side giving up those issues, and in March of last year -- I think the only thing I can give you in this regard is a historical perspective. When we talked to other states, they did not want to enter this part of the process, the cooperative agreement part, and they did not think we would be successful in cooperative agreements. They did not think we would be successful in design/construct. We're there now. I have every reason to believe that because we have such an early lead we are going to attract the major portion of Superfund, but part of our negotiations with our Congressional delegation has been, and we have maintained this all along, if we can build in New Jersey a four-year plan, which we know is going to be added on to, and we have provided for that within the four-year plan, a program that could draw down \$400 million or \$2 million easily, not going to the maintenance issue which we think ultimately will win, we knew that \$1.6 would never do it for the country. And that is one of the reasons why we so strongly support a continuation of the program.

So, why are we optimistic? I think we have the background data, the contracts signed to be optimistic. Now, you know, I can give you -- Marwan can address it from the professional side, but we are not aware of anybody that is in this position as a state to enter design/construct.

ASSEMBLYMAN LESNIAK: You, of course, are aware of the fact that Superfund has to provide cleanup of at least one site in every state?

COMMISSIONER HUGHEY: I am aware of that. If you will look at the regional list, which I will give to you, there are regions that have -- the region closest to New Jersey is six. There are regions that have no sites listed. I don't doubt for a minute that they will comply with Superfund and clean up one site in each state, but I would tell you that nobody has been as aggressive in jumping into the Superfund contracting business as this State.

ASSEMBLYMAN LESNIAK: There is no doubt about that. I am not questioning --

COMMISSIONER HUGHEY: I only mentioned that twice because once there was a question about aggression.

ASSEMBLYMAN LESNIAK: I'll get to the aggression -- I will get to the aggression. The \$200 million is going to be sufficient to cover all sixty-five Superfund sites?

COMMISSIONER HUGHEY: We do not maintain that. We have a four-year plan and we are going to go through the charts for you. They will show you the draw down for four years. That is not the end of the program. While it is called a four-year plan because we will be at various stages on all those sites -- all the Superfund sites, we will not have completed the cleanups or the maintenance that is required. I think Marwan suggested to you before that there are instances that we already know of, where we may have a ground water responsibility for thirty years. The four-year cleanup program that you've seen, or will see today, is at minimum a seven-year cleanup program. The \$200 million is all we project for drawing in the first four years, but we can exceed that as we push to have higher capital costs. We think that we will get our share, but more than that, we think more money is needed.

ASSEMBLYMAN LESNIAK: In terms of the sixty-five sites, I am going to reiterate the question I asked before. How much money is needed?

COMMISSIONER HUGHEY: We have estimated that as much as \$500 million may be required during the seven years it will take to really play out the entire four-year program that is now constructed.

ASSEMBLYMAN LESNIAK: Do you have any idea how we are going to get that \$500 million?

COMMISSIONER HUGHEY: Well, we know what our target is for that \$500 million, and that is Superfund. You have asked us a question on the Bond Act, and I think it is an appropriate question. We know, and have negotiated very hard on long-term maintenance, because we have already submitted to the Committee one site where we think the long-range commitment may have to be \$40 million. So, if you estimate that in seven years we may draw down on Superfund for \$500 million, we know we are going to go through the \$100 million at the State side of the bond issue. We are committed. I mean, I think what is going to happen is -- we're entering a field of really sort of creative legislation, which I am sure you appreciate. We have never had a construction program where one Legislature commits another, but, when you think about long-term maintenance responsibilities and the Bond Act, in fact, that is what we are going to be seeing, I think. I draw the analogy, Ray --

ASSEMBLYMAN LESNIAK: I will resist the temptation to speak about legislation which should be committed now.

COMMISSIONER HUGHEY: I think everybody will probably be committed. Let me say that one of the things I think that both I have learned, and you have learned, is that we are talking here about major construction projects. I mean, we do have a three-year old program. In this State we are familiar with sewer construction programs and highway programs, which take anywhere from eight to ten years from inception to construction. We have a program that is three years old, and we are going to enter design/construct on some of the major sites in this State this year, in the third year. This program is a construction program, and I think it relates directly to your dollar question. We do not know. The answer is, in the end, we do not know. I don't think the country knows. But, we are talking about a construction program here which will dwarf sewage construction and will dwarf highway construction in the country in the next decade.

MR. STANTON: Commissioner, I think there is one clarifying point. Superfund legislation -- I just checked with our lawyer to be sure -- says that in the top hundred sites on the list, there will be one site from each state that requests sites be listed. It doesn't say that one site per state has to be cleaned up. So, there are some states that did not request, for example, Louisiana did not submit any submittals --

ASSEMBLYMAN LESNIAK: They will.

MR. STANTON: They will, but I just wanted to point out that it didn't say they had to clean them up, only that they had to list them.

ASSEMBLYMAN LESNIAK: Louisiana will; I will guarantee that.

COMMISSIONER HUGHEY: Ray, let me have Marwan finish up his part of this and, again, it is just the first part. We also have for you today, should you care in a continuation this afternoon to go through the master plan, the four-year funding we see, which we can predict, but for our purposes at this point, Marwan can summarize in about two minutes, and then I would like to summarize for about three minutes, and then go back to questions if you like.

ASSEMBLYMAN LESNIAK: Just one question first, and I'm sure you will be asked to speak to this more completely before the Appropriations Committee. Your budget request for the Department is the same as it was for the last fiscal year, or if you are asked to do so much more. How do you do that? I know you're good, but are you that good?

COMMISSIONER HUGHEY: First of all, last year and the year before, we took a program, I think, in hazardous management where three years ago it was a \$200,000 program. All right? We were just going over this last night. We now have a program that is two and a half million dollars. That program draws on a number of funds, as you know. The Bond Act would not disappoint me about being able to draw some monies from it. The Spill Fund would not disappoint me about drawing some monies from it. We have been able to build a program fairly quickly. We have a priority package this year, in this area, for \$1.6 million that we would very much like to have. We will make up parts of -- as every department head enters the budget process, you know, I think, going in where you can make some trades or what your other funding sources may be.

We are going to cover parts of that priority package within the Department budget, but we would welcome any amount of that money being placed back on, and I don't think it was for any other reason except the budget crisis we are in that it wasn't part of the priority package submitted to the Legislature.

MR. STANTON: Mr. Chairman, I would like to point out that in the Spill budget, particularly, when Marwan and I came in in May of last year, there were approximately forty-eight or forty-nine filled positions. Although more had been requested, there hadn't been that much movement. Our budget for this year going up until July 1, 1983 for the Spill program -- the cleanups in the Spill program -- we have gone up to 105 positions, mainly the increases are in Marwan's area in the Hazardous Site Mitigation Group. There are some limited increases in the Spill response, three to five positions. We have virtually doubled, or will have doubled by June, 1983, the number of people working in the site cleanup area.

COMMISSIONER HUGHEY: Let me also say, Mr. Chairman, that we have taken a totally different kind of look at this area. We realize it is a contracting field; we have gone to Civil Service for professional titles. We have also gone to Civil Service for something totally unique in the State, which would be three-year contracts as opposed to permanent status. We want to build a program as we need it, and be able to phase out of it as we have to. I think you will see as we go through the budget that we really have beefed up this section; we've done it in a different way. Now, we haven't had everything that we need yet, but we do have a strategy.

ASSEMBLYMAN LESNIAK: I am sure you will articulate to the Appropriations Committee what you do not have that you do need.

COMMISSIONER HUGHEY: Yes.

DR. SADAT: I think finally, Mr. Chairman, I would like to point out that prior to the end of the Federal fiscal year, we have six design/construct contracts, and I repeat myself again, Burnt Fly Bog, Price's Landfill, D'Imperio, Krysowaty, Lone Pine and Lipari. The sum total of the construction and design is roughly \$40 million. This would be additional Superfund monies and Spill Fund monies, which we expect to have agreements with EPA on between now and October 1, 1983.

ASSEMBLYMAN LESNIAK: What was that figure again, I'm sorry?

DR. SADAT: Roughly \$40 million -- approximately \$40 million.

MR. STANTON: Ten percent of that will be out of the Spill Fund. It will be \$4,000,000 if we get the 10% now.

COMMISSIONER HUGHEY: Mr. Chairman, by way of summary, let me just restate what Marwan did. First of all, I think what is clear today -- I'm glad I got your first letter instead of your second letter --

ASSEMBLYMAN LESNIAK: I would have sent you the second one, too.

COMMISSIONER HUGHEY: We've had a good relationship with this Committee, and we are addressing a difficult area. I think it has taken us a while to get all the ingredients in place, but only a while in the relative sense of the word, particularly with the help of the Legislature.

To sum up right now, New Jersey has seventeen sites in the Superfund program with Federal funding committed for feasibility and/or cleanup. I think that is what I was trying to get across before. Once you sign that first document, you have made a commitment, and we intend to see that everybody sticks to that commitment. We intend to have twelve new feasibility studies under way by the end of this year, and sixty-eight studies going into design/construct by September 30, which is the end of the fiscal year for the Federal government. There will be three to four more going to design/construction by the end of the year, our year. In other words, we will have nine to fourteen sites in the State of New Jersey in design/construction by the end of this year.

As I said before, EPA Region 2 has 51% of the Superfund money committed in the nation; New Jersey has 70% to 80%, or 40% of the national total has been committed to this State under Superfund. At this point, after fourteen months, that is a record that I can stand by, and feel comfortable with.

Finally, we have made available to the Committee today, documents which I think show that we really have begun to construct long-term strategies. In addition to that, if time permits later this afternoon, we have a slide show prepared for the Committee which shows what the complications are in terms of going from finding a site through feasibility. I guess it all depends on how long we want to sit, but we would like to offer that to you. We think it is important that you understand how you get through from feasibility to design/construct.

We hope the testimony and supporting documents given to you today prove helpful. Again, let me state that there is always room for improvement, and we very much appreciate constructive criticism. This State has moved forward aggressively in the field of hazardous and toxic waste, and every time that I have talked about this program, I talk about it as a State program. It is a legislative program and an administrative program. Being out in front, we have learned in the toughest possible school, which is the school of experience. We are the ones who have cut the ground with EPA. We are the ones who have negotiated the sophisticated contracts, and I think sometimes to our detriment. We have learned well. We have the firmest foundation in this State of any that we know of in terms of dealing with this program. We are pretty happy with the progress we have been able to make in fourteen months. I think you saw today, and I think you will again -- and you and I will repeatedly in the next year -- one of the reasons why EPA was so hesitant to see a priority list, and I don't criticize them necessarily. The problem with the priority list is that somebody is number one and somebody is number fifty. But, what is important to this program is something that I think we have all appreciated in the past. If you have confidence in a program, if it is a nonpartisan program and if it is kept that way, then the person who is fifty has the confidence of the person who is one. That is what we are working for.

ASSEMBLYMAN LESNIAK: Commissioner, before you leave, just to clarify any misunderstandings that we may have had, certainly I have some criticisms of statements that were made, and not by you, quite frankly. But, it is very difficult for we who have been dealing with this problem for over five years, and who have been intimately involved in the legislative process in appropriating money to tackle this

problem, and to have had in the past promises made that have gone unfulfilled -- and I have heard every single excuse in the book, as I said many legitimate, but at some point in time you start just being cynical about everything. My major concern was the Kean cleanup program -- the statement that the main focus of it would be the 150 sites not on the Superfund priority list. I presume that that is not accurate.

COMMISSIONER HUGHEY: It's not.

ASSEMBLYMAN LESNIAK: My other concern was that statement in the paper that State sources were being used to compensate for the fact that Federal Superfund money wasn't coming down as quickly as possible. That bothered me. But, in any event, I think your planning is fine, but the proof has got to be in the performance. We had a hearing in July, and we were told to wait until December. December came and went and we are now in March. It is going to be up to you, it's in your hands, and if there are any problems in terms of cost expenditures legislation, it is going to be up to you to come to us to change that. If you don't come to us, then there will be no reason for any excuses. I think you know that, you are well aware of that.

I disagree with you in terms of whether we are going to get \$200 million from Superfund. You're gambling on that, and I hope you're right. I would be pleasantly surprised and pleased if we do. I would hope that we would have some contingency plans set in the works if that isn't forthcoming.

COMMISSIONER HUGHEY: Well, the contingency plan is -- the only gamble in this process is a legal gamble. We have a responsibility to go to Superfund for those sites on the list, and I know you appreciate that. Our backup and the backup of this State will be that we have to change the Federal guidelines on preemption, which I think we can do through the extension bill, and that is one of the reasons, in addition to the money, that I think the extension bill is required, and on reimbursement. Having done those two things, then we are covered pretty well. That has to happen at the Federal level.

Let me say one thing to you which I know I don't have to say to you. Last year we made some promises and in July we made some promises, and now it is March. We are not sitting here with an empty bag. We have made a tremendous amount of progress in that time. Everything that we said we were going to try to do, we have tried to do, and we do not come here with any excuses. I think this year, and I have said it repeatedly, this is the year we move to design/construct. It took us some time to get there, but it was intelligent time. Every feasibility study that we have looked at, Ray, has been one where if you walk onto a site you have an easy answer, and if you look at the feasibility study you learn something. And that is not just me, that is the scientists in the Department, where it may appear that the first and best alternative is to drain the lagoon, when it comes back and you realize that there are fifteen alternatives and the worst one would have been that immediate draining, I think you learn to appreciate the feasibility studies. You never appreciate the time it takes to do it, but I would submit to you that it has taken us a hell of a long time to get into this position and it is going to take us a little bit of time to get out. When I get out, I want to get out with a legacy, and the legacy is that we haven't taken a short-term alternative when a long-term alternative is what we needed. I know that the Committee shares that concern and is willing to make the long-term commitments that it takes to really have an effective cleanup program. I appreciate your time today.

ASSEMBLYMAN LESNIAK: What I am most concerned about in terms of your chart is the expenditure flow.

COMMISSIONER HUGHEY: Is that here yet?

MR. STANTON: It's right behind you, the expenditure flow anyway.

COMMISSIONER HUGHEY: Can't you carry this in your briefcase? Can we get it reduced fast?

DR. SADAT: Yes, we will get it reduced.

ASST. COMMISSIONER TYLER: We can talk through the charts now.

COMMISSIONER HUGHEY: Do you want to talk through the charts now?

ASSEMBLYMAN LESNIAK: I would like to do that now.

COMMISSIONER HUGHEY: All right. Marwan?

DR. SADAT: We will have these reduced for you. Starting with feasibility studies -- Over the next four years, 1983, and that goes to the end of calendar year 1983, we expect to have feasibility studies initiated on twenty-six sites. That includes Superfund and non-Superfund sites for approximately \$8.3 million. In 1984, eighteen sites, \$5.3 million; 1985, thirteen sites, \$3.9 million; and, finally, in 1986, sixteen sites, \$4.6 million.

ASSEMBLYMAN LESNIAK: What is the total of sites?

DR. SADAT: Well, this will include Superfund and non-Superfund sites, so we are talking basically about ninety-nine sites, roughly.

ASSEMBLYMAN LESNIAK: That adds up to ninety-nine sites?

DR. SADAT: No, it doesn't -- I'm not even sure that it does. There may be some cleanups, in fact, there are some cleanups. There are eleven major drum dumps where we are not going to do feasibility studies. We are just going to go in there and clean them up. So, there are ninety-nine altogether, all right?

ASSEMBLYMAN LESNIAK: Those sites that you have expenditure totals for, are these just for feasibility studies?

DR. SADAT: Feasibility studies, that is correct.

ASSEMBLYMAN LESNIAK: In 1983, \$8.3 million for feasibility studies on twenty-eight sites?

DR. SADAT: That is correct.

ASSEMBLYMAN LESNIAK: I see, so that is pretty good.

MR. STANTON: Twenty-six sites.

ASSEMBLYMAN LESNIAK: Can we have a breakdown on that -- twenty-six or twenty-eight?

MR. STANTON: Twenty-six.

DR. SADAT: Yes, we will be glad to provide the Committee --

ASSEMBLYMAN LESNIAK: -- as far as --

DR. SADAT: -- with twenty-six sites -- we will be glad to provide the Committee with these figures.

ASSEMBLYMAN LESNIAK: In 1984, it's \$5.3 million for eighteen sites.

DR. SADAT: -- eighteen sites. Thirteen sites in 1985, \$3.9 million, and sixteen sites in 1986 for \$4.6 million.

ASSEMBLYMAN LESNIAK: Do you have the sites identified?

DR. SADAT: Yes.

COMMISSIONER HUGHEY: Those are totals, Assemblyman.

ASSEMBLYMAN LESNIAK: On what basis were the sites selected?

DR. SADAT: The sites are selected strictly on the basis of the HRS.

ASSEMBLYMAN LESNIAK: The what?

COMMISSIONER HUGHEY: The mitre form.

DR. SADAT: The mitre form.

ASSEMBLYMAN LESNIAK: And there may be some non-Superfund sites that have a higher priority than Superfund sites?

DR. SADAT: No, there are -- The non-Superfund sites that we have selected are sites where we applied to EPA for Superfund and where they were rejected because they were not a high enough priority. Now, the way we introduce these sites is, in our plan where we have sites where EPA has the lead, at that point we bring the non-Superfund site -- let's say that Number 66, if you rank all ninety-nine sites, or ninety-two sites that we have, we bring Number 66 into the schedule and put it at the point where we know EPA has a lead on a site. We have a list of sixty-five, some of them are EPA leads and some of them are State lead. Where we know EPA has a lead and is going to do the contracting, is going to do the construction, we introduced Number 66, and then Number 67, and so on and so forth. We use a mitre form. Mitre scoring is the sole basis for establishing priority. The mitre system is the national system for ranking any sites.

ASSEMBLYMAN LESNIAK: So, you have the non-Superfund sites ranked?

DR. SADAT: All of the sites that are in the four-year plan are sites which were ranked for EPA submittal for National Priority List submission. Out of the ninety-two we submitted, we got sixty-five.

ASSEMBLYMAN LESNIAK: In 1983, you have twenty-six sites there, but not all of them are Superfund sites?

DR. SADAT: That is correct.

ASSEMBLYMAN LESNIAK: So, therefore, not all of them are -- so there are some sites --

COMMISSIONER HUGHEY: That are 100% State money? Are you looking at it in terms of dollars?

ASSEMBLYMAN LESNIAK: No, I am looking at it in terms of priorities.

COMMISSIONER HUGHEY: What we have tried to do, Ray, and this is what Marwan meant about EPA, we have taken EPA and put them on a schedule, which we have been doing all year. They are on a schedule for four years; we are on a schedule for four years. It could be that a non-Superfund site, and I think this is the question, Marwan, would actually precede, because it was at our direction a Superfund site.

ASSEMBLYMAN LESNIAK: I presume, however, that the non-Superfund sites are listed on that chart in accordance with your ranking?

COMMISSIONER HUGHEY: The mitre form is used for all sites. There was no subjectivity built into the rankings.

ASSEMBLYMAN LESNIAK: Therefore, all of the non-Superfund sites under that chart will flow in accordance with your rankings?

COMMISSIONER HUGHEY: Correct. And all sites to be built on in the future -- for example, I think Marwan told you in his testimony that we are now applying for a \$400,000 grant to look at sites that came along at later stages, to do the ranking. Every site that ever flows into our cleanup program, and, again, this is a minimal number -- as we get more sites ranked, all sites are going to be ranked on a mitre form. In other words, where it is or who may or may not be involved has nothing to do with the ranking.

ASSEMBLYMAN LESNIAK: Do you have your draw down of those sources -- of that money separated by source?

COMMISSIONER HUGHEY: No, that is what we are going to do for you by the end of the week, if we can.

DR. SADAT: We don't have it drawn down by source, but we have it by site.

ASSEMBLYMAN LESNIAK: That is critical, in my viewpoint, to my concern, to ensure that the money that is available is going to be spent.

COMMISSIONER HUGHEY: But, the thing that you won't even see from the draw down, and what we will have to repeatedly come to the Committee with as the year progresses, is the feasibility and the maintenance pass-through, so that we may look at an aggregate total before all the design/constructs begin, which just diminishes very quickly this year in terms of all of our commitments.

DR. SADAT: As you can see, Mr. Chairman, we have twenty-three non-Superfund sites over the next four years. We are going to take care of over sixty-five sites, so, I don't know what statements were made with respect to taking care of the 150 non-Superfund sites. Basically, over the next four years, we are going to be dealing with the ninety or so sites that were submitted to EPA for Superfund. With respect to design, again, in 1983, these are design costs: \$7.6 million for six sites, -- as I have indicated to you, these will be design costs (Dr. Sadat illustrates by using DEP chart) -- twenty-two sites, \$3.7 million; twenty sites, \$4.6 million; and, fourteen sites, \$2.2 million.

COMMISSIONER HUGHEY: I think the significance here, Ray, is that you can see how the long-term program starts to tie together, in terms of design/construct as opposed to design money, you know, the start-up and the flow-through is beginning to make some sense now.

DR. SADAT: In 1983, in terms of actual expenditure on construction -- by the end of 1983, \$7.1 million on approximately ten sites. In 1984, \$77.9 million, and, as the Commissioner indicated in his testimony, this is when we begin to need the bond money. That is, we had to do this to come to the conclusion at what point do we actually draw down the Spill Fund so that we are going to need to request appropriations from the Bond Fund -- not appropriations, but some scheduling to sell the bonds from the Bond Fund.

COMMISSIONER HUGHEY: Let me just clarify that, Ray.

ASSEMBLYMAN LESNIAK: And when was this decided?

COMMISSIONER HUGHEY: Well, it couldn't be decided until we had a plan, what the Attorney General and the Treasurer asked us to do. What I think they have to do before they can sell bonds, is show the need for the bonds which, of course, as we were negotiating one site at a time, was very difficult to do. That was one of the complicating factors. This one, as opposed to the "Cap," this one we take care of with a plan. What we can now do, is create the energy to sell the bonds, because we can actually show a draw down on those bonds within the four-year plan.

MR. STANTON: One other important point to realize is that the latest EPA position is that they are going to run this program from now on like a construction ground program. In other words, they never wanted to have interceptors in the ground and then run out of money before they could build a sewerage treatment plant. So, their latest guidance to us is that once we leave feasibility and go to design/construct, they will earmark the total sum of money for that project and pull it out of Superfund.

ASSEMBLYMAN LESNIAK: That is going to be the day.

COMMISSIONER HUGHEY: That is why I have more confidence than you do. I mean, I really think they are sucked into this position.

MR. STANTON: They don't want to end up with feasibility studies finished and then nothing being done on the sites.

DR. SADAT: And as you can see, Mr. Chairman, after this initial hike we stabilized roughly about \$35 million, probably over the next seven years. We have not extended the plan over seven years, but we will do that. We actually have agreed that we are not very sure of our figures at that point because you're dealing with seven years, which is a very long time.

ASSEMBLYMAN LESNIAK: Within a few days, you will have those figures broken down by source?

COMMISSIONER HUGHEY: Yes, and a schedule for you, which we hope EPA will be certifying by the end of the week. That will appear to you in draft form, but that is what we submitted, and as soon as they accept it -- let me tell you what the complication -- there is no complication in terms of their acceptance, but once they published the Superfund list there was a public comment period, where other people could try to qualify other sites. So, they were not in a position where they could certify our list until now. Thank you.

Are there any other questions?

ASSEMBLYMAN LESNIAK: Not at this time.

COMMISSIONER HUGHEY: I'm sure we'll see each other again. Thank you very much.

ASSEMBLYMAN LESNIAK: Thank you, Commissioner. Thank you, gentlemen. Is Lester still here? (affirmative response) Commissioner, can you leave someone behind?

COMMISSIONER HUGHEY: Jack, would you and Marwan both stay?

ASSEMBLYMAN LESNIAK: Lester, I'm sorry everybody is leaving, but we're here.

LESSTER JARGOWSKY: I am Lester Jargowsky, County Health Officer for Monmouth County. I would like to make my comments brief, especially in light of the documents submitted today, so I will have an opportunity to review them. It does appear that some of the questions that I would have liked to raise have been addressed today. However, I do have a deep concern that the sites be addressed with some degree of expediency, especially our Monmouth County sites. We happen to have several very, very dangerous sites. I am not totally confident with the economic pictures that are projected, in terms of cleanup of these various sites. For example, we have encountered problems with heavy metal contamination deep into aquifers, and where private firms have entered into consent agreements for cleanups on relatively minor problems, minor being a six-acre tract with chromium contamination down deep into the aquifer, 120 feet or so. The costs to try to recover that ground water, treat it and bring the situation under control are staggering, and this is just on a small six-acre tract looking at half a million dollars to recover chromium from 120 feet down into the ground water.

I think that what we are going to find is a very severe economic liability for the State in terms of maintenance in the future on the Superfund funded sites, especially in terms of ground water, recovery, cleanup and regeneration. I am particularly concerned with Lone Pine Landfill, because there is severe ground water contamination at that site down into two aquifers, and I strongly believe that the associated costs, long-term costs, are going to be very, very, very great.

There were comments made about taking the "Cap" off the Spill Fund. I think that is a very appropriate move, to try to use our local resources in a more

flexible way -- our State resources. I don't see where New Jersey is going to have -- well, this first year perhaps we will be able to tap into a good amount of money, but as other states come on line and finally realize their problems, there are going to be very difficult days ahead, and very difficult competition for those Federal Superfund dollars. We are going to have to develop ways and means with our own State resources to address our problems.

I also believe that we are far from finding -- we have probably found perhaps half of the hazardous waste sites in New Jersey. Right now, we are continuing investigations. We are finding the more subtle dumping problems, where the trees look fine, the ground looks fine, but what has been injected underneath the ground is causing major problems. I think that is going to be a trend throughout the State, this more discreet dumping that is going to be found. We are rapidly approaching a construction phase with the Manasquan Reservoir in Monmouth County. This is a major water supply, which we definitely need to combat salt water intrusion and other problems with hazardous waste in our county.

I did not hear mention of one particular site called the Bog Creek Farm site, which sits alongside a tributary to the Manasquan River. This is a critical site to that reservoir project, to the Manasquan Reservoir project. Lone Pine is also critical to that reservoir project, and there has been testimony on that particular case. But, the Bog Creek Farm site should be given a higher priority, in that it is feeding contaminants into a stream which will lead to a critical point for the intake of the Manasquan Reservoir. Perhaps through this Committee, there could be an update as to the status of that site.

ASSEMBLYMAN LESNIAK: Lester, if you will call my office next week -- we were not given the priority ranking of the non-Superfund sites, I don't believe, or, if we were, I have to look for it.

DR. SADAT: Mr. Chairman, if I may, Bog Creek Farm is scheduled for signature between us -- an agreement between us and EPA prior to June 30, 1983 -- prior to this June. This would initiate the feasibility study.

MR. JARGOWSKY: Okay, that is a point I wasn't aware of, which leads me to the next point --

ASSEMBLYMAN LESNIAK: Why weren't you aware of this?

MR. JARGOWSKY: The DEP is currently attempting to improve communications with local health officials. However, I think there is a long way to go. I was not aware, for example, that the Burnt Fly Bog feasibility study was mailed two weeks ago to local officials. I did not get a copy of it. We found that site in September of 1978 and have been tracking it through the years. I was a little dismayed that I wasn't on the mailing list, but I think we can work at that and perhaps improve those communications as we go along.

In summary I would say that from what I have heard, the State DEP is definitely on track and, with careful economic analysis of where we are going, we have a rough row to hoe.

ASSEMBLYMAN LESNIAK: I would agree with you fully on that statement. Thank you, Lester. Thank you for coming. Mary Ann Bancroft, Committeewoman from Howell Township. Oh, mayor, I'm sorry. You're committeewoman and mayor.

COMMITTEEWOMAN BANCROFT: No, I am not mayor.

ASSEMBLYMAN LESNIAK: Oh, you're not mayor. I was just told you were mayor.

COMMITTEEWOMAN BANCROFT: No, I ran against the mayor. Everybody makes that mistake. I ran against the mayor, but he was only running for township committeeperson.

MARY ANN BANCROFT: I have all this to say today, but in view of what you have been put through so far, I won't do it. I will make just some brief comments based on what I have heard today, and you will have to realize that my comments come from my past history, which is the fact that I started with an environmental group. I live in the back yard of the WDI Landfill, which is a toxic waste site in Howell Township, which I believe you are familiar with. We have about thirty-seven priority pollutants, twenty-one of them carcinogens, and right now we are in the very, very beginning stages of a cleanup plan. Now, I also speak as an elected official in Howell Township.

The basic comments I make at first have to do with some of the statements that were made today and some of my reactions and workings with the DEP prior to being elected last November.

I heard a lot of talk today about feasibility studies, and what it all boils down to is time. Everything is on a time schedule. We just went through in Howell Township a seventeen-month negotiation with SCA to clean up this landfill which is presently open. The initial contamination was discovered and documented by the EPA in March of 1980, but already in DEP records, there is indication of it as far back as 1975. But, a preliminary consent order was signed in May of 1981. Then we negotiated -- this neat little one with the fancy cover on it (witness holds up material she is speaking about) for seventeen months. Now, the difference between this one and this one is really --

ASSEMBLYMAN LESNIAK: Not worth seventeen months?

MS. BANCROFT: -- nothing. Not worth seventeen months; not worth seventeen months of those toxics flowing into the ground water and further contaminating the streams that were already contaminated. So, my basic problem is the matter of time.

ASSEMBLYMAN LESNIAK: When was that agreement signed?

MS. BANCROFT: Do you mean the last one? Well, this one -- I have to mention this because I noticed it was mentioned before that the DEP doesn't partake of partisan cleanups. But, this final plan was signed, at a very special signing ceremony, at which the mayor of Howell Township running for reelection at that time participated, October 27, 1982. I really don't know what the people of Howell Township waited seventeen months for.

ASSEMBLYMAN LESNIAK: That is one of my serious concerns, and I'm sorry the Commissioner isn't here because my concern isn't with him. But, my concern has been with the Administration politically posturizing on this issue. As I said, we had the wrong person here for that. But, we had a similar situation where EPA came in to announce a contract in the middle of a campaign and brought in a Congressman who wasn't even a Congressman from that district, but that was the new district that he was running in. Quite frankly, he had no business being there at all, except for purely political purposes. That is one of the reasons why, quite frankly, I was inspired to have this hearing to ensure that commitments are made on the record and that everything that has come down today will be followed up six months from now. Are you aware of any noncompliance with the agreement at this time?

MS. BANCROFT: Yes.

ASSEMBLYMAN LESNIAK: Can you tell us about it?

MS. BANCROFT: All right. We have been meeting monthly with DEP and SCA to go over the consent order as it proceeds. Our latest meeting was approximately two weeks ago in Trenton, in which we outlined several -- one particular part of the

consent order which forbids the operation of the landfill to exceed beyond their sixty-six acres. We had a problem with the man from the DEP. He indicated that we would have to go back and go over this paragraph, that this was open to interpretation by SCA, DEP and Howell Township. We did not believe that there was that much to be interpreted. When it says you can't extend your operations beyond the sixty-six acres, it means that. They have been clearing land, trees, taking the sand out to use for fill, and in doing so are creating another nice landfill area.

Our other problem which developed at this meeting was that we were under the impression that as of December 6, 1982, a Certificate of Approval had been given the WDI facility, as well as approval of their design plans. One of the stipulations, Item 14 of the Certificate of Approval, stipulates that they must have a leachate collection system in place prior to the depositing of solid waste at each increment. Now, we were disturbed by this because we have seen indicated in the papers that Mercer County is possibly coming to WDI. SCA has indicated that they would welcome their business with open arms. And then, also, we had, as of last week, the indication that we were to be included in the change of flow from the Sussex County landfill that was to be closed. WDI was to be included in that change of flow and we were to get Passaic County's solid waste. We were told at that meeting in Trenton that, unfortunately, Item 14 didn't apply, because SCA had appealed the Certificate of Approval. Now, this goes back to what Les mentioned before, as far as communication is concerned. We thought it would have been nice if we had been notified that the Certificate of Approval evidently does not hold. None of the items in it hold because it has been appealed. Now, we are still in another negotiation process. This is December 6; we are now at the end of March, and we are in a further negotiation with SCA over their Certificate of Approval.

I don't understand why there seems to be a constant repetition with the DEP, that when you deal with the big companies you negotiate, you negotiate, and you use up time and you waste time.

ASSEMBLYMAN LESNIAK: One point that you make, and which Lester made, it appears quite evident that DEP needs a staff person, at least one staff person, to deal exclusively with municipal and county officials to keep them informed on progress and lack of progress, and changes, because in many instances we're hearing your story over and over again, and Lester's story, and in many instances it is the local officials that can tell DEP what really is going on. Oftentimes, they are just hearing from the owner/operator of the site, without hearing from the people who, on a daily basis, can observe with their own two eyes and who know an awful lot more about the site than DEP does. So, I would recommend that, through the appropriations process, that we do something about that, because I figure we could go a long way toward helping out in the cleanup effort and ensuring that these things are not overlooked.

MS. BANCROFT: In fact, I know the other counties that were involved with this redistricting of the flow from Sussex County, none of us received notification that our landfills were going to be receiving this additional solid waste. I heard about it at eleven o'clock at night from a reporter, and yet when we went to the BPU hearings on Monday, the Asbury Park Press reporter sitting next to me had three press releases from DEP indicating an imminent change in flow. Our question is, why aren't we who are going to be, you know, directly affected by this, one of the first to be notified? And here we were in Trenton just two days before this happened, and yet the man who was involved with our consent order evidently had

no knowledge of what was going on. Why doesn't the man in the DEP who is involved with our cleanup process know what Mr. DeBonis and his officials in the other sections are doing? There seems to be a lack of communication among their own departments.

The other thing which I will mention is what Les started to say. We are a little disturbed because the DEP has announced that they recommend that the Manasquan River Reservoir design plans be undertaken, and they anticipate completion of the reservoir -- we have been given a time schedule of 1990, which doesn't give us much time to get Lone Pine Landfill and Bog Creek Farm cleaned up. Now, I didn't hear Bog Creek Farm even mentioned today. Now, I do hear that we will have a feasibility study given out in June.

ASSEMBLYMAN LESNIAK: Which means completed sometime in the middle of 1984.

MS. BANCROFT: Right, and then we have to go to contract. You know, that still doesn't get us a cleanup. But, meanwhile, we have a five billion gallon reservoir right in the center of Howell which is going to be taking water from the Manasquan, which will be getting contamination directly from these sites, and this is possibly one of the biggest changes that will happen to Howell Township for a long time to come. There are many people who are looking forward to it with great anticipation, but not if all we are going to have is a big contaminated pond in the middle of the township. We are already talking about the fact that we will have to have a treatment facility in the township to treat the water that is in the reservoir.

So, what we are asking is that -- yes, Bog Creek is only thirty-five on the Superfund list. Lone Pine is higher; it's fifteen, but we ask the DEP that if they are pushing that the Manasquan River Reservoir go into effect, that they also push the Bog Creek Farm cleanup, because this is very important to this reservoir project.

ASSEMBLYMAN LESNIAK: Thank you very much.

MR. STANTON: Mr. Chairman, if I may, I would like to introduce Miss Grace Singer, who is sitting right over there -- Dr. Grace Singer who, for the cleanup program anyway, is taking over and will be running the public participation program at the hazardous waste cleanup sites. She will have a public participation program with a local committee for each site. So, Dr. Grace Singer is the one who, working for Dr. Sadat, will be the contact for public participation on the hazardous waste cleanups. Also, on Assistant Commissioner Tyler's staff, there is a new person who is just coming on board from a different area, named Joe Maher, and he is going to take over and build a small staff to try to address, more carefully than we have, the County Environmental Health Act and the implementation of it. So, that is another person who should serve as a contact for you.

On WDI -- I don't know who the person was who was at your meeting. Was it Lee Pereira?

MS. BANCROFT: George Schlosser.

MR. STANTON: George Schlosser, he's a lawyer. He might not --

MS. BANCROFT: You gave him to us.

MR. STANTON: The planning decision that you talked about, that was Mike DeBonis. He is in charge of planning. The redistricting of Sussex County waste, I don't really think impacts you.

MS. BANCROFT: It didn't, because they reevaluated the situation after we complained.

MR. STANTON: Right. Any municipalities that were going to be affected -- in other words, if it was going to go to landfills in other areas, we sent out 450 notices of that pending action to any counties that were affected, local officials that were affected, and I don't think Howell was one of them because it wasn't intended to go there. But, if you want, I'll have --

MS. BANCROFT: But, WDI was one of the intended landfills, and that is right in Howell Township, so I don't know how you missed us.

MR. STANTON: But, it wasn't one of the ones that was finally decided on. The ones that were finally decided on --

MS. BANCROFT: But, two weeks before when the notices went out, when the other notices evidently went out to the press, WDI was listed as one of the intended sites, and the other people who were on that list also had the same problem.

MR. STANTON: All right, I'll have someone contact you that has the latest on that.

MS. BANCROFT: My other comment will be to the public participation. Commissioner Hughey indicated today that he wants clearer public understanding. Along with the seventeen-month negotiations for a cleanup plan, the people, -- the public was denied any participation, any knowledge of what was being negotiated. We were not to see that cleanup plan until after the signing on October 27. Now, if you want a clearer understanding from the public and you want the public to be receptive to the DEP, as far as I am concerned, the DEP has to be more open to the people.

DR. SADAT: Mr. Chairman, I was one of the people who negotiated that agreement in my former role in the Division of Water Resources. I handled the ground water aspects of WDI, and I would like -- I'm not really trying to make excuses for the Department, because I think in that case it was concern which was raised by the township about the cleanup program which was being proposed, which was a series of twelve points, that that would dry up the bog in the vicinity of the landfill. The Department then insisted that SCA reevaluate the pumping program to ensure that there was no drying up of the bog in the area. The consultant from the township was involved at every single meeting we had with SCA and, in fact, the reason it took so long is because we wanted to make sure that the township's concern, and this is very well documented, was taken care of. Initially, the cleanup program which was being proposed, which was a series of twelve points to pump the water out and decontaminate it and contain the flume within the landfill area, did not address environmental concerns which were raised by the township, and this is why it took so long because we were really pushing that company to come up with a plan which would not dry up the bog.

MS. BANCROFT: My reply is, I will be glad to lend you the documents I have. There is virtually no difference between the two documents that were originated. They both call for relocating a stream which does dry up the wet lands. They both call for the pumping of the water; in fact, the new plan calls for even more -- 500,000 gallons of water will be pumped a day. So, I don't know what was spent, but if the township wanted more, I guess we lost.

ASSEMBLYMAN LESNIAK: Are you satisfied with the compliance under the consent agreement?

DR. SADAT: Mr. Chairman, I'm sorry. I probably should know, but I am no longer in the Division of Water Resources, so I don't know. What I can tell you is that the consent agreement was signed only after we had consent, not only from the company, but also from the township.

ASSEMBLYMAN LESNIAK: Okay, thank you. You will have to pursue this further with Dr. Singer.

MS. BANCROFT: We are just asking for public participation; we have a right to know, I believe.

ASSEMBLYMAN LESNIAK: You certainly do, and thank you very much.

Paul Yurko?

P A U L Y U R K O: Mr. Chairman, first I would like to say that you and Assemblyman Bennett are the champions of the people in our fight against toxics. My name is Paul Yurko. I belong to the Monmouth County Federation of Sportsmen Club; I am past president of the Sunrise Rod and Gun Club; member of the Executive Board of Howell Citizens Against Toxics; and, member of the Howell Township Environmental Commission.

I am not happy with DEP. What I have seen here today is the most progress -- This report that was put on you, you didn't see this report before they presented it to you, right?

ASSEMBLYMAN LESNIAK: That is correct.

MR. YURKO: So, you were unaware of what was going on. It was another ploy that they used, okay? -- to have you uninformed so you could not ask them questions, have more questions made up, to put them on the defensive. So, it did have many constructive things in it. I did see movement today, which I haven't seen in a long time. Mary Ann Bancroft, as a member of Howell Citizens Against Toxics, is perfectly right in saying that the citizens, the people who live on the dump, the citizens who are in the downward flume of the pollution, did not have one word of input into the consent agreement that was signed. DEP was talking for me, and they didn't know my problems. Okay?

I am blessed to have property on a trout stream that is not polluted. Two hundred feet north of that, the Muddy Ford Brook, where it joins up with a couple other brooks, also knocked down the pollution because of the larger amounts of water. Heavy metals have been detected, arsenic has been detected; and, zinc has been detected. DEP knew this in 1980. No action was taken against SCA.

Another thing I found out with DEP, their follow-up stinks. One winter we had again to go to a hot line for water pollution. We had a small silting problem of the (inaudible) Brook. There was a man digging a hole, gravel had run off running into a trout stream, so that when the trout fishermen, during the season, stepped into it, the water was all fogged up and they couldn't trout fish it. A small pollution problem, but yet a pollution problem. It took fifteen calls and six weeks later to get it settled. A little thing like this. The stream is only about five miles long. You could walk it in a day in waders, right to the pollution source, which was a red sort of mud. It was no big thrill, yet over fifteen calls and six weeks. That, again, is not a decent result.

Now, we're talking about massive amounts of money they are going to spend. I would suggest that you gentlemen up here watching them closely, check on their efficiency, okay? They have given us, sort of, I call it "the carrot to the donkey syndrome." They gave us today some examples of things they have done. How much time, how much money has really been expended to get this done? Are our dollars being spent wisely? The way it seems now -- I mentioned that previous to today's report, we had been had. They are not spending our dollars wisely when it would take -- again, I go back to the six weeks, fifteen telephone calls for a small pollution problem.

So, I refer to that. I refer to it in dealings with WDI that we have had. Myself, I'm a boiler man; I'm forced to come here because I do love nature and I hate to see it killed. I can give you names of more qualified people, scientists

who belong to H-CAT, who can give you all the data, all the things you seek. I know people; I am sort of a gate keeper you might say. I am here because I have a day off.

Now, if you, Assemblyman Lesniak, or anyone from the DEP would like any of these gentlemen to have conferences where you could, again, have better public input, which has been seriously lacking from DEP -- I would hope today's report and the move in the direction that the report indicates, would help me, the State of New Jersey, and the sportsmen of New Jersey out, to get these problems taken care of with a minimum amount of politics involved and with a minimum amount of unwise spending of money. Thank you very much for your time, sir.

ASSEMBLYMAN LESNIAK: Thank you very much. I think the ultimate arbiter of that will be the public in terms of whether performance follows through with the promise.

MR. YURKO: One more thing here too, that I happened to pass by. Friends of mine in Burnt Fly Bog have a public participating commission. They were kept in the dark over this feasibility study that was issued, I heard last week. Again, here it is, public participation being denied, or not being passed on through proper channels. I would hope they, you know, clean up their act.

ASSEMBLYMAN LESNIAK: I think with Grace Singer working in that area it is going to show a marked improvement, I'm sure. Whether that is enough, I don't know. The job is so monumental.

MR. YURKO: Well, sir, I followed you from Marlboro to here, and if you happen to get to Washington, Lord willing, I'll be there too.

ASSEMBLYMAN LESNIAK: Well, we're going to stay here, but we will keep on this problem. Thank you. Is there anyone else who wishes to testify? (no response) All right, the hearing is closed. Thank you, Mr. Vice Chairman, for staying for so long.

(HEARING CONCLUDED)

ROBERT E. HUGHEY

Testimony Presented Before the Assembly  
Committee on Agriculture and Environment By The  
New Jersey Department of Environmental Protection

March 23, 1983

I am pleased once again to be before this committee to discuss New Jersey's hazardous waste problems and rapidly evolving solutions. The problem of remedying past uncontrolled and flagrant discharges of hazardous wastes and toxic substances is one of the most important health and environmental issues confronting New Jersey today. The answer to the problem seems basic enough - clean it up. However, perhaps the single most significant lesson I have learned in my first year as Commissioner of the New Jersey Department of Environmental Protection is that developing and implementing a successful cleanup program is extremely difficult and sometimes frustrating. From its inception to the present time, the New Jersey Department of Environmental Protection has done more to develop viable solutions to the problem than any other environmental agency in the nation. The State of New Jersey has made substantial progress since last May when the Department reorganized its Division of Waste Management to better manage hazardous waste problems (Exhibit I - Administrative Order, Organizational Chart). We have restructured our program to establish multi-disciplinary management teams to handle the highly complex problems associated with hazardous waste site cleanups. Never before have these issues been addressed on a scale of this magnitude. Through this program, we intend to deal with high priority hazardous waste sites in a timely fashion while maintaining the stringent fiscal and managerial controls necessary for the proper expenditure of public monies (Exhibit II - Administration of Hazardous

Waste Cleanups). Our goal is to eliminate or lessen potential public health and environmental impacts from these sites in the most effective and efficient manner possible. Among the wide variety of factors which have made rapid progress difficult, there appear to me to be three basic needs which perhaps only New Jersey has addressed:

- A. The need for a cohesive and predictable long-range cleanup strategy.
- B. The need for a sophisticated priority and contract system.
- C. The need to provide the public with a clear understanding of program objectives and complexities.

In the first instance, the Federal government has clearly had difficulty in coming to grips with the need for a long term commitment. There are many ways to look at this federal indecision, but virtually all of them lead to the conclusion that environmental agencies are not the proper place for budgeting decisions. EPA's assumption that the current Superfund program (\$1.6 billion) is adequate to effect a national cleanup, has made an overall strategy impossible. Realistically, the present \$1.6 billion federal commitment is nothing more than a start-up fund. EPA's contention that this funding is adequate has made an already difficult situation more difficult. This limited perspective leads to inevitable delays in Superfund site selection, needlessly complicates already complex contract and cooperative agreement negotiations, and seriously flaws the national contingency planning process. The Department has not settled for a watered down Superfund as some in EPA envisioned, but rather we have insisted through the courts that EPA fulfill its legislative responsibilities.

During the Congressional hearings in 1979 and before, we supported a more extensive Superfund than that which became law in 1981. We have repeatedly testified about the problems the current law presents, and, as you know, the State of New Jersey was the first to challenge EPA's failure to publish the mandated National Contingency Plan. Furthermore, when the Court Ordered Plan was finally released, we challenged and even today continue to appeal its adequacy.

Finally, last week, members of my staff assisted New Jersey Senators Bradley and Lautenberg in their work developing new Superfund legislation to more adequately address the hazardous waste problems faced by New Jersey and every other state in the nation.

Thus, we have pursued the optimum solution, i.e., an effective federally financed national cleanup effort.

The second issue, i.e., the need to prioritize, presents difficulty for all levels of government and has certainly been complicated by the unpredictability outlined above. If anything, the nature of this hearing today is a graphic exposition of the difficulty in developing priorities and the consequences of a legitimate priority system. In the realm of hazardous and toxic waste cleanup, every site deserves to be first, every project should start today and caution is viewed as unexcusable delay. . . until, of course, the contract is found to be inadequate, until the solution doesn't work because there was no feasibility study, and until everyone being first makes it impossible for anyone to really be first. I would submit to you that while it may be popular to attack from

both directions, it is neither intellectually honest nor realistic. In this field, you can't have it both ways.

We are in fact the only State to have a comprehensive 4-year cleanup strategy (Exhibit III-Four Year Plan). We have a new response contract with excellent controls which took 8 months to put together (Exhibit IV - X-213 Emergency Contract; its RFP, Addendum, Evaluation Committee Report). Other support contracts are still under development with the Department of Treasury (Exhibit V - North Bergen Drum Dump RFP for cleanup; Exhibit VI - Friedman Property for feasibility study). We have a multi-disciplined project management approach which incorporates ongoing outside auditing. All of these ingredients took time to develop and all of them are necessary for a successful long-range program.

The last broad issue is fundamental, namely the need for a clear public understanding of where we are going and what the complications are that we face. The easiest position to take with regard to hazardous and toxic cleanup is to fail to list objectives, which then in turn rules out a priority list, and finally makes it unnecessary to establish true time frames. EPA has and will continue to pay for this non-strategy but it is, in a way, understandable. Having a set of objectives and a plan obviously leaves one open to criticism. Unlike EPA, however, we believe it's an acceptable price to pay for direction and predictability. Real programs don't survive long in a world of could haves, should haves, and would haves. But, no matter how convenient a target, we do have a program and it is a do-able, real-world undertaking (Exhibit VII - Hazardous Waste Management in New Jersey; Exhibit VIII - Hazardous Waste Regulations). Finally, one of the most complicating factors is that all of the money everyone freely talks about is not freely spent. There are, and probably

should be, restrictions and legislative conflicts which should be fully understood by those who stand and watch.

At this point, let me say that we are all aware that the Hazardous Waste Cleanup Program was not and is not now a perfect program, but it has come a long way in the last 14 months and indeed a long way since its inception. Today we intend to outline for you the changes made, the new directions taken, and the adjustments still needed.

I would now like to call Assistant Commissioner George Tyler, who will outline a few of the steps we have taken to improve our cleanup program and to introduce our Division of Waste Management senior staff.

Conclusions

I thank you for the opportunity to be here today to address both our accomplishments and problems in cleaning up hazardous waste sites in New Jersey. We have been frank in discussing with you the problems of the State and welcome your suggestions and support. Although I do feel we have made tremendous strides in the last year, our success rate can and will continue to improve.

To sum up, New Jersey presently has 17 sites in the Superfund program with Federal funding committed for feasibility and/or cleanup; this is more than any other state in the country. We intend to have 12 new feasibility studies under way by the end of the year and 6 to 8 studies going into the design/construct phase by September 30, with 3 to 6 more going to design/construct by the end of the year (i.e., 9 to 14 by the end of the year).

As of today, EPA Region II has 51% of the Superfund money committed in the nation; of this New Jersey has 70% to 80% or roughly 40% of the national total committed from Superfund. I will stand by that record.

Finally, I have made available to the Committee a slide presentation which presents a realistic picture of the complexities entailed in the cleanup of a hazardous waste site. I strongly urge the committee to view this presentation for future insight into the problems confronting our agency, and the State of New Jersey.

We hope this testimony and the supporting documents given to you today prove helpful. Again, let me state that there is always room for improvement

and we very much appreciate constructive criticism. This State has moved forward aggressively in the field of hazardous and toxic waste cleanup. Being out in front, we have learned in the toughest possible school . . . the school of experience. I think we have learned well and have the firmest of foundations to continue the nation's finest Hazardous Waste Management program.

At this point, we'd be happy to answer any questions you might have.

Assistant Commissioner George J. Tyler  
Testimony Presented Before the Assembly  
Committee on Agriculture and Environment By The  
New Jersey Department of Environmental Protection

March 23, 1983

Since the New Jersey cleanup program began in 1980, less than 3 full years ago, the Department and indeed the State of New Jersey have developed an outstanding record. Much of the credit, in fact, goes to the State Legislature which, working in close partnership with the Department, has developed a comprehensive package of laws and funding support. Coupled with the Department's regulatory and technical expertise, this legislation has helped produce the nation's finest hazardous waste management program.

From 1980 to 1983, the DEP has completed cleanups of 70 hazardous waste sites, at a total cost of approximately \$35 million dollars. The completed cleanups are as follows:

Alloway Township Site	Glassboro Lab Pack Dump
Altman Street Drum Dump	Gold Leaf Trucking
Atlantic Development State II	Gordon Services
Barone Barrel & Drum Company	17 Horizon Boulevard
Bayonne Landfill Drums	Jersey City DPW-Rt 440
Blue Spruce/Tifa	Lab Reagents
Boro Garage Rt 47	Liberty State Park
Bubenick Property	Madison Circle
Clinton Place	Northern Fines
Thomas A. Cook	North Hook Road

314 East Fourth Street	Newark Hook Road
El Cid Contracting Corp.	New Jersey Turnpike MM 16.7
Fish Road	Oldham Road
Franklin Mines	Ringwood/West Milford
Fulton Street	Route 195 Trailer
Sampson Tank	610 South 13th Street
Swooco	Wilson Farm
A-Z Chemical	Emerald Trail
Barnegat Light Boro DPW	Harleigh Cemetery
Bayonne DPW	Jackson DPW
Bjornlass Kennels	Kurtz Residence
Black River Area	Manchester DPW
Burlington Avenue	Mikropul
Camden Fire Department	Murray Hill Parkway
Carlstadt DPW	Nash Property
Cohawkin Road	Paterson DPW
Columbus Avenue	Rahway River Park
Communipaw Avenue	Rahway River Park
Creektown Ceramics	Reimer Street
DOT	South Amboy Water Works
DOT Yard	Union Twp., DPW
Doughty Road	Venice Boulevard
Dover DPW	Victoria Lane
Ellis Property	

New Jersey has been on the cutting edge of technology in our hazardous waste cleanup program. Our pioneering work at hazardous sites have served as an

example to other states. We have developed techniques for personnel safety, environmental risk assessment, and land use control in the environs of a hazardous waste site. These standards and procedures have been used by private industry and by government agencies, including EPA, throughout the nation.

As the full ramifications of the clean-up program New Jersey required became apparent, we began to examine our organizational structure to seek ways to improve it.

In the early months of 1982, the Department determined that our clean-up program and our overall waste management efforts would be best served by the integration of all of our waste management units into one operating division. Commissioner Hughey, therefore, May of 1982, signed Administrative Order #15 (Exhibit ) which formally created the Division of Waste Management. The Division has been organized to address in a comprehensive and coherent fashion today's ever-more complex waste management issues. I'd like to briefly outline that new organizational structure. First, we have integrated our solid and hazardous waste program planning units because, quite frankly, it's very difficult and foolish to deal with only one aspect of the waste disposal problem. Hazardous waste comes in many shapes and forms, and is produced in every manner of business and commercial enterprise, and indeed in our own homes. Thus, a coherent long-range strategy for hazardous waste management must include proper management of garbage, the promotion of resource recovery, and recycling to minimize and make more manageable our waste streams, effective regulation and enforcement of the industrial and hazardous waste generators in the State, and finally, a sound and effective hazardous waste cleanup program where remedial action is necessary.

In the permit and licensing area, we have again pulled together, under one chief engineer, the various statutorily mandated programs that we carry out so that all of the new waste management facilities developed in New Jersey are permitted properly in a manner which reflects a total program integration approach. Thus, what we learn in the hazardous waste business is readily transferred and translated into solid waste facility permitting.

Finally, this new organization established the Hazardous Site Mitigation Administration as an element of the Division of Waste Management. This Administration includes 4 Bureaus and a Fiscal Integrity Unit. The Bureau of Environmental Evaluation and Risk Assessment handles the technical complexities of site assessment in its initial phases, the development of feasibility studies where necessary, and the analysis and selection of cost effective and environmentally sound alternatives. The Bureau of Site Management takes the alternative of choice and shepherds the development of a design/construct contract for the remedial action selected. The Bureau of Site Operations manages the cleanups in the field. Comprised of on-scene coordinators and support groups, this unit is our field construction management group. The Bureau of Contract Management is responsible for the development of a wide range of contractual support for the cleanup program. In the past, much criticism had been directed at the program for operating under one omnibus contract which made rapid clean-up easy but which had little of the auditing and financial safeguards that our present day more elaborate contracts permit. In addition, this unit will be responsible for the final development of site-specific requests for proposal for all major and minor clean-up operations, and as such, represents a major engineering/legal unit.

No explanation of our cleanup program and no rendition of its complexities would be complete without a discussion of the extensive environmental and public health issues and analysis necessary to proceed on even the smallest of these hazardous waste sites. First of all basic decisions are needed as to whether we will treat a site primarily as an enforcement matter or as a candidate for our remedial action program. And don't let me mislead you - this is not a one-time decision, but is often made and remade as negotiations with potential defendants continue.

Superfund at the federal level and the State Spill Fund were both designed to be used interchangeably with other regulatory statutes such as the New Jersey Solid Waste Management Act or the State's Water Pollution Control Act. Thus, we often begin to deal with a hazardous discharge site in an administrative enforcement mode only to shift to a cleanup mode to ensure that proper cleanup occurs whether or not our enforcement action is immediately successful. Moreover, once faced with the possibility of treble damages as provided for in both the State and Federal laws many potential defendants "See the Light" and begin their own clean-up efforts. Where an extensive enforcement proceeding is already underway, as is often the case either against generators, collector/haulers, or possibly former site owners or managers, or where a "deep pocket" exists making a collection action a clear possibility to reimburse the State's Spill Compensation and Control Fund or the Superfund, then initial cleanup steps such as site assessment and feasibility studies must be taken with extreme caution in order to preserve and protect what will become evidence in bitterly contested and often legally significant lawsuits. The inter-active process with the various enforcement and staff attorneys is never complete and is always complex.

Even where no significant legal action is contemplated, numerous technical reviews are necessary to develop a scope of work for a Feasibility Study, to design a Remedial Action Plan and to carry out the clean-up action. This typically involves consultation with our Office of Cancer and Toxic Substances Research and our Division of Water Resources. At the Federal level, it is not atypical for EPA to consult with NIOSH, OHSA, the Federal Department of Health and Human Services, the National Center for Disease Control or other Federal agencies.

In this fashion, the contracting process can be used to ensure that cleanup actions are adequate to protect both air and water quality and the public health during cleanup operations and thereafter.

To explain in more depth the overall hazardous waste management in the State, we have for your information a technical bulletin entitled, "Hazardous Waste Management in New Jersey".

I would now like to introduce Mr. Jack Stanton, Director of Division of Waste Management, and Dr. Marwan Sadat, Administrator of the Hazardous Site Mitigation Administration. These gentlemen work directly in the front line and will provide you with an in-depth look at our current program.

JACK STANTON

In my section it is my intention to explain to you four areas of the State's Hazardous Waste Cleanup program:

- I. Interaction of Funding Sources
- II. Contracting Procedures
- III. Overview of the Four-Year Plan
- IV. State Spill Actions

## I. Interaction of Funding Sources

### Federal Superfund

- For sites, that qualify, preempts State funding, except for match.
- Policy decision, in the best interest of the people of New Jersey to seek large sums of Federal dollars for big projects that will cost millions of dollars.
- State of New Jersey worked very hard having 65 sites qualify for Superfund dollars; more than any other state.

### State Spill Fund

A formal Attorney General's opinion requires the State to apply for Federal Superfund dollars first (90% Federal, 10% State - in most cases). The State share will come from the State Spill Fund or the Hazardous Site Bond Issue (sometimes 50% or higher for publicly owned or operated sites).

- If a site is not approved and added to the Superfund List then the State Spill Fund or bond monies are required for 100% of cleanup. - The State Spill Fund will be used for all major and minor drum dump cleanups (with two exceptions).
- The State Spill Fund will be used for all emergency spill responses and spill related cleanups.

### Hazardous Discharge Bond Act

- The formal Attorney General's opinion to Treasurer Biederman states:

- 1) New Jersey must apply for Superfund first for consideration, if rejected then;
- 2) New Jersey must go to its Spill Fund and only if it is determined that there are insufficient funds in the Spill Fund now and for next 3 years (arbitrage certificate requires that bonds be used within 3 years of date of issuance) then;
- 3) New Jersey can utilize bond proceeds as our share of Superfund if the Spill Act is insufficient (will be employed for "pre-act" sites when the \$3 million cap is reached).

Note: As you can see, the interactions of the various funding sources are very complex. Superfund first on major sites to bring large sums of federal dollars into New Jersey; State Spill Fund for all other sites, for State matching dollars and for emergency actions; and Bond Fund when those two are depleted.

The Bond Act, a simple one page piece of legislation, very well intended by the legislature, is difficult to reach because of legal technicalities.

## II. Contracting Procedures

### Two Methods of Reaching Agreements Under Superfund

#### 1) Federal Contracts

- EPA takes the lead on the project and awards all contracts.
- State provides oversight and concurrence on actions.
- EPA has preselected zone contractors and is able to award (task orders) contracts quickly after Superfund contract is approved.

#### 2) State Cooperative Agreements

- State takes the lead on the project and awards all contracts.
- EPA provides oversight and concurrence on actions.
- New contracting procedures (Section 3.11) requires that all non-emergency cleanup contracts be competitively bid, on a fixed price basis (i.e., no time and materials or cost plus contracts); this requires significant lead time for contract awards.
- New 3.11 procedures also provide for better managerial and fiscal control, real-time field audits and establishment of a fiscal integrity team to review and verify all payment vouchers and contract items before they are actually paid

### State Spill Fund Contracts

- Spill Fund used for all sites not on Superfund for all drum dump cleanups and emergency response to spills and emergency cleanups.
- New X-213 emergency contract (9 - 12 months to develop and award) provides better managerial and fiscal control on emergency contracts.
- All non-emergency Spill Fund contracts are competitively bid,

monitored and audited in conformance with 3.11 procedures.

Present and Future Problems with Superfund Contracts

- Long range maintenance issue; EPA says maintenance is 100% State responsibility, New Jersey view is that the 90%/10% cost sharing formula applies.. One project now about to enter the design/construct phase feasibility is \$9 - 11M capital \$30 to 40M long range O & M (pumping and treating ground water). This is obviously a major issue for the State, since acquiescence to the federal position could deplete the entire bond fund and spill fund in 2 or years.
- Cost sharing on publicly owned sites is 50/50 or greater.
- A key impediment to unilateral state action is the Superfund provision preventing reimbursement for work performed before a Superfund award; in-kind services are permitted as part of the State's 10% share, but not full reimbursement.
- DEP is addressing all of these with proposed Superfund amendments to be introduced by Senators Bradley and Lautenberg.

### III. Overview of the Four-Year Cleanup Plan

#### 3) Pronged Attack On Hazardous Waste Sites

##### Drum Dump Cleanups

- 33 individual sites, approximately 400 drums, cost approximately \$250,000 will be completed by the end of the month (4 or 5 to go) and paid by the Spill Fund.

##### Major Drum Dump Cleanup

- 11 major drum dump sites to be scheduled in the first two years of the Plan.
- Contain less than 1,000 surface drums, possible buried drums and minimal ground water contamination.
- More can be scheduled if discovered.

##### Long Range Major Hazardous Site Cleanup Program - This is DEP's major long range cleanup effort.

- 65 sites on the Superfund National Priorities List.
- 23 sites not included on National Priorities List, but to be cleaned up totally with State Spill Fund.
- The list includes 16 sites from the original Hazardous Discharge Bond Act of 1981; 3 others are on the major drum dump list, 4 have been cleaned up and 2 were found on inspection to have no hazardous waste on site. This covers all of the sites from the bond list.

##### Status of Plan to Date

- Presently 17 sites have some form of joint federal/state funding

commitment for feasibility studies and some form of cleanup; mostly sites and just feasibility, but for example

- A) Bridgeport Rental & Oil Services - Initial cleanup and lowering of lagoon level and feasibility study (1.4M). (work underway)
- B) Syncon Resins - 2.2M award to remove drums on surface (2M) and do feasibility for long range cleanup (\$210,000). (expect to start field operations within the next 60 days)
- Expect 12 to 18 new feasibility study awards by the end of the year; to move to design construct in early 1984.
- Expect 6 to 8 current feasibility studies to move to design construct phase by mid-July and possibly 3 to 6 more by the end-of-the-year.
- Feasibility studies are very necessary because of the complexity of the problems and difficulty in effecting solutions. In one of our first feasibility studies, 13 to 15 options for solution were evaluated and the cleanup will cost \$9 to \$12M capital expenditure and possibly \$30 to \$40M in long range O & M for just one site. Dr. Sadat will expand on why feasibility studies are necessary;

#### IV. Emergency Spill Response

- In all of this Superfund talk let us not forget that the Spill Fund still responds to emergency spills:
  - 1982 Total - 774 responses
  - 1983 So far - 210 responses
- January, 1982 to March, 1983 there were six major spill cleanups (not including 1982 or 1983 drum roundups) totalling approximately \$200,000.

#### Additionally

- The sites on the Four-Year Plan include 16-18 site being cleaned up by consent orders and voluntary cleanup by industry; these will be monitored by DEP.
- 39 sites being cleaned up by the Division of Water Resources Enforcement Unit cases against industry

#### AND

- 36 sites cleaned up by Spill Fund before Superfund started (from 1980 to 1982) at a cost of 35 million dollar from the State Spill Fund.

DR. MARWAN M. SADAT

Testimony presented before the Assembly  
Committee on Agriculture and Environment by  
the New Jersey Department of Environmental Protection - March 23, 1983

I am pleased to be here today to describe to members of this committee the technical aspects of the DEP's Four Year Plan to deal with hazardous sites mitigation and remediation in New Jersey.

As mentioned earlier, DEP's Division of Waste Management was reorganized, and I presently serve as the Administrator for the Hazardous Site Mitigation Administration. One of the first tasks tackled by the new reorganization was providing a systematic approach to the remediation of Superfund and non Superfund sites. DEP's Division of Waste Management developed the Four Year Plan - a statewide hazardous waste site action program. The Plan is a three pronged attack on New Jersey's hazardous waste problems. It represents the results of a review process which started with an original list of sites ranked by DEP and EPA according to the Federal Hazardous Ranking System (HRS). The so called "Mitre Ranking System" is based on potential danger to public health and the environment, and considers surface and ground water pollution as well as releases of hazardous chemicals into the atmosphere. Emerging from this list were 93 sites which, when further screened, were reduced to 72 high priority sites for submittal to USEPA in Washington. On December 20, 1982, EPA identified a total of 65 New Jersey sites as eligible for Superfund monies through the issuance of its National Priorities List (NPL). New Jersey was allocated the largest number of sites on the list, and became the nation's leader in the competition for Superfund money. New Jersey was successful in

obtaining this lead, only through the Department's efforts in early identification and prioritization of waste sites. Presently preliminary cleanup efforts are underway at 17 Superfund sites throughout the State:

Lipari Landfill - Plans and specifications for a containment system (slurry wall) are completed, and being reviewed by DEP, construction to begin July, 1983.

Price's Landfill - Finalization of the feasibility study is pending completion of an addendum to further evaluate selected alternatives.

\*Burnt Fly Bog - Feasibility study completed and submitted to EPA March 11, 1983 for approval.

\*Goose, Spence and Pijak Farms (Plumsted Sites) - EPA currently developing RAMP (Remedial Action Master Plan) feasibility study to start early summer, 1983.

\*Friedman Property - RAMP recently completed by EPA; feasibility study to start mid-April, 1983. RAMP mailed to consulting engineering firms.

Lone Pine Landfill - Feasibility Study completed and submitted by consultants to DEP for review in March 9, 1983.

Bridgeport Rental and Oil Services, Co. - Anticipating initial remedial action which deals with lowering the lagoon by June, 1983, feasibility study on-going.

D'Imperio Property - on-going feasibility study.

Kin Buc, Inc. - Laboratory consultant is performing a so called "treatability" study. This is to evaluate the impact of discharging pretreated leachate into the Middlesex County Municipal Utilities Authority's sewage treatment plan at Sayreville. EPA negotiating with property owners to take over

emergency containment (at Pool C;) of the leachate discharge engineering consultant formulating interim remedial action plan.

\*Chemical Control - Contract under development for removal actions, and reconstruction of sewers and catch basins; signing is scheduled for April, 1983.

\*Swope Oil - Cooperative agreement to perform feasibility study scheduled for signing in March, 1983.

\*Syncon Resins - Cooperative agreement signed December 20, 1982; DEP currently developing Request for Proposal (RFP) for initial drum removal scheduled to start late May, 1983; feasibility study to be initiated after completion of drum removal.

Krysowaty Farm - Contract signed December 20, 1982; Scope of Work being developed by EPA.

GEMS Landfill - Request to EPA for emergency action (Sept. 1982) Emergency action contract signed in late February, 1983; construction of fence began March 14, 1983; contract signing to perform feasibility study scheduled for signing in March, 1983.

Kramer Landfill - Remedial Action Management Plan currently being developed by EPA; scheduled for contract signed in March, 1983.

\*DEP lead sites

There are a total of 132 hazardous waste sites in the Plan. These include: the 65 sites on the National Priorities List; 23 sites not included on the National Priorities List; and 44 sites containing less than 1,000 above-ground drums. The Four Year Plan is preliminary. The Plan requires EPA concurrence on the scheduling of remedial actions receiving Superfund monies, and the final draft was transmitted to EPA for approval on February 10, 1983. Additionally,

the public will have the opportunity to comment on the proposed plan at a public hearing which has tentatively been scheduled for late Spring.

The major components of the Plan are:

- 1) Small Drum Dump Cleanups: Expected for completion in Spring 1983, this action will eliminate the 33 drum dump sites in Table 1.

TABLE 1

SITE NAME

A - Z Chemical	Emerald Trail
Barnegat Light Boro DPW	Harleigh Cemetary
Bayonne DPW	Jackson DPW
Bjornlass Kennels	Kurtz Residence
Burlington Avenue	Mikropol
Camden Fire Department	Murray Hill Parkway
Carlstadt DPW	Nash Property
Cohawkin Road	Paterson DPW
Columbus Avenue	Pleasant Grove Road
Communipaw Avenue	Rahway River Park
Creektown Ceramics	Reimer Street
DOT	South Amboy Water Works
DOT Yard	Union Twp. DPW
Douckley Road	Vandam Boulevard
Dover DFW	W. Jersey Lane
EMI's Interactions	

The list consists of 42 individual sites with a total of 384 fifty-five (55) gallon drums, 7 one-gallon bottles, and 3 liquid vats of unknown volume. The actual cleanups will be carried out as follows:

DEP samples each site and then has analysis performed per sample by a qualified laboratory. A site description and related analysis per site is then provided to 3 to 5 qualified disposal contractors for bid. The contract review team created under the Department's 3.11 Fiscal Administrative Procedures then reviews the quotes and selects a vendor for each job.

These drums and other wastes at these sites present a condition where there exists a substantial risk of imminent danger to public safety or severe damage to the environment. In most cases, the sites are not secured sites and are accessible to the general public presenting the possibility of accident or injury especially to children. During the winter and in inclement weather, drum conditions deteriorate presenting the possibility of chemical contamination to the air, soil and ground water and further increasing the possibility of explosion or injury from reactive chemicals which might mix together upon leaking. The relative simplicity of cleanup procedures at sites with less than 40 drums, permits timely removal prior to the inevitable deterioration of these drums. No feasibility study is required prior to drum removal, only field investigation of each site to determine that site contamination is restricted to existing drums, and not soil or ground water. To date 27 of the 33 drum dump sites have been cleaned up. Only six sites remains to be cleaned up under the drum dump program.

- 2) Major Drum Dump Cleanup: There are a total of eleven major drum dump sites scheduled for cleanup within the first two years of the implementation of the Four-Year Work Plan. These dump sites contain less than approximately 1,000 surface drums and are suspected to contain buried drums and/or are expected to have caused minimal ground water and soil contamination. Also included in this category is the initial removal and assessment action at the Myers Property, a Superfund site. (See Table 2)

The sites included in this category are as follows:

TABLE 2

Cooper Road	Voorhees Twp.	Camden
Frontage Road	Newark City	Essex
Kearny Drum Dumps No.1	Kearny Town	Hudson
Kearny Drum Dumps No.2	Kearny Town	Hudson
Kearny Drum Dumps No.3	Kearny Town	Hudson
Kearny Drum Dumps No.4	Kearny Town	Hudson
Kearny Drum Dumps No.5	Kearny Town	Hudson
Minsei Kogyo Shoji	Woodland Twp.	Burlington
kk America, Inc.		
Myers Property *+	Franklin Twp.	Hunterdon
(initial removal)		
North Bergen/Keystone +	North Bergen Twp.	Hudson
Storer Dump	Marlboro Twp.	Monmouth
Tabernacle Site	Tabernacle Twp.	Burlington

\*Sites included on the proposed National Priorities List

+Sites included on the Hazardous Discharge Bond Act

These cleanups are more technically complex than those for small drum dumps because of the increased hazardous waste quantities on-site, potential for ground water contamination, and potential exploratory digs required to uncover buried drums.

In general, major drum dump sites involve the following phases prior to initiation of cleanup:

- 1) Site identification and initial assessment.
- 2) Sampling to verify the presence of hazardous waste.
- 3) Investigation of potentially liable parties.
- 4) Issuance of the directive letter(s).
- 5) Development of the Hazard Ranking Score (HRS) and submission to EPA to determine eligibility for Superfund monies.

The initial site assessment and file search is needed to determine the total surface waste quantity, to complete the HRS Form, and any special actions required for cleanup (e.g., construction of an access road). The initial site assessment is also used to identify generators and determine property boundaries for future enforcement actions.

Once sampling and analysis verifies the presence of hazardous wastes, the HRS score is completed and submitted to EPA for Superfund eligibility. Concurrently, the Department issues directive letters to potentially liable parties ordering them to clean up the site and notifying them of possible terrible damages.

If the responsible parties cannot or will not effect cleanup within an appropriate time frame, the State will begin cleanup. Funding for cleanup costs incurred can be provided by Spill Fund monies, Hazardous Discharge Bond monies, or Superfund monies.

The majority of these site cleanups are not expected to be funded through Superfund, with the exception of the Myers Property site, due to their low Hazard Ranking System Scores. Therefore, cleanup actions initiated by the state will be funded with Spill Fund and/or Hazardous Discharge Bond monies.

Cleanup actions include the following two major phases:

- 1) Staging, sampling, and assessment of ground water contamination, and
- 2) Removal and disposal of hazardous materials.

The State will issue a request for proposal for the staging and sampling services for each site. These actions include the movement and overpacking of leaking drums to a secured area (staging area) so that they can be sampled. The drums and soil are sampled and analyzed to determine contents and compatibility for ultimate disposal. Contaminated soil is excavated and moved to the staging area and compatible wastes are bulked for disposal. The staging and sampling contractor is required to submit a disposal plan for State approval based on the results of this analysis.

The staging and sampling contractor is also utilized to install and sample a sufficient number of ground water monitoring wells to determine the presence and extent of ground water contamination.

Disposal services for each site will be provided under a separate contract. This is done because of the difficulties involved in obtaining competitive bids prior to the identification of the type and quantity of wastes on site.

The State intends to issue a request for qualifications for specific disposal methods and waste type categories. Contractors will be asked to supply "not to exceed unit prices" for each waste category and disposal method listed. The State will review these technical proposals and develop a list of qualified contractors for each disposal method.

Following the completion of staging and sampling and approval of the site-specific disposal plan, the State will notify those contractors previously qualifying for the required disposal methods and request bids. These bids must be submitted within a limited period of time and cannot exceed the prices previously submitted by the contractors in responding to the request for qualifications. Disposal services will then be awarded to the lowest qualified bidder.

This contracting procedures is expected to expedite the removal of small quantities of hazardous materials (less than 1,000 surface drums) throughout the State by removing the time burden (at least sixty days for bid submission, review, and award) associated with procuring disposal services following the completion of staging and sampling. It should also provide a mechanism for effecting timely cleanups at the lowest possible cost.

Long-term remedial actions; i.e., ground water decontamination and exploratory digs to uncover buried drums, will be conducted following the removal of surface contamination, if necessary.

The State intends to issue sampling and staging RFP's at a rate of one per month. The North Bergen/Keystone bids were evaluated and an award is expected March 30.

The Storer Dump RFP was scheduled for issuance in March, however, in response to the directive letter issued on February 25, the property owner has indicated a desire to clean up the site. Therefore, he has been requested to submit a site cleanup plan for State approval prior to initiating cleanup. If this plan is acceptable, the State will monitor the cleanup to ensure compliance with appropriate regulations and health and safety standards. However, if this submission is unacceptable, the State intends to issue an RFP for sampling and staging in April. In accordance with this, cleanup actions will begin at the site by July and be funded with Spill Fund monies.

The attached table indicates the current status of the remaining major drum dump sites. In accordance with this, the next action initiated by the State will be for the initial removal at the Myers Property site. The projected date of issuance of the RFP is May 15.

- 3) Four-Year Cleanup Plan for Major Hazardous Waste Dump Sites: This will be the Department of Environmental Protection's (DEP) major long-range effort. It will concentrate on initiation of cleanups at over 100 of New Jersey's most severe hazardous waste dump sites (refer to Table 3). In some cases DEP will have responsibility for cleanup

programs while in others, USEPA will take the lead. Included in the Plan are sites on the National Priorities List or Superfund List, and 16 waste sites were listed on the Hazardous Discharge Bond Act of 1981:

Williams Property	JIS Landfill
Bog Creek Farm	Swope Oil
Sayreville Pesticide Dump	Barrier Industries
GEMS Landfill	Jackson Township Landfill
Lang Property	T. Fiore Demolition
Buzby Brothers Landfill	Delilah Road Landfill
Horseshoe Road Dump	Renora, Inc.
Krysowaty Farm	Roosevelt Drive-In

Three of the Bond Act sites, North Bergen Drum Dumps (same as Keystone Steel), Myers Property, and Bayonne Trailer are sites included in the department's drum dump cleanup program. Four of the original 26 Bond Act sites have been cleaned up: Barczewski Street Dump, 610 South 13th Street, Newark Stamp and Dye, and County Environmental Services. At the remaining two Bond Act sites, no hazardous waste can be identified: 466 Wilson Avenue and MAC Landfill.

Status of Major Drum Dump Cleanup Actions

<u>Site Name</u>	<u>Quantity of Waste</u>	<u>Verification of Hazardous Waste</u>	<u>Issuance of Directive Letter</u>	<u>Submission of HRS to EPA</u>
Cooper Road Voorhees Twp. Camden County	Unknown number of 1-2 oz. buried vials	X	X 10/28/82	
Frontage Road Newark Essex County	450 drums	X		X
Kearny Dumps (No.'s 1 - 5) Kearny Hudson County	278 drums	Sampling Conducted 2/25/83		
Minsei Kogyo Shoji k.k. America Woodland Twp. Burlington County	20 drums and extensive soil contamination	X	X 3/25/82	
Myers Property Franklin Twp. Hunterdon County	18 drums and suspected buried drums	X	X 12/7/82	X
Storer Dump Marlboro Twp. Monmouth County	110 drums	X	X 2/25/83	X
Tabernacle Site Tabernacle Burlington County	168 drums	X	Active-Burlington County Prosecutors Office	

35x

The scheduling and cost breakdown presented in the Plan reflects the relative complexity and duration of cleanup activities. The sites were categorized in terms of relative hazard and funding sources. Sites included on the proposed National Priorities List (NPL) were considered to represent the greatest potential hazard to public and/or the environment. The sites included on the NPL where remedial action had been previously initiated were scheduled first (e.g., Burnt Fly Bog, Bridgeport Rental and Oil Service, etc.). All other NPL sites were scheduled in order of the Hazard Ranking System (HRS) score, at a rate of one per month. Sites not included on the NPL such as the Bond Act sites were introduced into the schedule concurrently with those remedial actions proposed as an EPA lead site and in order of their HRS score. The additional manpower available at DEP when EPA has the lead for a remedial action will provide for timely cleanup of those sites not eligible for Superfund monies. This scheduling methodology resulted in the initiation of remedial actions at the 65 Superfund sites, and 23 other sites not included on the National Priorities List (NPL). In all, 17 Bond Act sites were included on the NPL. Sixteen (16) of these sites are scheduled for cleanup in the Department's major waste site cleanup program, while one site, Myers Property, is scheduled for cleanup under the major drum dump program.

In order to estimate project duration and cost, the sites included in the work plan were separated into size categories based on the anticipated extent of soil and ground water

contamination. Large sites were those exhibiting extensive soil and groundwater contamination and require complex and lengthy procedures to reflect complete. Medium sites were those exhibiting less extensive contamination, but still expected to encounter significant problems during cleanup and small sites were those expected to have cause minimal soil and ground water contamination and require relatively simple cleanup procedures of short duration.

The costs associated with project cleanup were also assumed to vary with project size; i.e., complex, lengthy cleanup procedures are expected to be the most costly. Finally, treatment/removal costs were estimated based on general knowledge of the contamination at the site, and previous cleanup experience. Actual costs were utilized where known.

The total projected costs for remedial actions taken at sites scheduled in the Four-Year Plan are presented below in Table 2. As shown, total project costs of approximately \$23 million, \$87 million, \$45 million, and \$42 million are projected for cleanup actions taken in 1983, 1984, 1985 and 1986, respectively. Total projected cleanup costs for the Four-Year Plan is \$197 million.

TABLE 2

TOTAL ESTIMATED COSTS FOR PROJECTS SCHEDULED  
IN THE HSMA FOUR-YEAR PLAN BY  
CALENDAR YEAR AND PROJECT STAGE

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Feasibility Study	\$ 8,300,000	\$ 5,300,000	\$ 3,900,000	\$ 4,600,000
Design*	\$ 7,600,000	\$ 3,700,000	\$ 4,600,000	\$ 2,200,000
Treatment/Removal	\$ 7,100,000	\$77,900,000	\$36,800,000	\$34,900,000
 <u>Total Costs</u>	 <u>\$23,000,000</u>	 <u>\$86,900,000</u>	 <u>\$45,300,000</u>	 <u>\$41,700,000</u>

\* Actual design costs presented, if known. Estimated design costs equal 10 percent of project treatment/removal costs.

The Spill Compensation and Control Act stipulates that funds provided for cleanup actions taken at sites abandoned prior to the effective date of the act (i.e., April, 1977), be limited to \$3 million per calendar year. Based on the estimate of total incurred costs of \$89 million in calendar year 1984 and the assumption that the state will have to provide matching funds at least 10 percent of these costs or \$8.9 million, we estimate that the state will require the use of Bond Monies in 1984. This is assuming 75% of the sites are Pre-Act sites. It is important to note that the total costs identified do not include costs which may be required for operation and maintenance of selected remedial action alternative. The total costs also do not take into account that industries may finance the cleanup and, therefore, federal and/or state funding.

The department intends to initiate all major hazardous waste sites listed in the Plan. Completion, however, of all sites will

be seven-to-eight year effort, with some sites requiring maintenance for many years beyond that time. You may question why it takes so long to cleanup a hazardous waste site. The answer is not easy, because the process from initial site identification to ultimate cleanup of a site is far from simple with many access points along the course allowing for delays or even road blocks. Let me explain the process step-by-step for a Superfund cleanup:

1. A Remedial Action Master Plan (RAMP) is first developed by EPA. The RAMP is a consolidation of all available information on the site. Data gaps are identified, and if possible, a scope of work to perform a feasibility study is developed. In addition, any initial required remedial actions, eg, fence construction are identified following the completion of the RAMP. For a non-superfund site a similar step would be necessary.
2. The RAMP is sent to the department for review and approval and a cooperative agreement or contract is then developed jointly by EPA and DEP to include any initial remedial actions required and the development of the feasibility study. The feasibility study is intended to assess the extent of contamination and develop remedial action alternatives. The assessment may include drum sampling, groundwater modelling and monitoring, and soil sampling. The alternatives developed to contain or remove the source of

contamination and decontaminate any existing problems are extremely complex. These could include on-site containment, off-site treatment, off-site landfilling, or construction of a decontamination facility on site. The feasibility study must evaluate all available alternatives and recommend that most cost-effective and environmentally sound method for mitigating the hazards to public health and the environment.

3. Following internal DEP and EPA Region II review and revisions, the agreement/contract is sent to EPA headquarters in Washington for further revisions and upon finalization, scheduled for signing.
4. If the site is a DEP lead site, the state must follow state procurement procedures in awarding a contract for feasibility study development. From the scope of work included in the cooperative agreement, a Request for Proposal is developed. Proposals are solicited, reviewed, and a contract is awarded to a consultant. The entire process of procurement requires approximately four months for completion. If the site is an EPA lead site, involving a contract, EPA notifies their zone contractor and a work plan is developed. The initiation of the feasibility study for EPA lead sites is estimated to be two months following headquarters sign-off.

5. The feasibility study is initiated by the consultant. Meetings are held with EPA, DEP, and the consultant during the course of the study to assess the extent of the problem, and to develop and evaluate cleanup alternatives. Ultimately, the most cost-effective, environmentally sound alternative is selected, and a public meeting is held.
6. To implement the selected alternative, the cooperative agreement/contract is amended to include design and construction. A scope of work is developed and again a contractor must be procured.
7. The design and construction phase is initiated. The source of contamination is either removed, contained, and/or treated. On-going monitoring may be required following cleanup. Operation and maintenance of a treatment facility may continue for many years.

As I am sure you will concur, the process required to cleanup a major hazardous waste site is quite burdensome. An enormous amount of paperwork must be generated prior to initiating any removal or treatment action at a site. As noted earlier, the State of New Jersey must rely on 90% federal funding

to accomplish its goal in remediating the hazardous waste problems in New Jersey, creating an institutional dependence on EPA.

Because of this funding mechanism, New Jersey needs the full cooperation and assistance of the EPA, both in Region II in New York City, and from headquarters in Washington. However, much of our success with the cleanup of high priority sites included on the National Priorities List (NPL) depends on the responsiveness of the USEPA to sign contracts or cooperative agreements, as well as the efficient and proper operation of the Superfund program at every level of administration. To date, cleanup action has been accomplished at only two high priority sites on the NPL; Chemical Control and Goose Farm, (one of the Plumsted sites), and this was accomplished with state, not federal funds. Shortly, we hope to initiate actual cleanup action at the Bridgeport Rental and Oil Service, Co. (BROS.) site and the North Bergen Drum Dumps. Of the 17 highest priority Superfund sites, most are under study, 4 sites are pending USEPA/DEP cooperative agreement/contract signings. Eight additional high priority sites are proposed for signings between DEP and EPA by fall, 1983, to initiate a feasibility study, while six of the 17 sites are targeted for signing to initiate design and construction by the end of this year. The projected cooperative agreement/contract signings for federal fiscal year 1983 are as follows:

Feasibility Studies

GEMS Landfill	Rockaway Township Wells
Kramer Landfill	Rockaway Borough Wellfield
Chemical Control	Reich Farms
Swope Oil	Fairlawn Borough Wells
Combe Fill South Landfill	Sharkey Landfill
Combe Fill North Landfill	Chemsol, Inc.

Design/Construction

Burnt Fly Bog	Krysowaty Farm
Price Landfill	Lone Pine Landfill
D'Imperio Property	Lipari Landfill

The scheduling of sites targeted for feasibility study initiation this fall was based on the following criteria determined jointly by USEPA and DEP:

1. Action already initiated;
2. sites included on the interim priority list;
3. HRS score provided Enforcement clearance is timely.

In view of the past record, it seems unlikely that all these agreements (or contracts) will be expeditiously signed by USEPA headquarters in Washington by September 30, 1983. However, the Department will continue preparations to expedite these signings upon notice by USEPA.

There are also programmatic problems with Superfund. One such problem is the lack of standards for Superfund financed cleanups. Standards must be developed, either uniformly or on a site-by-site basis to provide both consultants and state officials with a reference point for evaluation of alternatives in feasibility studies. Furthermore, establishing uniform standards for the extent of cleanup would enable states to treat similar cleanup problems alike and thus save time and money, as well as assure the public of equitable treatment. In lieu of standards, USEPA's approach to selection of a cleanup alternative is based on cost benefit-analysis rather than cost-effectiveness. With cost benefit-analysis, the cost for cleanup should not outweigh the benefit derived from the dollars spent. This issue has been a constant source of controversy between EPA and DEP and consequently caused delays. DEP has in fact instituted suit against EPA concerning this issue.

Another area of difficulty is in the calculation of the State's share for remedial cleanups. One issue at stake is whether the State is responsible for payment of 100% of all operations and maintenance costs. Should operation and maintenance costs become the sole responsibility of New Jersey, the financial obligation to the State could be unlimited. Of additional controversy is the State's cost share on sites which were owned by the State or one of its political subdivisions at the time of disposal of hazardous wastes. In one feasibility study the selected cost-effective alternative would result in an \$8,000,000 capitol cost and a \$1,000,000 O & M cost for an

indefinite period of time which may be as long as 25 years.

In an attempt to resolve these controversies, the Department has "forced the hand of USEPA" by filing suit against the agency for failure to address these issues adequately in the National Contingency Plan (NCP).

The Department intends to continue forward with implementation of the Four-Year Plan. In addition, the Department will continue to evaluate newly identified sites, as well as existing sites which are now eligible for Superfund assistance. To this end, the DEP is currently applying for financial assistance from the federal government for assessment and inspection of hazardous waste sites under section 3012 of the Resource Conservation and Recovery Act. Funding of this grant to DEP is imminent.

To resolve the issue of how clean is clean; the Department intends to develop cleanup criteria. In addition, the Department is currently developing the Hazardous Site Master List in compliance with Assembly Bill No. 1255 creating a Hazardous Substance Contingency Response Task Force.

The Department has a solid foundation for solving the hazardous waste problems of New Jersey. In addition, the cleanup of many industrial sites is being undertaken cooperatively by New Jersey's industries under the supervision of the NJDEP. Approximately 18 sites listed on the NL are currently active enforcement sites, i.e. CPS Madison, American Cyanamid. These facilities were submitted to the Superfund list and included in the Four-Year Plan to ensure that the cleanup efforts by the industry is completed in a timely manner. Many additional sites throughout the State which were not listed on the NPL or included in the Four-Year Plan are also currently being cleaned up by the owners, i.e. Witco, Quanta Resources.

In addition, from 1980 to 1982, the DEP has completed surface cleanups of 34 hazardous waste sites, at a total cost of almost \$3 million dollars. The completed surface cleanups are as follows:

Alloway Twp Site	Glassboro Lab Pack Dump
Altman Street Drum Dump	Gold Leaf Trucking
Atlantic Development Stage II	Gordon Services
Barone Barrel & Drum Company	17 Horizon Boulevard
Bayonne Landfill Drums	Jersey City DPW-Rt 440
Blue Spruce/Tifa	Lab Reagents
Boro Garage Rt 47	Liberty State Park
Bubenick Property	Madison Circle
Clinton Place	Norther Fines
Thomas A. Cook	North Hook Road
314 East Fourth Street	Newark Stamp & Dye
El Cid Contracting Corp.	New Jersey Turnpike MM 16.7
Fish Road	Oldham Road
Franklin Mines	Ringwood/West Milford
Fulton Street	Route 195 Trailer
	Sampson Tank
	610 South 13th Street
	Swoco
	Wilson Farm

I thank you for the opportunity to be here today and address both our accomplishments and problems in cleaning up hazardous waste sites in New Jersey. I welcome your suggestions and support.

In addition to all of the lists of Superfund and Spill Fund remedial action sites that you see before you today, no discussion of our Department's cleanup efforts would be complete without a discussion of our aggressive enforcement program, especially in the water pollution control area through which many other sites are being decontaminated. In fact, at this time, there are 39 separate ground water decontamination projects underway for which the private parties involved will expand more than \$30 million dollars over the next two years. There are 20 hydrocarbon spill cleanups that are also being policed by the Division of Water Resources. The average cost of these 20 gasoline spill type cleanups is approximately \$30,000 dollars per site of which not a cent is public funds. While it is certain that our aggressive publicly funded cleanup program with triple damage options provided significant motivation for accomplishing such cleanups, one must keep in mind that the ongoing water polluton control efforts of the Division of Water Resources is a vital component to our master plan for the cleanup of hazardous waste in New Jersey. The list of sites is as follows:

New Jersey Ground Water Decontamination Sites, (NON-HYDROCARBON), as January  
1983<sup>1</sup>

<u>Company or Municipality</u>	<u>Location</u>
1) IBM (Dayton)	South Brunswick
2) Mideast Aluminum Industries	South Brunswick
3) Saytech (Hexcell)	Sayreville
4) Allied Chemical	Morristown
5) Stauffer Chemical	Edison
6) Dupont	Chamberworks
7) Vineland Chemical Co.	Vineland
8) American Cyanamid	Bound Brook
9) Biocraft, Inc.	Waldwick
10) Rockaway Township	Rockaway
11) Reichold Chemical	Carteret
12) Rollins (res. Inc.) Environmental Services, Inc.	Logan Township
13) Marisol, Inc.	Middlesex
14) Mennon Well No. 1 & Well No. 2 (Airtron)	Morris Plains
15) Coastal Services	Paulsboro
16) Rhone-Poulenc	New Brunswick
17) Fairlawn, City of	Fairlawn
18) Taylor Forge	Branchberg
19) West Amwell Elementary School, Lehigh Fluid Power Co.	West Amwell
20) International Wire Products (IWP)	Wycoff
21) Inmont	Lodi
22) Rockaway Borough	Morris County
23) Yates Industries	Bordentown

<sup>1</sup> Includes programs both on-line and under construction. See "Hydrocarbon" list for gasoline and fuel oil recovery systems currently in operation.

<u>Company or Municipality</u>	<u>Location</u>
24) Shield Alloy	Newfield
25) Fairfield Borough, Well #7	Essex Co.
26) RCA Sarnoff Research Center	West Windsor
27) Penick Corp.	Lyndhurst Bergen Co.
28) Hoffman-LaRoche	Belvidere, Warren Co.
29) BFI Landfill	Monroe Township
30) C. P. Chemical	Sewaren
31) Polyrez	Woodbury
32) IFF	Union Beach
33) Winnes Chemical	Paulsboro
34) WDI Landfill	Howell Township
35) Plasti-Clad	Wall Township
36) Inland Chemical	Newark
37) Atlantic City Municipal Utilities Authority, Well Field	Pleasantville

New Jersey Ground Water Decontamination Sites, (HYDROCARBONS), as of January 1983

<u>Company/Facility</u>	<u>Location</u>
1) Harrison Baking	Harrison
2) Cumberland Farms	Little Egg Harbor Twp.
3) Johnsonburg Exxon	Frelinghysen Twp.
4) Mobil Oil Refinery	Paulsboro
5) Exxon Storage Site (and Bayonne Industries)	Constable Hook
6) Burlington Co. Garage	Mt. Holly
7) Lake Telemark Gulf, Spartan Oil Company	Rockaway Township
8) Borough of Leonia (Fort Lee)	Leonia (Fort Lee)
9) Rays Petroleum	Whippany
10) Naval Air Engineering Center (NAEC)	Lakehurst
11) North Hunterdon Regional High School	Clinton
12) Exxon Refinery (Bayway)	Linden
13) George's Shell	Hackensack
14) J & M Amoco	Piscataway
15) Power Test	New Brunswick
16) NJ Bell	Atlantic City
17) Hoesch Residence	Waretown

<sup>1</sup> This listing included only hydrocarbon recovery programs. See "Non Hydrocarbon" decontamination list for ground water recovery programs involving industrial solvents. It should be noted that major and independent oil companies have underway at least dozens of service station-type recovery and cleanup efforts that are independent of NJDEP.

New Jersey State Library

<u>Company/Facility</u>	<u>Location</u>
18) Flagtown School Bus Terminal	Flagtown
19) Chevron Service Station River Styx Road	Hopatcong
20) Conrail Hoboken	Hoboken
21) Shell Sewaren Plant	Sewaren

# **HAZARDOUS WASTE MANAGEMENT IN NEW JERSEY**

Let's protect our earth



A GUIDE TO RULES, PROGRAMS AND OFFICIALS  
IN NEW JERSEY'S  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

53x

THOMAS H. KEAN  
*Governor*

ROBERT E. HUGHEY  
*Commissioner*

HAZARDOUS WASTE MANAGEMENT IN NEW JERSEY

January, 1983

New Jersey has long recognized the need for a strong, integrated program to deal with the handling, treatment and disposal of hazardous waste. Hazardous waste management is a top priority for the N.J. Department of Environmental Protection (DEP). The DEP has instituted a number of programs and initiatives aimed at correcting past improper disposal practices as well as ensuring adequate hazardous waste management practices in the future.

DEP's hazardous waste management activities are carried out mainly through four major program areas. The following components of the DEP are responsible for various aspects of the overall hazardous waste program:

- The Division of Waste Management
- The Division of Water Resources
- The Division of Environmental Quality
- The Office of Cancer and Toxic Substances Research

The first three programs are under the supervision of the Assistant Commissioner for Environmental Management and Control; the Office of Cancer and Toxic Substances Research is under the supervision of the Deputy Commissioner.

The purpose of this document is to provide the reader with a clear understanding of how the New Jersey Department of Environmental Protection manages hazardous waste in the state. The functions of the major DEP program areas are described as well as the functions of various satellite units. A directory, organizational chart and synopsis of major laws and regulations which apply to hazardous waste are appended.

#### Division of Waste Management

The Division of Waste Management assumes the lead responsibility within the Department for the management of hazardous waste. The major functions of the Division are:

- Regulation of all hazardous waste generators and transporters.
- Regulation of all hazardous waste storage, treatment and disposal facilities with the exception of those facilities which generate wastewater and are regulated under the Water Pollution Control Act and the Pretreatment Act administered by the Division of Water Resources.
- Respond to hazardous material and toxic substances incidents such as spills, fires and explosions.
- Cleanup of hazardous waste sites.

- Tracking of hazardous waste from generators to points of environmentally sound disposal.

The Division's Planning and Resource Recovery element covers the regulation of the treatment, storage and disposal of hazardous waste including the characterization of the waste, the tracking of the waste from generator to disposal facility, and the permitting of the treatment process utilized. In addition, the Division's Enforcement element performs frequent (weekly in some cases) inspections of hazardous waste facilities in the state.

The New Jersey Solid Waste Management Act of 1970 (N.J.S.A. 13:1E et seq.) provides the DEP with broad authority to regulate all types of waste. It is from this statute that the DEP derives its power to control hazardous waste facility design and operation, and to operate its manifest system to track hazardous waste shipments. The DEP's manifest system, implemented in 1978, tracks hazardous waste from the point of generation to ultimate disposal. The manifest is a multipart form on which the wastes in each shipment are described and categorized. Copies of the manifest are required to be sent to the DEP by the generator, by the transporter or hauler, and by the treatment or ultimate disposal facility operator. Each person in the chain is required to attest by signature that he has received the wastes described on the manifest. The reports are then filed with the DEP and computerized. Haulers must have a copy of the manifest in their possession during the waste transport, and under the Solid Waste Utility Control Act, must also be registered with the Board of Public Utilities.

The manifest system has been strengthened by the recent establishment of nationwide manifest requirements. These regulations were developed pursuant to Subtitle C of the Resource Conservation and Recovery Act of 1976. Under these regulations, hazardous waste shipments must be tracked in all states. Furthermore, a regional program was initiated so that the Middle Atlantic states (Delaware, Pennsylvania, New York and New Jersey) have set up a consistent regional approach to hazardous waste tracking.

DEP adopted new regulations in 1982 which not only streamline the former manifest system but also set state standards for haulers of hazardous waste and for treatment, storage, and disposal facilities. As specified by these regulations and the recent federal guidelines, the disposal facilities will be required to forward a copy of the manifest form back to the generator and to the DEP. The generator is required to make a reasonable investigation as to the fate of the waste shipment if the form is not returned from the designated disposal facility. The generator must also notify the DEP of the discrepancy. Finally, a generator may only use a properly registered hauler.

The Division's Engineering, Permits and Licensing element is responsible for reviewing engineering designs and registration applications for the construction and operation of hazardous waste facilities. An environmental and public health impact statement, engineering design, hydrogeology data, emergency contingency plan, closure and post-closure plan, and financial information must be included in the registration applications. Disclosure statements must also be submitted to the DEP. These statements must detail the background and liabilities of the principal company personnel.

In conjunction with the Hazardous Waste Advisory Council and Commission, the Department is currently developing criteria for the siting of hazardous waste facilities. These criteria are required under the Hazardous Waste Facilities Siting Act (S-1300). The construction of proper hazardous waste facilities in the state to which generators can send their waste will prevent hazards associated with temporary on-site storage, illegal dumping, long-distance transport and other short-term solutions.

The Department, through the Division's Hazardous Site Mitigation Administration, is working closely with the U.S. Environmental Protection Agency (EPA) to allow for the commitment of a large portion of Superfund money for the cleanup of New Jersey's hazardous waste sites. Through recent Superfund allocations, operations have already begun at several of the state's most hazardous sites.

The Department is currently using the federal hazard ranking system for the prioritization of the over 350 hazardous waste sites located throughout the state. This system will aid in the selection of available state and federal funding sources for each specific site.

The Division's Field Operations element, under the authority of the New Jersey Spill Compensation and Control Act of 1977 (N.J.S.A. 58:10-23-11), provides for direction, coordination, technical expertise and support in containment and removal activities for spills of oil and hazardous substances. Over 2,000 such incidents occur annually in New Jersey.

Funds for the cleanup and containment of spills are available from the State Spill Fund. This fund, set up under the Spill Compensation and Control Act, is supported by a tax on the transfer of petroleum and petroleum products. Hazardous substances other than petroleum are also taxed. The fund is designed to pay the costs of cleaning up spills in addition to compensating persons for damages when payment is not readily available from the responsible discharger. The N.J. Department of Treasury handles the administration and collection of payments from the fund. Tax revenue is estimated to be over \$1.1 million per month.

The Spill Act was originally intended to provide funds for the cleanup of sites where discharges of hazardous wastes were occurring. In January, 1980, the Act was amended to provide funds for abandoned chemical dump sites with the potential to cause public and environmental harm.

Division of Water Resources

The Water Quality Management Element (WQME) within the Division of Water Resources carries out four programs relating to hazardous waste: Industrial Pretreatment, Industrial Wastewater Permits, Industrial Sludge Management and, as a support function, Groundwater Pollution Analysis.

A. Pretreatment

The WQME, Bureau of Industrial Waste Management, industrial pretreatment program, is responsible for specifying the degree of pretreatment required for industries that discharge waste into municipal wastewater treatment plants. In the past, only those industries discharging directly into surface waters, and owning and operating a treatment works, were required to meet national effluent standards. In many cases, industries could discharge into a publicly-owned sewer system, with little restriction on the type of discharge allowed. The objective of industrial pretreatment is to eliminate the discharge of toxic pollutants in toxic amounts into surface waters via municipal treatment systems. In 1978, the EPA published pretreatment regulations to define the requirements for local enforcement of industrial pretreatment standards for 21 industrial categories. Standards are currently being promulgated, and it is estimated that the standards will be completed for many of the 21 categories during 1982; between 2,000 and 4,000 industries in the state may ultimately be required to install treatment systems under these standards.

A general strategy for statewide industrial pretreatment has been prepared by WQME. Under this strategy, DEP will provide guidance, coordination, and enforcement for industrial pretreatment. The strategy is divided into four areas:

- Data gathering and handling, including information on the degree of industrial contamination of sludge (the residual material resulting from treatment of wastewaters) and information on industrial inputs into municipal systems;
- Planning for local program development, including establishment of priorities for funding to develop local pretreatment programs and issuance of guidelines to assist municipalities and sewerage authorities in establishing and executing local pretreatment programs;

- Program implementation, including the issuance of New Jersey Pollution Discharge Elimination System (NJPDES) Permits by the DEP to Significant Industrial Users of Publicly Owned Treatment Works (POTW); and
- Development of a statewide residuals management plan for those facilities affected under the program.

The pretreatment program is already being implemented and more than \$5 million in federal and state grants have been given to local sewerage authorities to perform industrial waste surveys and to sample for toxic chemicals.

A pretreatment EPA grant, under Section 201 of the Clean Water Act, has been awarded to DEP and will deal with several aspects of the pretreatment program and the disposal of pretreatment residuals and other hazardous wastes in the state.

The overall objective of the grant is to develop a statewide program which will be effective in identifying, classifying, controlling, treating, handling and disposing of various wastes (liquid and residual) generated within the state. Its main purpose is to reduce, control, and, eventually, eliminate pollutants that are deleterious to the environment and have been generated from industrial and commercial activities within each POTW service area. The program will recommend specific methods of monitoring and enforcement to regulate the discharges, and will also suggest ways of treating the wastewater and the residual waste resulting from pretreatment.

The industrial pretreatment program operates under the authority of the N.J. Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and the N.J. Pretreatment Act (N.J.S.A. 58:11-49 et seq.).

## B. Industrial Waste Permitting

### 1. Surface Waters

The WQME, industrial waste permitting program is currently responsible for reviewing applications for direct discharge of industrial wastewaters to the surface waters, under NJPDES. The Division of Water Resources has recently obtained complete delegation of this surface water permit program from the EPA. The EPA was previously responsible for the administration of this program. With regard to the control of toxic pollutants to surface waters, the federal Clean Water Act mandates the achievement of best available technology for industrial sources by July 1, 1984 or no later than 3 years after limitations are established by EPA. Toxic and hazardous criteria will be developed and used in the setting of effluent

limits for specific parameters. Subsequent to this, water quality based effluent limits and technology based effluent limits which are economically achievable will be promulgated. These standards will then be incorporated into the state permitting process. It is the ultimate intention of the EPA and the DEP to modify or re-issue discharge permits to applicable industries to include toxic effluent limitations.

## 2. Ground Waters

The WQME, Groundwater Permits Section reviews all applications for permits to dispose of hazardous or toxic wastewater on the land or into the ground water. This review is undertaken in order to prevent toxic or hazardous contaminants from entering groundwaters and is performed on all facilities currently discharging but not permitted, as well as those facilities planning to discharge to the groundwater in the near future. This also includes such activities as landfill, spray irrigation, and surface impoundment discharges. The regulations granting the authority to undertake this massive program were promulgated in March, 1981. Within the next five years, all ground water discharges will require a NJPDES permit from the WQME.

## C. Industrial Sludge Management

The WQME, Bureau of Groundwater Discharge Permits has been involved in the development of a statewide sludge and septage management strategy. Sludge is the residual material which results from the treatment of wastewaters. Septage is the combination of liquid and solid residues resulting from the treatment of domestic waste in individual subsurface sewage disposal systems. If adequate treatment and disposal methods are not instituted to deal with sludge and septage, significant impact on the environment can occur. Disposal of sludge into improperly designed landfills is being phased out based on legislative mandates and environmental problems. Amendments to the Solid Waste Management Act called for the closure of landfills which lack liners and leachate collection systems to septage on March 15, 1981. That same edict applies to liquid sludge on March 15, 1985. The objectives of the statewide sludge management strategy are to: respond to the Federal Marine Protection and Sanctuaries Act; reduce volumes of sludge in landfills; and upgrade cut-moded storage or treatment measures being practiced by many sludge generators. The statewide septage management plan seeks to ensure the environmentally acceptable treatment of septage by disposing of these wastes into existing treatment plants with available capacity, at composting or co-composting facilities or by land treatment methods. The implementation of a

pretreatment program will reduce the municipal sludge disposal problem by generally improving sludge quality and by making more sludges safe for land application via composting or landfarming.

#### D. Groundwater Pollution Analysis

The WQME, Bureau of Groundwater Management, Groundwater Pollution Analysis Section, assists all DEP programs in cases where toxic and/or hazardous substances have entered the groundwater. The Bureau also responds to requests from the other DEP agencies/groups involved with hazardous waste management. The Bureau's services regarding the release of toxic and hazardous substances to groundwaters include:

- Evaluation of the fate of hazardous and/or toxic substances after such substances have penetrated the soil or contaminated the groundwater.
- Evaluation of the geology of sites to estimate ground water flow direction and seriousness of incidents.
- Location and supervision of the construction of monitor wells in order to establish flow direction and extent of contamination.
- Selection of nearby wells to be sampled based on geology, hydrology, and well construction to define the zone of impact.
- Geophysical logging of monitor and/or production wells to determine subsurface conditions.
- Soil resistivity and electromagnetic conductivity surveys to define polluted plumes of ground water without extensive monitor well data and to determine water table depth.
- Seismic surveys which can rapidly define depth to bedrock or clay.
- Recommendations for cleanup or mitigation of ground water contamination.
- Expert testimony on the subjects of soils, geology and ground water hydrology for the prosecution of ground water pollution cases.

The Bureau has drilling capabilities which allow for the installation of monitor wells in both unconsolidated and consolidated formations where it is suspected that hazardous and/or toxic materials have been dumped.

Division of Environmental Quality

The Division of Environmental Quality is the agency responsible for regulating the emission of air contaminants into atmosphere. In this regard, the DEP has adopted and implemented a stringent air quality control program.

With certain exceptions for very small sources, if a facility will be emitting air contaminants, it must obtain a permit to construct, and a certificate to operate from the DEP. State permit requirements mandate that all new facilities be furnished with the best available air pollution control equipment. For existing facilities of listed toxic volatile organic substances, retrofitting of best available control technology is required. For existing facilities emitting other volatile organic substances, reasonable available control technology must be installed.

A treatment facility which incinerates hazardous waste must obtain a hazardous waste incinerator permit. However, if a facility meets the limited exemptions provided within the definition of a hazardous waste incinerator (N.J.A.C. 7:26-1.4), the regulations are not applicable.

Should a facility require an air pollution permit and a hazardous waste permit, the DEP will coordinate the review process. In this way, should both applications be approved, the permits will be issued simultaneously.

The Division of Environmental Quality no longer regulates the disposal of pesticides since those policies have been superceded by the Hazardous Waste Regulations (N.J.A.C. 7:26-1.11).

Office of Cancer and Toxic Substances Research

The Office of Cancer and Toxic Substances Research (OCTSR) was established in 1976, by a governor's executive order. The order was issued following a report by the National Cancer Institute, showing New Jersey and the region to have high mortality rate from many forms of cancer, often exceeding the national average. OCTSR was directed to find what possible correlations there might be between environmental factors and the high cancer mortality.

The Office has expanded its research work beyond cancer mortality rates to investigate the whole gamut of toxic substances, chronic exposures, and the public health. OCTDR is working with other bureaus and agencies, and contributing advice and assistance whenever possible.

OCTSR is structured into six working units, which have been developed to give the most comprehensive coverage of any toxic substances problems that might occur in New Jersey. The six units are:

- 1) Air - The air program is conducting sampling of three urban sites to determine what pollutants residents are subjected to, and by doing seasonal sampling, which times of the year they are subjected to various combinations of pollutants. A mobile monitoring laboratory is being developed to sample and perform rapid analysis of volatile air pollutants. In the future, with additional equipment, the mobile laboratory will be able to perform analysis on other forms of air contaminants and also, soil and water.
- 2) Water - In addition to conducting annual surveys of ground, surface, and potable water to develop a comprehensive picture of the state's water quality, the Water and Biota Unit is using these surveys to pin-point and develop specialized water studies, such as an arsenic study in southern Jersey, characterization and behavioral study of drinking water in a reservoir, and PCBs and chlordane studies. The unit is also investigating sublethal effects of pollutants on marine biota.
- 3) Biological Testing - The Ames bioassay for mutagenicity is being used to test ambient air particulates, industrial/municipal effluents, ground water and leachate at hazardous waste landfills, and potable water.
- 4) Industrial Survey - An extensive survey of New Jersey's industry is being conducted to determine the use, storage, production, emission, discharge, and disposal practices for approximately 160 known toxic chemicals. Businesses are required to fill out questionnaires regarding these practices and follow-up monitoring is then done by a field team.
- 5) Geographic and Statistical Analysis - All the data that is gathered in OCTSR's research work is computerized for analysis, correlation, and comparison. Mapping and graphic capabilities allow visual displays of the research data that are used to make up the environmental profile of New Jersey.
- 6) Information Resources - OCTSR generates reports from its data analysis and disseminates this information in various formats to different types of audiences. The Information Resource Center (IRC) also has an extensive toxicology collection and computerized literature data bases for aiding in the research work of OCTSR staff and any other potential users.

### Hazardous Waste Facilities Siting Commission

The Hazardous Waste Facilities Siting Commission was created as part of a major legislative bill adopted on January 13, 1981 entitled the Major Hazardous Waste Facilities Siting Act (commonly known as S-1300). The nine members of the Commission, comprised of representatives from industry, government and the general public, were appointed by the Governor, with the advice and consent of the Senate.

The principal duties of the Commission are to:

- Review the siting criteria for new major hazardous waste facilities that will be proposed by the DEP in consultation with the Hazardous Waste Advisory Council.
- Prepare, in consultation with the Council, a comprehensive Major Hazardous Waste Facilities Plan for New Jersey which will be revised and updated once every three years.
- Propose and adopt in consultation with the Council, site designations for the number and type of new major hazardous waste facilities determined to be necessary in the plan.
- Prepare a public information program and hold public meetings and hearings in the state on any matter related to the siting, licensing, construction, operation or closure of major hazardous waste facilities.
- Prepare a public information program which addresses the nature and dimension of the hazardous waste problem, the need for proper and expeditious siting for new major hazardous waste facilities, and the respective responsibilities of the Commission, the DEP, and the Council pursuant to the Act.
- To ensure that a five percent gross receipts tax is paid to the host municipalities by the major hazardous waste facilities. The tax money is to be used for extra police and fire costs which are necessitated by the operation of the facility, local inspection program costs, road construction or repair costs necessitated by the transportation of hazardous waste to the facility, and other expenses directly related to the impact of the facility on the municipality.

### Hazardous Waste Advisory Council

The Hazardous Waste Advisory Council was established to provide public participation at the decision-making level of the siting process. The Council consists of thirteen members appointed by the Governor with the advice and consent of the Senate.

The principal responsibilities of the Council are as follows:

- Advise the DEP concerning the preparation and adoption of the plan, the proposal and adoption by the Commission of all sites for major hazardous waste facilities, and the implementation of the public information program.
- Advise the DEP concerning the preparation and adoption of criteria for the siting of new major hazardous waste facilities.
- Make recommendations for DEP action on applications for the approval of registration statements and engineering designs for new major hazardous waste facilities.
- Review all matters submitted to it by the Commission or the DEP and state a position on the matter within sixty days.

\$50,000 is appropriated to the Council, through the DEP, for the performance of the above responsibilities. In addition, the Council has the power to:

- Review any matter relating to the siting, licensing, construction, operation or closure of major hazardous waste facilities and make any recommendations to the Commission and to the DEP.
- Hold public meetings and hearings on any matter related to the siting, licensing, construction, operation or closure of major hazardous waste facilities.
- Utilize the services of employees of any state, county, or municipal department, board, commission or agency as may be required and made available for such purposes.

The Council is involved with every decision regarding the siting of major hazardous waste facilities, either directly or indirectly.

#### Hazardous Waste Strike Force

The Hazardous Waste Strike Force oversees and coordinates the investigation of illegal hazardous waste disposal and is involved with the prosecution of illegal disposers. The strike force is comprised of representatives of the DEP, the New Jersey Office of the Attorney General, the EPA, and the U.S. Attorney's Office, and receives input from other state agencies when appropriate. The N.J. Office of the Attorney General, Division of Criminal Justice coordinates the Strike Force activities.

NEW JERSEY STATUTES AND REGULATIONS APPLICABLE  
TO HAZARDOUS WASTE MANAGEMENT

- The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) authorizes the State to regulate and supervise all solid and hazardous waste collection and disposal facilities and operations and to register all persons engaged in the collection and/or disposal of solid and hazardous waste in the state.

Solid Waste Management Rules - N.J.A.C. 7:26-1 et seq.

- The New Jersey Spill Compensation and Control Act (N.J.S.A. 58:10-23.11 et seq.) requires that all spills or other discharges of hazardous substances be reported to the Department. The Act provides for a fund for prompt containment and removal of a discharge and for swift and adequate compensation to persons damaged by a discharge.

N.J.A.C. 7:1E-1 et seq.

- The New Jersey Hazardous Discharge Bond Act (L. 1981, C. 275) authorizes the issuance of \$100 million in State bonds for the identification, cleanup and removal of hazardous discharges.
- The New Jersey Pretreatment Standards for Sewerage, etc. (Pretreatment Act) (N.J.S.A. 58:11-49 to 58) authorizes the adoption and enforcement of rules and regulations requiring the treatment of certain wastes prior to their discharge into sewerage systems.
- The New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) authorizes the Department to adopt and enforce rules and regulations to prevent, control or abate water pollution.

New Jersey Pollutant Discharge Elimination System  
Regulations - N.J.A.C. 7:14A-1 et seq.

- The New Jersey Pesticide Control Act (N.J.S.A. 13:1F-1 et seq.) authorizes the Department to adopt and enforce regulations governing the sale, use and application of all pesticides.

Pesticide Control Regulations - N.J.A.C. 7:30-1 et seq.

- The New Jersey Air Pollution Control Act (N.J.S.A. 26-2C-1 et seq.) provides for the control of air contaminants, installation or alteration of control apparatus, enforcement of procedures, and issuance of penalties for violations of the Act. The State shall make determinations concerning emergency health risks due to air pollution, declare an air pollution emergency and take appropriate measures to remedy the situation.

Air Pollution Control Regulations - N.J.A.C. 7:27-1 et seq.

- The New Jersey Sanitary Landfill Closure and Contingency Fund Act (L. 1981, C. 306) guarantees that adequate funds are reserved to ensure the proper closure of sanitary landfills and to relieve problems associated with the improper closure or operation of sanitary landfills.
- The New Jersey Major Hazardous Waste Facilities Siting Act (L. 1981, C. 279) provides for the siting, construction, operation and use of environmentally acceptable major hazardous waste facilities.

## DIRECTORY

### New Jersey's Hazardous Waste Program Department of Environmental Protection

#### I. Division of Waste Management

Hazardous waste treatment and disposal regulation; evaluation of abandoned dump sites; cleanup of spills and abandoned dump sites.

Division Director - Jack Stanton

Deputy Director - Lino Pereira

Address - Department of Environmental Protection  
Division of Waste Management  
32 East Hanover Street  
Trenton, New Jersey 08625

609-292-9120

#### II. Division of Water Resources

Pretreatment of industrial waste; industrial waste permitting; sludge management; groundwater management.

Division Director - John Gaston

Address - Department of Environmental Protection  
Division of Water Resources  
P.O. Box CN 029  
Trenton, New Jersey 08625

609-292-1637

#### III. Division of Environmental Quality

Air pollution control; pesticide use and storage; radiation emergencies and transportation.

Division Director - Steven Kuhrtz

Address - Department of Environmental Protection  
Division of Environmental Quality  
CN 027  
Trenton, New Jersey 08625

609-292-5383

IV. Office of Cancer and Toxic Substances Research

Director - Thomas Burke

Address - Department of Environmental Protection  
Office of Cancer and Toxic Substances Research  
190 West State Street  
Trenton, New Jersey 08625  
609-984-6070

V. Hazardous Waste Facilities Siting Commission

Review siting criteria for new major hazardous waste facilities;  
develop state siting plan for hazardous waste facilities.

Director - Richard Gimello

Address Hazardous Waste Facilities Siting Commission  
National State Bank Building, 6th Floor  
28 West State Street  
Trenton, New Jersey 08625

609-984-3728

VI. Hazardous Waste Strike Force

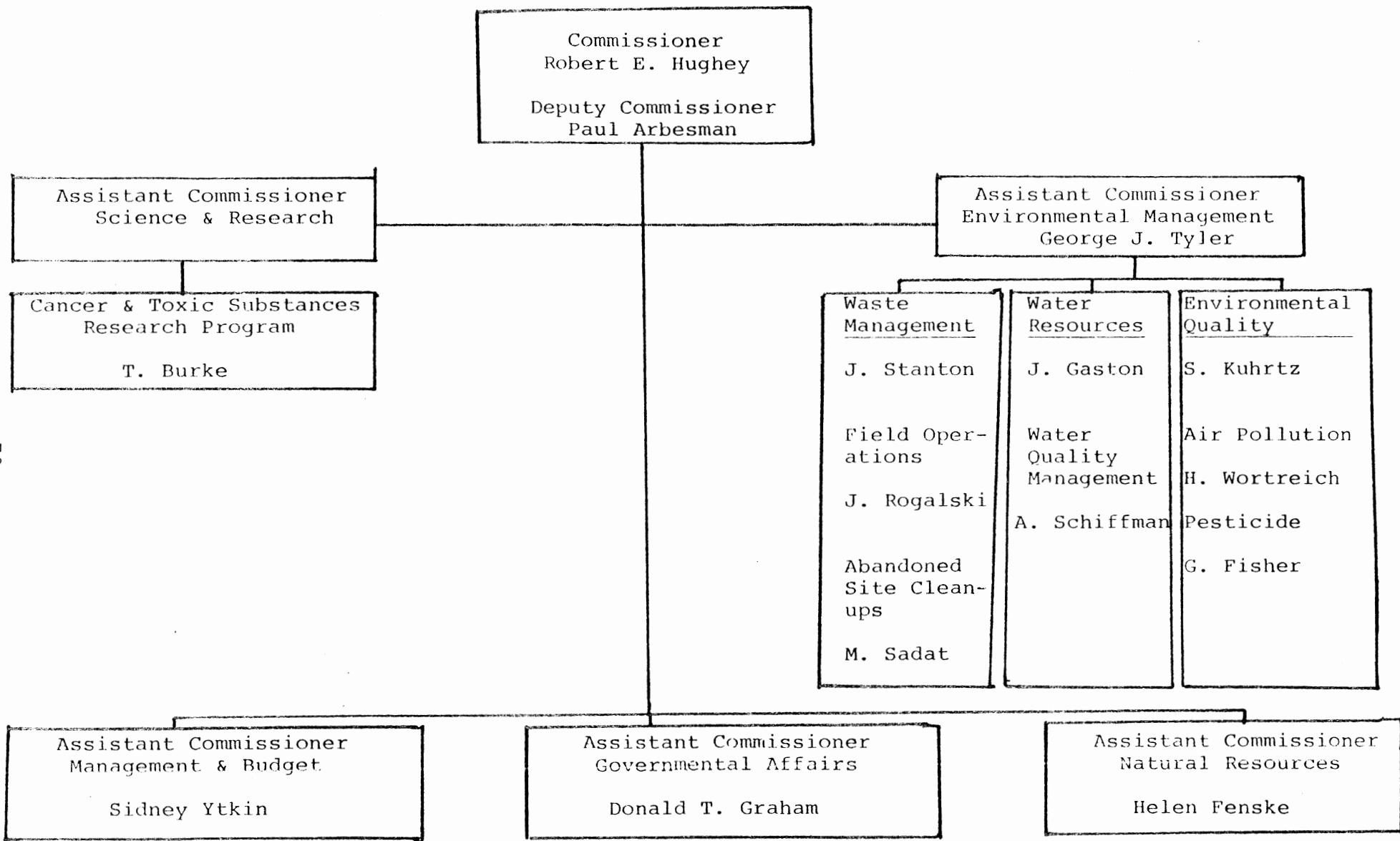
Conduct investigations of the illegal disposal of hazardous  
waste; handle prosecutions of persons involved in illegal  
disposal.

Lead State Agency - Department of Law and Public Safety,  
Division of Criminal Justices

Acting Division Director - Thomas Greelish

Address - Department of Law and Public Safety  
Division of Criminal Justice  
Hughes Justice Complex  
Trenton, New Jersey 08625

609-452-9500



Hazardous Site Status Sheet

Sites

65 Superfund Sites

DEP/EPA Action

14 Cooperative Agreement/Contracts  
signed by 2/10/83\*

13 Feasibility Studies  
1 Emergency Action  
6 Design/Construction  
Amendment by 10/1/83

12 Cooperative Agreements/Contracts  
signed by 10/1/83

11 Feasibility Studies  
1 Design/Construction/  
Removal

17 Active DWR Enforcement

23 Scheduled for initiation within  
4 years

11 Major Drum Dumps

1 Contract Awarded 3/83

11 to be cleaned up  
within 2 years

33 Small Drum Dumps

29 Completed by 3/21/83

4 to be completed by 4/83

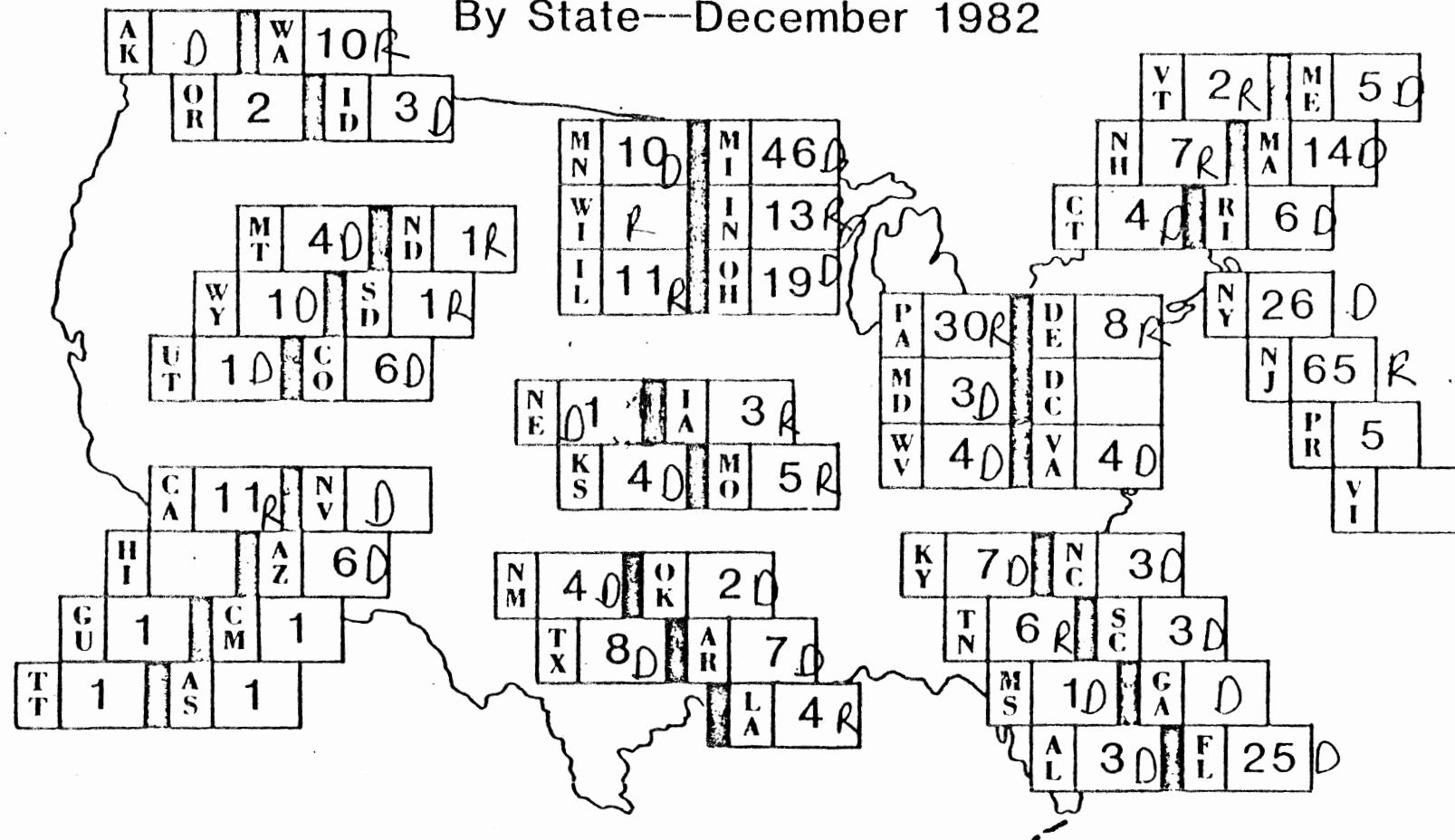
23 Non Superfund Sites

Scheduled for initiation  
within 4 years

\* 4 Sites Funded with RCRA monies

# Distribution of Hazardous Waste Sites On Proposed Superfund Priorities List

By State--December 1982



NATIONAL STATUS OF COOPERATIVE AGREEMENTS/CONTRACTS

C/C Signed

Region	<u>Number of Cooperative Agreements</u>	<u>Number of Contracts</u>	<u>Cooperative Agreements In Negotiation</u>	<u>Contracts In Negotiation</u>
I	5	1	2	2
II	17 (NJ 14 for 13 sites)	0	0	0
III	No Response	--	--	--
IV	6	0	1	1
V	2	1	0	0
VI				
VII				
VIII	2	0	2 funds are obligated but states have not signed	
IX	0	0	0	0
X	0	1 of 2	0	0

Department of Environmental Protection  
Division of Waste Management  
Bureau of Compliance and Enforcement

In 1982, in an effort to consolidate agencies with similar functions and overlapping jurisdiction, and improve efficiency, the Department combined the Bureaus of Solid Waste Management and Hazardous Waste Management in the Division of Environmental Quality with the Division of Hazard Management, forming the Division of Waste Management. This Division is responsible for, and charged with enforcing, the "Solid Waste Management Act" (N.J.S.A. 13:1E-1 et seq.) and the rules and regulations promulgated thereunder (N.J.A.C. 7:26-1 et seq.), and the "Spill Compensation and Control Act" (N.J.S.A. 58:10-23.11 et seq.) and the rules and regulations promulgated thereunder (N.J.A.C. 7:1E-1 et seq.).

During this reorganization, portions of the enforcement elements of the Division of Environmental Quality and the Division of Hazard Management were consolidated into the Bureau of Compliance and Enforcement. This Bureau is primarily a service agency for other Bureaus in the Division; never initiating an initial action against a party without first receiving an incident report from another Bureau which indicates that a violation of a rule or regulation, enforceable by the Division, has occurred. Upon receiving such a report, the Bureau, after it has reviewed the report and is satisfied that the observations and facts presented constitute a violation, will initiate what it deems to be the appropriate enforcement action.

The appropriate action against a party depends on several factors including the type, nature and extent of the violation, the frequency of such violations and the past history of other violations and actions taken by the Bureau, or its predecessor, and the Department on those violations.

The most frequent actions initiated by the Bureau of Compliance and Enforcement are as follows:

a) Notice of Violation:

This document is issued to parties for minor violations, such as litter violations, that are readily remedied, or where remedial action has been taken prior to the issuance of the document as in the case of violations of the "Spill Compensation and Control Act" where the discharge is cleaned up prior to the issuance of the document. A penalty settlement offer may or may not be issued in conjunction with this document, depending on the frequency of such violations. With respect to violations of the "Spill Compensation and Control Act," a penalty is always incorporated into the Notice of Violation and the document signed by the Administrator of the Spill Compensation and Control Fund.

b) Administrative Order:

This document is issued to parties for violations that are not readily remedied or where the Notice of Violation has not been

effective in remediating the violation. Such documents include specific dates of compliance and possibly a schedule for compliance which itemizes interim steps or actions which must be taken by the party by specific dates in an effort to achieve final compliance. A penalty settlement offer may or may not be issued in conjunction with this document depending on the frequency and nature of the violation. Such documents are only issued pursuant to the "Solid Waste Management Act."

c) Administrative Consent Order:

This document is a variation of the Administrative Order; the difference being that with the Administrative Consent Order the terms of the order are agreed to by both the Department and the party in violation. It, too, may or may not include a penalty settlement offer.

d) Directive Letter:

This document, issued under the "Spill Compensation and Control Act," directs a party to clean up, or initiate specific remedial actions which will result in the ultimate clean up of hazardous substances which were discharged into the waters of the State or into lands from which it might flow or drain into such waters, within a specific time period. Such time period is usually ten days but may be less, even immediate, depending on the nature of the substance, the quantity of the substance discharged, the geology of the area, the hazard to the public, etc. The document also advises the party that if the substance of the directive is not enacted within the specified time period, the State may initiate remedial actions, cleaning up the discharge, and then seek, through litigation, treble damages, three times the cost of the clean up, from the responsible party.

e) Denial Letter:

This document is issued to parties where documentary evidence exists which indicates that the issuance of a permit, registration, or authorization by the Department would not be in the best interest of the public health, safety and welfare of the residents of the State, or of the environment.

f) Letter of Intent:

This document is similar to a denial letter and is issued for the same reasons. The difference is that the party has previously been issued, by the Department, a permit, registration or authorization and documentary evidence has been brought to light that indicates that the renewal of, or continued existence of, a valid permit, registration, or authorization would not be in the best interests of the public health, safety and welfare of the residents of the State, or of the environment.

g) Referral:

Should a violation be an imminent hazard to the public health, safety and welfare to the residents of the State, or the environment, or should a party fail to comply with another action taken by the Department, including failure to pay an administrative penalty, or should a party be aggrieved by an action taken by the Department, the Bureau prepares a referral document. Such document is sent by the Bureau to the Office of Regulatory Affairs with the recommendation that the matter be referred to the Office of the Attorney General for appropriate legal action, or, in the case of hearing requests, to the Office of Administrative Law for action on the request.

Prior to the reorganization and consolidation, the activities, with respect to the "Solid Waste Management Act" and the "Spill Compensation and Control Act," were accomplished by eight professionals, five attorneys and three secretaries. After the reorganization and consolidation, these activities were within the Bureau of Compliance and Enforcement which has seven professionals and one secretary. This reorganization and transition occurred between May and September of 1982. For comparative purposes, the following charts are provided to indicate the number of documents issued, the penalties assessed and the penalties collected:

Pre-Reorganization Period  
January through September, 1982

	<u>Solid Waste</u>	<u>Hazardous Waste</u>	<u>Spill Act</u>	<u>Total</u>
Documents Issued	1,135	44	83	1,262
Penalties Assessed	414,975	218,500	103,965	737,440
Penalties Collected	39,200	80,500	56,895	176,595

Transition Period  
October through December, 1982

	<u>Solid Waste</u>	<u>Hazardous Waste</u>	<u>Spill Act</u>	<u>Total</u>
Documents Issued	121	309	31	461
Penalties Assessed	101,800	6,850	25,795	134,445
Penalties Collected	7,025	13,000	11,720	31,745

Post-Reorganization Period  
January and February, 1983

	<u>Solid Waste</u>	<u>Hazardous Waste</u>	<u>Spill Act</u>	<u>Total</u>
Documents Issued	70	285	16	371
Penalties Assessed	66,550	25,850	7,720	100,120

Penalties Collected	52,600	13,250	2,080	67,930
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(Attached is a detailed summary of the documents issued in January and February, 1982).

In 1983, while it is expected that the Bureau of Compliance and Enforcement will issue fewer enforcement documents for minor violations of the "Solid Waste Management Act" for landfill violation (such violations are being sited and initial Notices of Violations are being issued by the enforcement officer at the site), the overall workload will increase dramatically not only in the number of documents issued, but also in the complexity of the documents issued. The reasons for this increased workload are as follows:

- a) assumption of enforcement responsibilities for hazardous waste violations currently processed by EPA under RCRA; in 1982, 780 hazardous waste reports were sent to EPA, by the Division, for review and processing; these will now be reviewed and processed by the Bureau of Compliance and Enforcement.
- b) issuance of enforcement documents for cases referred by the Division's Engineering Element for a party's failure to submit TSD annual reports; it is estimated that 400 such violations will be processed.
- c) issuance of enforcement documents for cases referred to the Bureau by the Hazardous Site Mitigation Administration; in these cases responsible parties must be determined and the appropriate enforcement action must be taken; it is estimated that at least 100 enforcement documents will be issued to property owners and generators.
- d) issuance of enforcement documents for cases referred by the Department's Office of Special Funds Administration for a party's failure to submit annual audit reports; it is estimated that 400 such violations will have to be processed.

In addition to issuing enforcement documents and initiating referrals, the Bureau assists in negotiating and settling with parties for the improper disposal of hazardous wastes and substances in an effort to minimize expenditures of State monies from the New Jersey Spill Compensation and Control Fund and the Hazardous Discharge Bond Act, and the Appropriations Bill adopted pursuant thereto.

Further, the Bureau coordinates the preparation and development of cases involving other Bureaus within the Division; other divisions within the Department, including the Division of Water Resources, Division of Environmental Quality, the Division of Fish, Game and Wildlife, etc., other Departments, including the Department of Treasury; and other federal, county and local agencies.

Bureau of Compliance and Enforcement  
 Summary of Activities  
 January and February, 1983

<u>Documents Issued</u>		<u>Solid Waste</u>	<u>Hazardous Waste</u>	<u>Spill Act</u>	<u>Total</u>
Notice of Violation	No.	7	271	0	278
Notice of Violation with Penalty	No.	26	7	9	42
	Amt.	\$11,000	\$1,100	\$7,720	\$19,820
Administrative Orders	No.	17	0	0	17
Administrative Orders with Penalty	No.	17	6	0	23
	Amt.	\$53,050	\$24,750	0	\$77,800
Administrative Consent Orders with Penalty	No.	1	0	0	1
	Amt.	\$2,500	0	0	\$2,500
Directive Letters	No.	0	0	7	7
Letters of Intent	No.	1	0	0	1
Denial Letters	No.	1	1	0	2
Total Documents Issued		70	285	16	371
Total Penalties Assessed		\$66,550	\$25,850	\$7,720	\$100,120

Penalties Collected

Notice of Violation with Penalty	No.	18	6	5	29
	Amt.	\$2,100	\$4,650	\$2,080	\$8,830
Administrative Order with Penalty	No.	0	5	0	5
	Amt.	0	\$8,600	0	\$8,600
Penalty Collected by DAG	No.	2	0	0	2
	Amt.	\$50,500	0	0	\$50,500
Total Penalties Collected	No.	20	11	5	36
	Amt.	\$52,600	\$13,250	\$2,080	\$67,930

OFFICE OF THE GOVERNOR

RELEASE: IMMEDIATELY

CONTACT: JIM STAPLES

THURSDAY, FEBRUARY 10, 1983

609/292-2994

Governor Thomas H. Kean today announced a four-year statewide hazardous waste dump site action program which he said will make 1983 remembered as "the year of the cleanup" in New Jersey.

Terming it a "three-pronged attack on New Jersey's hazardous waste dump sites," the Governor listed its phases as:

1- SMALL DRUM DUMP CLEANUP: Already underway and to be finished by early March, "this effort will clean up 33 small drum dump sites (of 40 drums or less) around the state, and involves a total cleanup of approximately 400 drums of hazardous waste."

2- MEDIUM TO LARGE DRUM DUMP CLEANUP: This effort will address dump sites of 40 or more drums of hazardous waste. It will be integrated with the larger, more complex dump site cleanups addressed in the accompanying four-year plan. Other drum dump sites will be added if and when they are discovered. Both of these cleanups will be funded by the State Spill Fund.

3- DRAFT FOUR-YEAR CLEANUP PLAN FOR MAJOR HAZARDOUS WASTE DUMP SITES:

This will be the Department of Environmental Protection's (DEP) draft major long-range effort. It will concentrate on beginning the cleanups of over 100 of New Jersey's most severe hazardous waste dump sites. Included will be sites on the U.S. Environmental Protection Agency (EPA) federal "Superfund" list, as well as other sites to be addressed through New Jersey's Spill Fund and Hazardous Waste Site Bond Act. The plan indicates that the cleanup projects will be started within the four years, but completion of all sites on the list will be a seven to eight-year effort.

Governor Kean described the latter strategy as a "systematic approach for initiating remedial action at hazardous waste sites which is expected to cost \$197 million All three strategies were developed by DEP's Division of Waste Management. "This plan represents the culmination of a review process which started with the original New Jersey list of sites 5-79x"

Department," said DEP Commissioner Robert E. Hughey.

Hughey said 93 of those top state priority sites were ranked by DEP and EPA according to the federal Hazard Ranking System. This system is based on potential danger to public health and the environment, and takes into account surface and groundwater pollution as well as releases of hazardous chemicals into the atmosphere, Hughey explained.

The federal Superfund program provides up to 90 percent cleanup costs for a hazardous waste site, with the state providing the remainder of the costs from either the state Spill Fund or the Hazardous Waste Site bond fund.

"The 93 sites were further screened and ultimately 72 New Jersey sites were submitted to the EPA in Washington. Of them, 17 received high priority approval in mid-1982. On Dec. 20, 1982 the EPA identified a total of 65 sites which are eligible for Superfund monies," Hughey said.

Noting that the draft plan announced today will require the review and funding approval of the EPA, Governor Kean said, "If our efforts are to be successful, we will need the full cooperation and assistance of the EPA. We intend to work very closely with its Region II office in New York City and with EPA's Washington headquarters to achieve our common goal of cleaning up our environment."

The draft New Jersey four-year plan is being transmitted to EPA today for its review and comment, Governor Kean said.

Because the national Superfund list of 418 sites cannot be declared official by EPA until after the close of the public comment period, it is impossible at this time to define action schedules for New Jersey's 65 Superfund sites, Hughey said.

New Jersey will also submit its four-year action plan to public scrutiny and comment prior to its adoption by DEP, Hughey said. He noted that in some cases DEP will have responsibility for cleanup programs, while in others EPA will take the lead.

DEP still intends to evaluate sites which are not eligible for Superfund assistance at this time, and some of those sites have been included in the four-year preliminary plan, Hughey explained, "In addition to the drum dump sites already mentioned, the DEP expects to undertake cleanup programs for approximately 20 sites . . . . . 80v

which were not included on the national Superfund list, and these sites are also included in the four-year plan," Hughey said.

"New Jersey was extremely successful in the national competition for federal Superfund monies for cleanup programs, due to the early documentation and priority system developed by the DEP," Governor Kean said.

Hughey related that "last August DEP reorganized its Division of Waste Management to better deal with hazardous waste problems in New Jersey. We have restructured the program to establish multi-disciplinary management teams to handle this highly complex problem. Nowhere has this problem ever been addressed on a scale of such magnitude. We intend to deal with high priority hazardous waste sites in a timely fashion while insuring proper fiscal and managerial controls for the expenditure of public monies. Our goal is to eliminate or lessen potential public health and environmental impacts from these sites."

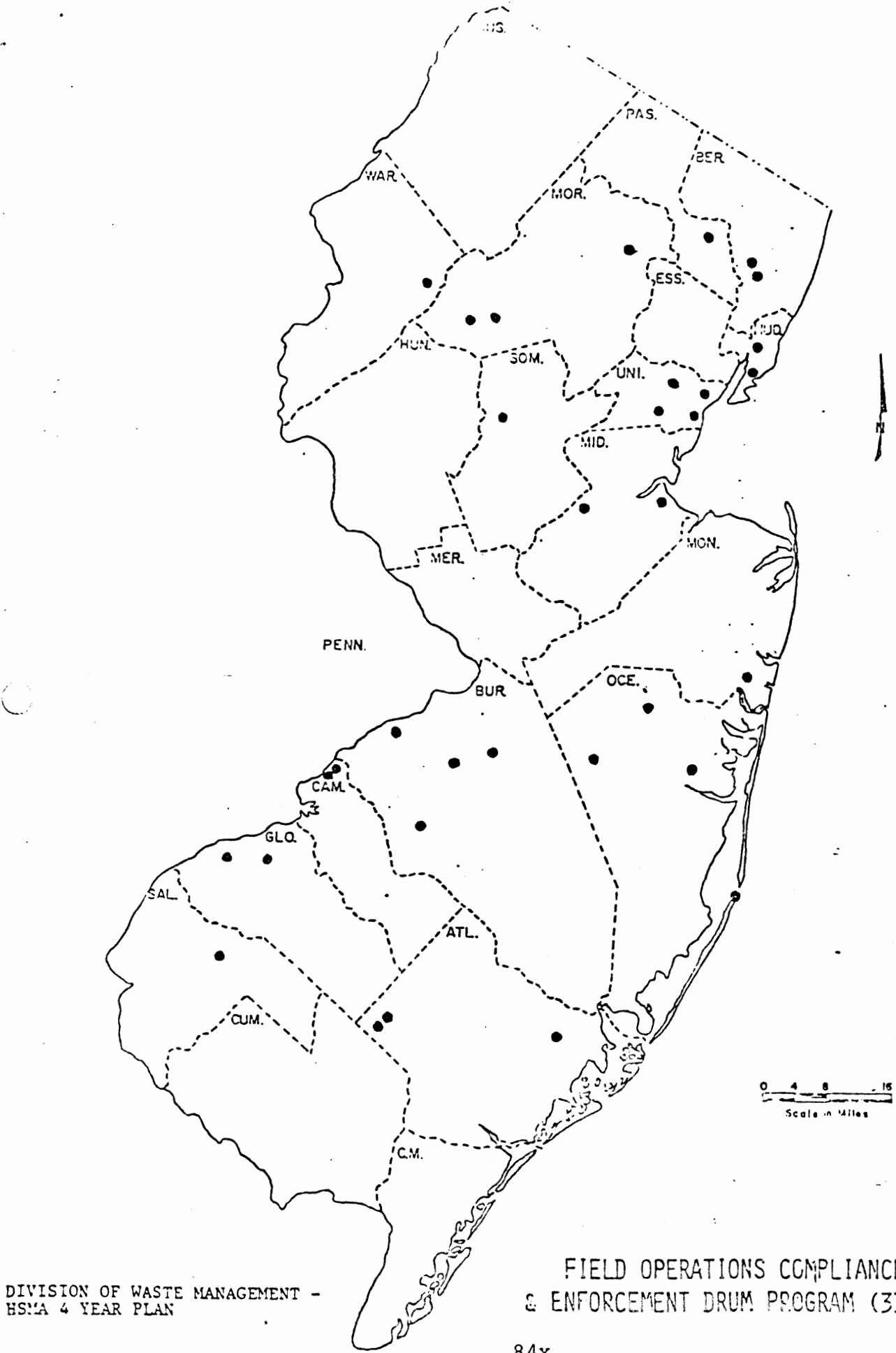
# # # #

Small Drum Dump Cleanup Sites

Attachment A

<u>SITE NAME</u>	<u>TOWNSHIP</u>	<u>COUNTY</u>
A-Z Chemical	N. Brunswick	Middlesex
Barnegat Light Boro DPW	Barnegat	Ocean
Bayonne DPW	Bayonne	Hudson
Bjornlass Kennels	Montville	Morris
Black River Area	Chester	Morris
Burlington Avenue	Delanco	Burlington
Camden Fire Department	Camden City	Camden
Carlstadt DPW	Carlstadt	Bergen
Cohawkin Road	E. Greenwich	Gloucester
Columbus Avenue	Roselle	Union
Communipaw Avenue	Jersey City	Hudson
Creektown Ceramics	Hainesport	Burlington
DOT	Wall Twp	Monmouth
DOT Yard	Logan Twp	Gloucester
Doughty Road	Egg Harbor Twp	Atlantic
Dover DPW	Dover Twp	Ocean
Ellis Property	Evesham	Burlington
Emerald Trail	Bridgewater	Somerset
Harleigh Cemetery	Camden City	Camden
Jackson DPW	Jackson Twp	Ocean
Kurtz Residence	Woodstown	Salem
Manchester DPW	Manchester	Ocean
Mikropul	Garwood	Union

<u>SITE NAME</u>	<u>TOWNSHIP</u>	<u>COUNTY</u>
Murray Hill Parkway	E. Rutherford	Bergen
Nash Property	Buena	Atlantic
Paterson DPW	Paterson	Passaic
Pleasant Grove Road	Long Valley	Morris
Rahway River Park	Rahway	Union
Reimer Street	Mount Holly	Burlington
South Amboy Water Works	S. Amboy	Middlesex
Union Twp. DPW	Union Twp	Union
Venice Boulevard	Buena Twp	Atlantic
Victoria Lane	Hackettstown	Warren

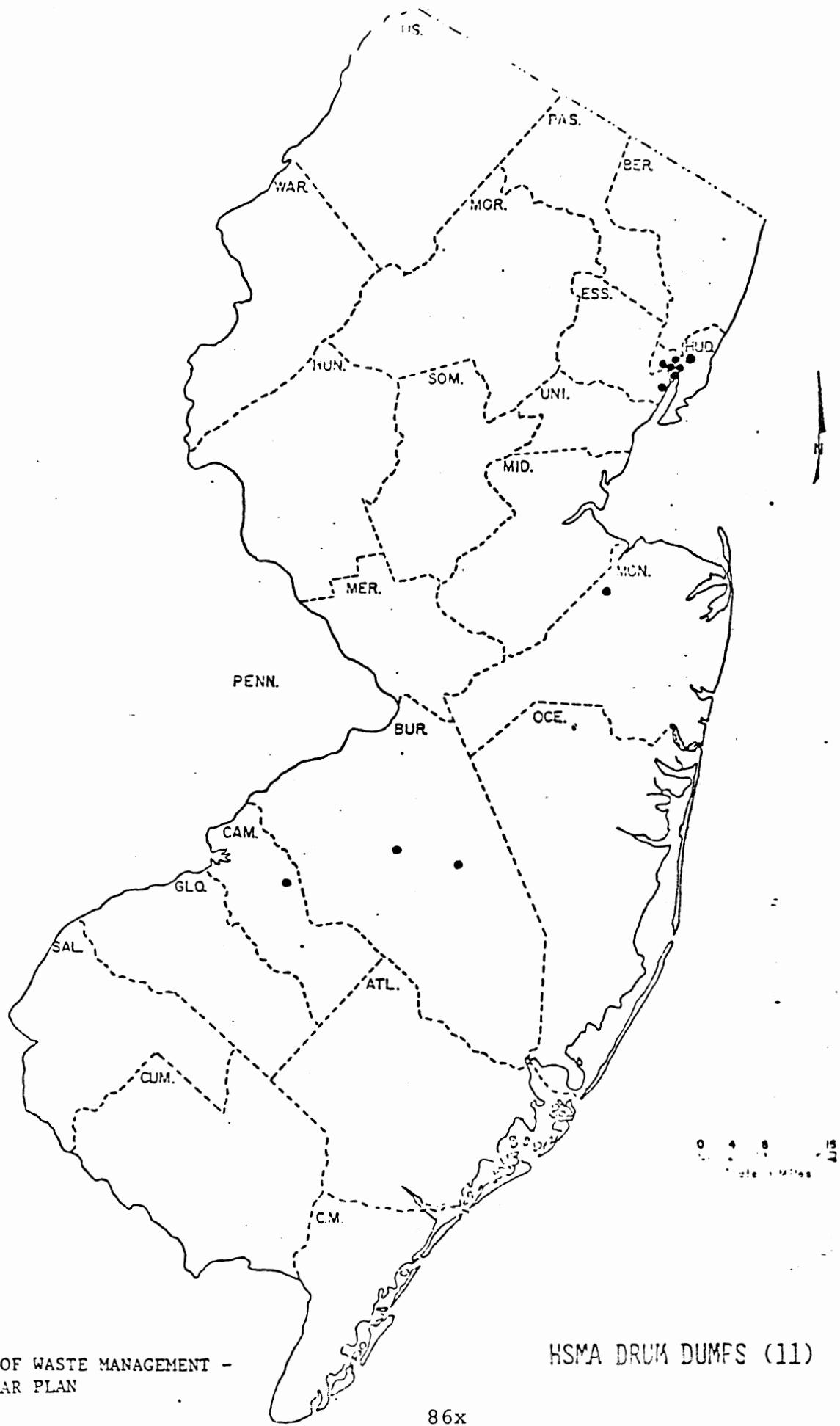


Medium to Large Drum Dump Cleanups

Attachment B

<u>SITE NAME</u>	<u>MUNICIPALITY</u>	<u>COUNTY</u>
Cooper Road	Voorhees Twp	Camden
Frontage Road	Newark City	Essex
Kearny Drum Dumps (Nos 1-5)	Kearny Town	Hudson
Minsei Kogyo Shoji kk America, Inc.	Woodland Twp	Burlington
Myers Property *	Franklin Twp	Hunterdon
North Bergen/Keystone	North Bergen Twp	Hudson
Storer Dump	Marlboro Twp	Monmouth
Tabernacle Site	Tabernacle Twp	Burlington

\* Sites included on the proposed National Priorities List



Sites Included in Four Year Plan  
(Superfund and Non-Superfund)

Attachment C.

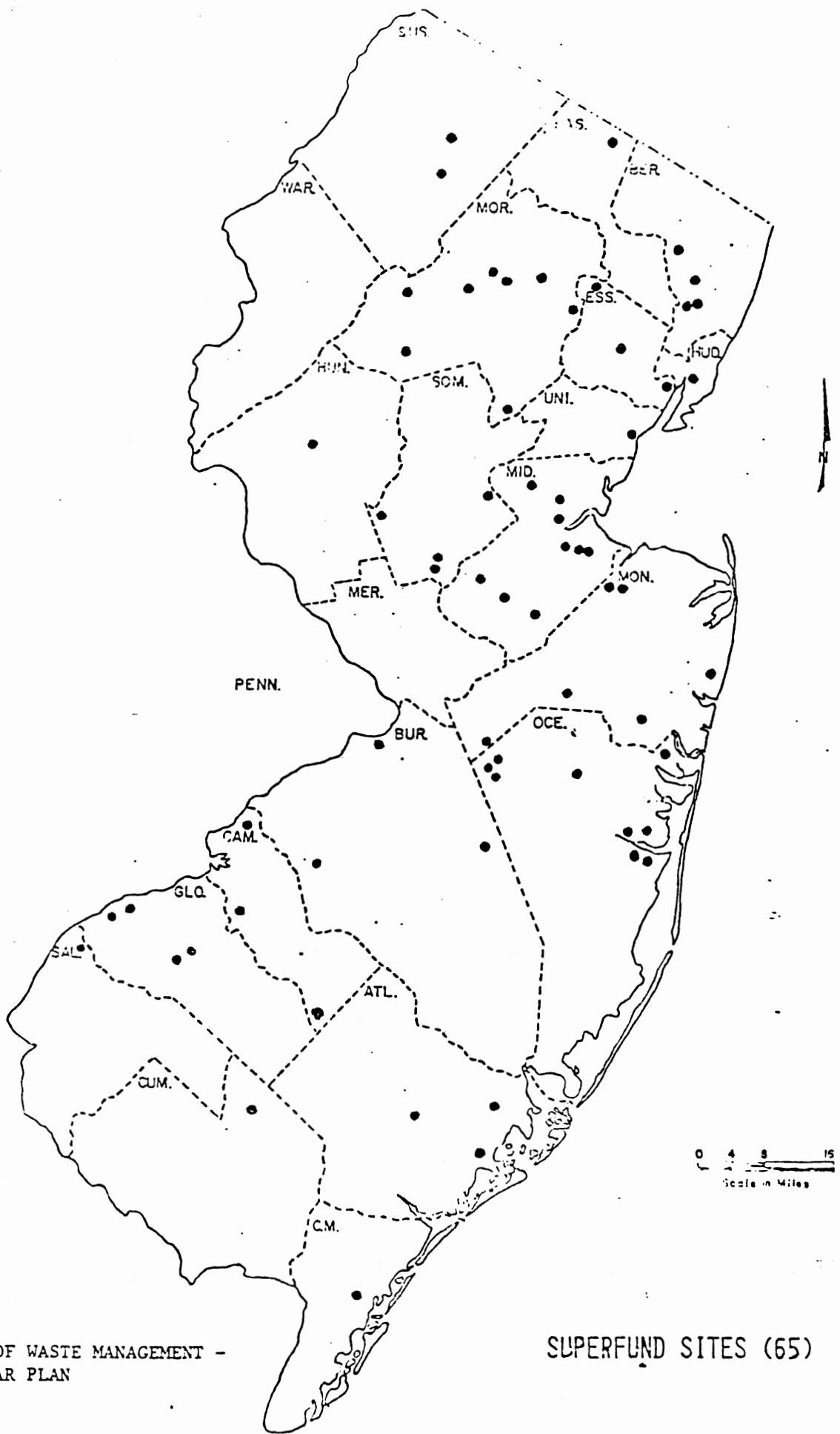
<u>SITE NAME</u>	<u>MUNICIPALITY</u>	<u>COUNTY</u>
Albert Steel	Newark	Essex
American Cyanamid *	Bound Brook Boro	Somerset
A. O. Polymer *	Sparta Twp	Sussex
Arky Property	Marlboro Township	Monmouth
Asbestos Dump *	Passaic Twp	Somerset
Ashland Company	Woodbridge Twp	Middlesex
Barrier Chemical Industry	Vernon Twp	Sussex
Beachwood/Berkeley Wells *	Berkeley Twp	Ocean
Bog Creek Farm *	Howell Twp	Monmouth
Borne Chemical	Elizabeth City	Union
Brick Township Landfill *	Brick Township	Ocean
Bridgeport Rental & Oil Service*	Logan Twp	Gloucester
Burnt Fly Bog *	Marlboro Twp	Monmouth
Buzby Brothers Landfill	Voorhees Twp	Camden
Caldwell Trucking Co.*	Fairfield Twp	Essex
Chemical Control Corp.*	Elizabeth City	Union
Chemsol, Inc.*	Piscataway Twp	Middlesex
Chirman Chemical	Middlesex Boro	Middlesex
Combe-Fill North Landfill *	Mount Olive Twp	Morris
Combe-Fill South Landfill *	Chester Twp/ Washington Twp	Morris
CPS/Madison Industries *	Old Bridge Twp	Middlesex
Denzer & Schafer X-Ray Co.*	Berkeley Twp	Ocean

<u>SITE NAME</u>	<u>MUNICIPALITY</u>	<u>COUNTY</u>
D'Imperio Property *	Hamilton Twp	Atlantic
Dover Municipal Well #4 *	Dover Twp	Morris
Duane Marine	Perth Amboy City	Middlesex
Duck Island Landfill	Hamilton Twp	Mercer
Ellis Property *	Evesham Twp	Burlington
Evor-Phillips *	Old Bridge Twp	Monmouth
Fairlawn Wellfield *	Fairlawn Boro	Bergen
T. Fiore Demolition	Newark City	Essex
Friedman Property *	Upper Freehold Twp	Monmouth
GEMS Landfill *	Gloucester Twp	Camden
Goose Farm *	Plumsted Twp	Ocean
Hercules, Inc. *	Greenwich Twp	Gloucester
Horseshoe Road Dump	Sayreville Boro	Middlesex
Ideal Cooperage	Jersey City	Hudson
Imperial Oil *	Marlboro Twp	Monmouth
Jackson Twp. Landfill *	Jackson Twp	Ocean
JIS Landfill *	Monroe Twp	Middlesex
Kin-Buc Landfill *	Edison Twp	Middlesex
Kit Enterprises	Elizabeth City	Union
King of Prussia Landfill *	Winslow Twp	Camden
Koppers Company	Kearny Town	Hudson
Kramer Sanitary Landfill *	Mantua Twp	Gloucester
Krysowaty Farm *	Hillsborough Twp	Somerset
Lang Property *	Pemberton Twp	Burlington

<u>SITE NAME</u>	<u>MUNICIPALITY</u>	<u>COUNTY</u>
Lipari Landfill *	Mantua Twp	Gloucester
Lone Pine Landfill *	Freehold Twp	Monmouth
Manchester Twp Mile Marker 28	Manchester Twp	Ocean
Mannheim Ave. Dump Site *	Galloway Twp	Atlantic
Martell Property	Deptford Twp	Gloucester
Maywood Chemical *	Maywood Twp/ Rochelle Park Boro	Bergen
Metaltec/Aerosystems *	Franklin Boro	Sussex
Mirex Dump	Sayreville Boro	Middlesex
Mobil Chemical	Carteret Boro	Middlesex
Monroe Twp Landfill *	Monroe Twp	Middlesex
Montgomery Twp Housing Development *	Montgomery Twp	Somerset
N. L. Industries *	Oldmans Twp	Salem
Pepe Field *	Boonton Town	Morris
Perth Amboy PCB Case	Perth Amboy City	Middlesex
Pijak Farm *	Plumsted Twp	Ocean
PJP Landfill *	Jersey City	Hudson
Price Landfill *	Egg Harbor Twp/ Pleasantville City	Atlantic
Reich Farms *	Dover Twp	Ocean
Renora, Inc.*	Edison Twp	Middlesex
Ringwood Boro Landfill/ Mines *	Ringwood Boro	Passaic
Rockaway Township Wells *	Rockaway Twp	Morris
Rockaway Borough Wellfield *	Rockaway Boro	Morris
Rocky Hill Municipal Well *	Rocky Hill Boro	Somerset

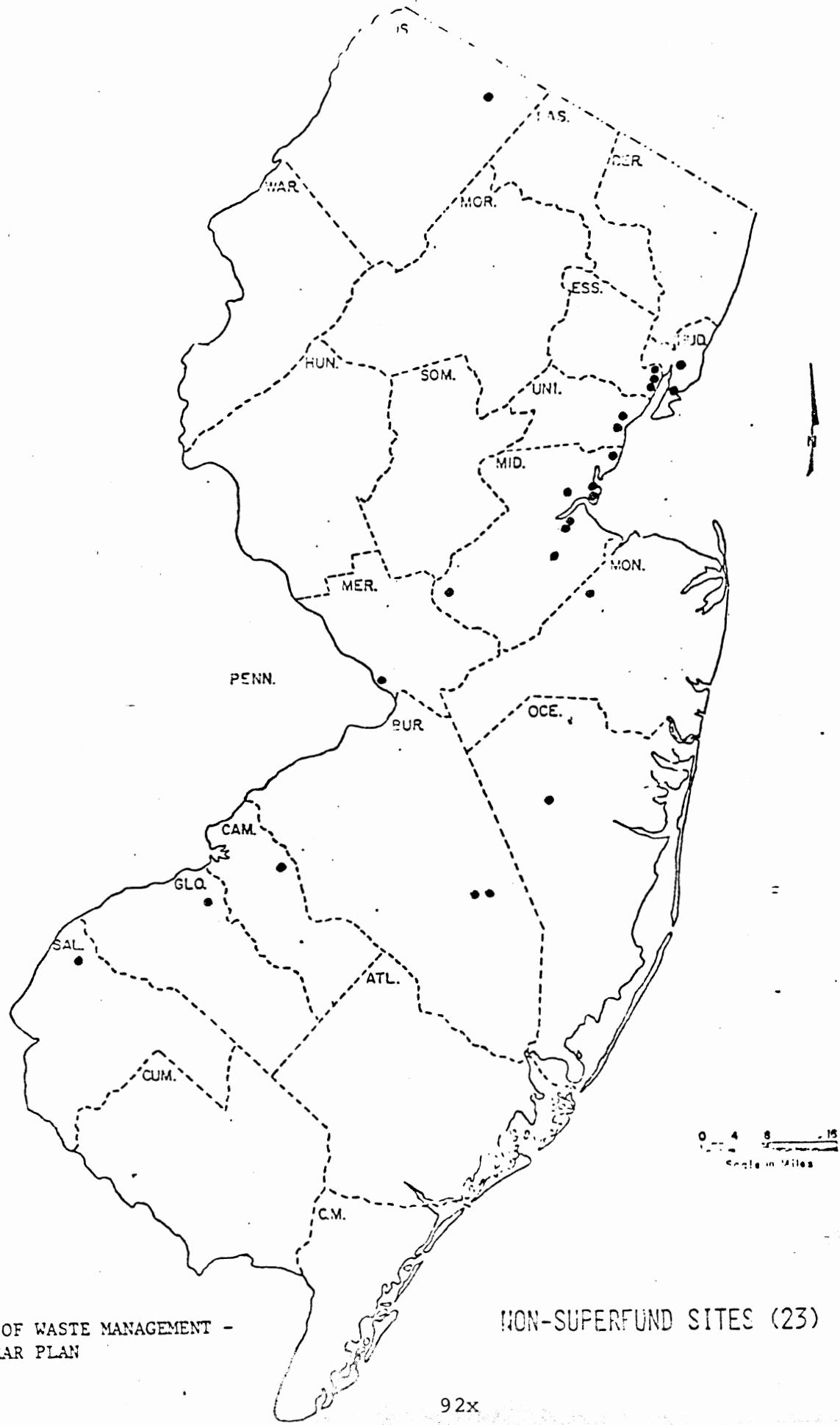
<u>SITE NAME</u>	<u>MUNICIPALITY</u>	<u>COUNTY</u>
Roebling Steel Company *	Florence Twp	Burlington
Sayreville Landfill *	Sayreville Boro	Middlesex
Sayreville Pesticide Dump	Sayreville Boro	Middlesex
Scientific Chemical Processing *	Carlstadt Boro	Bergen
Seaview Square Mall/M & T Delisa Landfill *	Ocean Twp	Monmouth
Sharkey's Farm Landfill *	Parsippany-Troy Hills Twp	Morris
South Brunswick Landfill *	S. Brunswick Twp	Middlesex
Spence Farm *	Plumsted Twp	Ocean
Swope Oil *	Pennsauken Twp	Camden
Syncon Resins *	Kearny Town	Hudson
Toms River Chemical Co. *	Dover Twp	Camden
U. S. Radium Site *	Orange City	Essex
Universal Oil Products *	E. Rutherford Boro	Bergen
Vineland State School *	Vineland City	Cumberland
White Chemical Company	Bayonne City	Hudson
Williams Property *	Middle Twp	Cape May
Woodland Twp Dump #1	Woodland Twp	Burlington
Woodland Twp Dump #2	Woodland Twp	Burlington

\* Sites included on the proposed National Priorities List



VISION OF WASTE MANAGEMENT -  
HSMA 4 YEAR PLAN

SUPERFUND SITES (65)



VISION OF WASTE MANAGEMENT -  
AUMA 4 YEAR PLAN

Site Name In Order of Priority

SITE NAME

Chemical Control

Price's Landfill \*

Burnt Fly Bog

Kin Buc Landfill \*

Lone Pine Landfill \*

Lipari Landfill \*

Bridgeport Rental Oil  
Service\*

D'Imperio Property \*

Syncon Resins \*

Kramer Landfill \*

GEMS Landfill

Krysowaty Farm \*

Goose Farm

Spence Farm

Pijak Farm

SITE NAME

Swope Oil \*

Friedman Property

CPS/Madison Industries ++

Caldwel Trucking +

Brick Township Landfill +

Scientific Chemical  
Processing \*

Duck Island Landfill

Universal Oil Products

Reich Farms \*

Woodland Twp Dump No. 1

S. Brunswick Landfill \*

Barrier Chemical Industry

Ringwood Boro Landfill/  
Mines \*

Manchester Twp Mile  
Marker #28

Maywood Chemical \*

Ideal Cooperage

American Cyanamid ++

N.L. Industries \*++

White Chemical Company

Metaltec/Aerosystems

SITE NAME

Lang Property \*

Arky Property

Sharkey's Farm Landfill \*

Chipman Chemical ++

King of Prussia Landfill \*

Ashland Company

Toms River Chemical Co. ++

Combe-Fill South Landfill \*

Buzby Brothers Landfill

JIS Landfill +

Rockaway Township Wells

Bog Creek Farm \*

Horseshoe Road Dumps

- Horseshoe Road

- Sayreville Pesticide

Chemsol, Inc +

Imperial Oil +

Fairlawn Wellfield

Combe-Fill North Landfill \*

Koppers Co. \*\*

Monroe Township Landfill +

Rockaway Borough Wellfield

Beachwood/Berkeley Wells

SITE NAME

Dover Township Municipal  
Well #4

Roebling Steel Company \*

Woodland Twp Dump #2

Vineland State School

Williams Property

Renora, Inc

Denzer & Schafer X-Ray Co \*+

Albert Steel +

Hercules, Inc. \*

Perth Amboy PCB Case

Asbestos Dump/Millington \*

Roosevelt Drive-In

Jackson Twp Landfill +

Rocky Hill Municipal Well

Montgomery Twp Housing  
Development

U.S. Radium Site \*

Mobil Chemical

Sayreville Landfill \*

T. Fiore Demolition

Evor-Phillips

Mannheim Ave Dump Site

Ellis Property

\* Remedial Actions proposed for EPA-lead

(IA) Interim Action

Remedial Actions expected to be conducted by private companies

+ Sites for which Administrative Consent Orders have been previously issued

TO: Mr. Earl Josephson, Deputy Director  
Division of Purchase and Property

THROUGH: Commissioner Robert E. Hughey  
Department of Environmental Protection

FROM: The Standing Evaluation Committee for the  
Evaluation of Bids Related to the Cleanup,  
Removal & Disposal of Hazardous Substances

SUBJECT: Recommended Contract Awards for Services Related  
to Emergency Cleanup and Removal of Hazardous  
Substances-State of New Jersey-DEP.

Bid Identification Number X-213

Date: February 14, 1983

I. Background

The subject of Procurement Circular number 34 dated August 15, 1982 was contract delegations to DEP for hazardous materials cleanups. This procurement circular was approved by Kenneth R. Biederman, State Treasurer, and Robert E. Hughey, Commissioner, Department of Environmental Protection. The general purpose of the procurement circular as related to the subject recommendations is, "to establish policies and procedures to be utilized when awarding contracts for the removal of hazardous materials administered by the Department of Environmental Protection for (a) Emergency cleanup projects that pose an imminent endangerment to the public health or welfare or the environment. Examples may include actions such as but not limited to the spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of toxic substances into the environment." Section II of PC-34 entitled policy, paragraph "b" states "all contracts that do not exceed \$250,000 for emergency cleanup operations will be issued by DEP using the term contracts established by the Department of the Treasury through the competitive bidding process." PC-34 also establishes procedures and responsibilities for the establishment of current contracts for emergency cleanups and in addition sets forth the method that is to be followed in evaluating bid proposals submitted that are related to the hazardous materials area. PC-34 establishes a standing Evaluation Committee to be utilized for this purpose. Section III of this report identifies the members of this committee.

In accordance with PC-34 the Department of the Treasury, Purchase Bureau, in conjunction with DEP has developed RFP X-213, "Services Related to Emergency Cleanup and Removal of Hazardous Substances-State of New Jersey - DEP." This RFP was formulated to encompass purchase policy, procedures and responsibilities delineated in PC-34. The following report is the Standing Evaluation Committee's recommendation for contract award(s) in the various regions and categories of work established by R.F.P. X-213.

II. General Overview of Procurement Process R.F.P. X-213

The following are the key dates during the bid process.

1. Bid mailing date; October 22, 1982. RFP X-213 was mailed to an initial list of 630 potential bidders.
2. Mandatory bidders conference: A mandatory bidders conference was held on November 5, 1982. 110 firms attended the mandatory bid conference and therefore qualified to bid on X-213.
3. Addendum #1: On November 16, 1982 addendum #1 was mailed to the 110 bidders who attended the mandatory bid conference. A copy of addendum #1 is attached to this report as Attachment #1.
4. Addendums #2: On December 8, 1982 addendum #2 was mailed to the 110 firms that attended the mandatory bidders conference.

Addendum #2 answered all questions raised by the bidders at the mandatory bidders conference along with written questions that were submitted by the attendees of the mandatory bidders conference. A copy of Addendum #2 is attached to this report as Attachment #2.

5. Bid opening date: The Bid opening date was 1/3/83. On 1/3/83 twenty-three (23) proposals were received by the Purchase Bureau and were publicly opened and read.

### III. Evaluation Methodology

Pursuant to PC-34 "The Purchase Bureau Supervisor has the responsibility to formulate a five (5) member evaluation committee composed of two representatives from DEP (one of which will be from the Division of Fiscal and Support Services) one representative from the Purchase Bureau, one representative from the Office of the Spill Fund Administrator and one representative from a disinterested third party state agency. The Purchase Bureau member will chair this Evaluation Committee."

Pursuant to PC-34 the Purchase Bureau Supervisor has formulated the Standing Evaluation Committee as follows:

1. David F. Kinney, Purchase Bureau.
2. Howard Reading, Office of the Spill Fund Administrator.
3. Dr. Dhum Patel, Dept. of Health (disinterested third party).
4. Charles Strano, Bureau of Management Services, DEP.
5. Anthony Farro, Bureau of Site Management, DEP.

NOTE: For purposes of this evaluation Tom Allen, of the Bureau of Field Operations, has been chosen by Anthony Farro to serve as his designee on this committee. Mr. Allen was chosen to serve on the committee since he is the D.E.P. program representative whose unit would be utilizing the services provided by the contract.

The following is a listing of the dates on which the evaluation committee activities occurred:

1. December 30, 1982
2. January 18, 1983
3. January 25, 1983
4. January 26, 1983
5. January 27, 1983
6. January 31, 1983
7. February 3, 1983
8. February 7, 1983

The above dates, along with individual efforts, represent approximately 80 hours of individual involvement for each Committee member.

The following section is a discussion of the Committee's analysis of the various mandatory bid submission items together with the associated evaluation criteria where applicable.

During the evaluation process it became evident that various required bid submission items were either not applicable to certain categories of work, or were not considered by the Committee to be necessary in order for the Committee to reach valid conclusions on contract award(s). The Committee's analysis was broken down into the areas of technical proposal/organizational support and experience and cost requirements. The analysis that follows will set the groundwork for Committee recommendations on each individual bid proposal.

The following discussion is organized according to the R.F.P. section and is grouped with the associated evaluation criteria where applicable.

It should be noted by the reader that Section IV of this report will consist of Committee analysis of each firm's proposal. The determination(s) by the Committee on the importance of various bid submission items and associated criteria, along with any explanatory comments where applicable, will not be reiterated later in the individual discussion of the proposals. During the individual discussion of the proposals, major and minor deviations are noted but will not be further discussed or explained. For ease of reference and use by the reader the following is a list of various categories of work contained in R.F.P. X-312. For the remainder of the report, only the letter of the applicable category will usually be referenced.

- A. Petroleum Spill Cleanup
- B. Hazardous Substance Removal and Cleanup
- C. Leak Detections X-Ray Inspection
- D. Explosivity Detection Vapors and Gases
- E. Explosive Material Removal and Disposal

- F. Inspection of Pipes
- G. Well Drilling
- H. Disposal Services

See Attachment #3 Proposal Evaluation Sheet and Attachment #4 Committee Analysis of Proposal Evaluation Sheet.

R.F.P. Section 6.1.1 Reads as Follows:

"The detailed procedures the bidder will follow to mobilize his personnel and resources (or subcontractors if necessary) to insure arrival at job site within the two (2) hours from notification. This shall include both operational and management procedures." The associated evaluation criteria is RFP Section 7.1.3 that reads as follows: "The bidding organization's plan to mobilize their resources to respond to emergency conditions within two hours to support this activity on a statewide or regional depot basis."

Committee Analysis

The Committee has determined that this submission item is mandatory for the following categories: A, B, C, D, E, & F.

The Committee has concluded that this bid submission item and correlated evaluation criteria are not applicable to categories G and H. The Committee has reached this decision based on the fact that Addendum #2 under the "attachment section" 5.0 revised stated that the required response time for category G will be twelve hours and the response time for category H will be mutually agreeable, reasonable response time. Therefore, the Committee has not evaluated this bid submission requirement or utilized this evaluation criteria in making a determination of contract award recommendations in categories G and H.

R.F.P. Section 6.1.2

"A back up plan should any of the bidders normal procedures fail for any reason (or subcontractors if necessary)." The associated evaluation criteria for this section is the same as noted above i.e. Section 7.1.3 of the RFP.

Committee Analysis

The Committee deemed that this bid submission item was a mandatory requirement in the following categories of work: A, B, C, D, E and F. The Committee has found that this bid submission requirement is not applicable for categories G and H due to the fact that the response time for category G is twelve hours and is to be determined by mutual agreement between DEP and the contractor for category H as discussed above.

R.F.P. Section 6.1.3

"Describe bidders method of quality control and assurance to guarantee proper performance of work." There is no directly associated evaluation criteria for this particular submission item.

Committee Analysis

The Committee has concluded that this bid submission item is mandatory for all categories of work A through H.

R.F.P. Section 6.1.4

"Provide answer to 3.28 of this RFP with name(s) if applicable." Section 3.28 of the RFP concerns clean air and water certification.

Committee Analysis

RFP Section 6.1.4

Section 6.1.4 included and "answer to 3.28" as one of the items to be submitted with the bidder's proposal.

Section 3.28 of the RFP, Clean Air and Water Certification, clearly indicated that the intent of the RFP was not to require a bidder to certify his compliance with this section at the time of bid submission, but rather at the time of award.

Because of this contradiction within the RFP, the Committee decided that neither response nor non-response to this section would be considered for evaluation purposes.

R.F.P. Section 6.1.5

"Provide signed statement that demonstrates the vendor's complete compliance with Attachment I - Confidential Information." There is no evaluation criteria that corresponds directly to this bid submission item.

Committee Analysis

The Committee has ascertained that this bid submission item is a mandatory item in all categories A through H. A statement by the bidder that his firm would comply with Attachment I of the R.F.P. combined with the bidder's signature on the proposal was accepted as a satisfactory response.

R.F.P. Section 6.1.6

"Provide proof of compliance to Section 3.19 of this RFP". The associated evaluation criteria is to be found in Section 7.1.6 of the RFP which reads as follows: "History of compliance with all federal, state, and local regulations and statutes of the contractor, subcontractors and their key personnel."

Section 3.19 of the RFP deals with licenses and permits.

The Committee concluded that the intent of Section 3.19, License and Permits, was to ensure that contractors and subcontractors performing work for the State would be in possession of all applicable licenses, permits and authorizations from the various regulatory agencies. It was, however, unclear as to when a bidder would have to provide proof of compliance with this requirement.

Section 6.1.6 of Proposal Preparation Instructions instructed bidders to include with his proposal, proof of compliance with Section 3.19. However, since Section 3.19 did not specifically indicate a timeframe for supplying evidence of compliance, there may have been some confusion for potential bidders. The Committee has agreed that this section was open to interpretation and has given the benefit of the doubt to those bidders who did not include any evidence of licenses and permits with this proposal.

The requirement that evidence of compliance with 3.19 be submitted with the bid proposal has been deemed to be non-critical for evaluation purposes by the Committee.

The Committee was confident that the spirit and intent of the RFP would be met because of DEP's in-house capability to check potential awardee's compliance with regulations and statutes prior to issuance of formal contracts.

#### R.F.P. Section 6.3.1

"Location of bidders headquarters." The associated proposal evaluation criteria is R.F.P. Section 7.3.7 which reads as follows: "The bidders submission of all documentation required by Section 6.3 (Including Health and Safety Plan)." The discussion of the bid submission requirements for R.F.P. Sections 6.3.1 through 6.3.7 will therefore all have the associated evaluation criteria of R.F.P. Section 7.3.7 quoted above.

#### Committee Analysis

The Committee decided that the submission by the bidders of the location of the bidder's headquarters was a mandatory bid submission item for all categories of work A through H. However, the Committee used a broad interpretation of this particular bid submission requirement. The RFP did not specifically state whether the intent was for the bidder to submit the location of their corporate headquarters or the location of the bidders facility from which service would be provided. Therefore, either of these submissions was accepted by the Committee. Virtually any mention of the location of the bidders headquarters at any point throughout the Bidder's Proposal was deemed by the Committee to constitute satisfactory response to this requirement.

#### R.F.P. Section 6.3.2 & 6.3.3

- 6.3.2 "A chart of the bidders organization which shows for key project staff members, their level of responsibility within the organization."
- 6.3.3 "A chart of the project organization with names."

#### Committee Analysis

For purposes of Committee analysis of this bid response requirement, we bound together Section 6.3.2 of the RFP with Section 6.3.3 referenced above. The Committee has determined that the submission of Section 6.3.2 and/or 6.3.3 is a mandatory submission item for all categories A through H. However, the Committee used a broad definition of the submission of the information required by 6.3.2/6.3.3. For example, a listing of the personnel contained in the bidders organization that was clearly intended to fulfill this requirement was

accepted. In addition, either the chart of the bidders organization or a chart of the project organization with names was deemed to be a satisfactory response which would fulfill the requirements of both of these sections.

R.F.P. Section 6.3.4

"A list of key personnel to be assigned, their function on the project, an indication of the labor category as described in Schedule A, and a resume for each person assigned."

Committee Analysis

The Committee found that the submission of the information required by Section 6.3.4 was a mandatory submission item for the following categories: A, B, C, D, and F. The Committee concluded that the submission of this information for categories E, G and H was not considered a critical factor. The rationale leading to this Committee determination is as follows. For categories E, G and H, there exist various licensing requirements. The firm or personnel of the firm that will be performing the work in these categories must fulfill certain requirements in order to obtain the necessary license and/or permits.

As long as the firm or the personnel of that firm have the required license or permit, the Committee deemed it to be sufficient evidence to meet the requirements of this section. Specifically, firms or personnel to be used in performing work under category E would be licensed blasters. Persons or firms to be used in category G would be licensed well drillers. Firms or personnel to be used in category H would have the applicable licenses for the transportation, hauling or disposal of hazardous materials.

R.F.P. Section 6.3.5

"Documentation which clearly shows the bidder's experience as a prime contractor in performing similar projects." The associated evaluation criteria can be found in Section 7.1.2 of the RFP which reads as follows: "The documented experience of the bidding organization and the subcontractor where applicable in abating emergency conditions resulting from the discharge of petroleum, petroleum products and hazardous substances, also other categories of this RFP. In addition, the bidder shall be evaluated on his or her experience in abating emergency's resulting from the improper operation or closure of operating landfills."

Committee Analysis

The Committee has found that documentation required by Section 6.3.5 is a mandatory submission item in the following categories: A, B, C and D. The Committee has also found that the submission of the required documentation of previous experience as a prime contractor is of little or no importance in the determination of contract awards for categories E, F, G and H. A similar rationale as explained above for Section 6.3.4 was utilized by the Committee in determining the applicability of the documentation of previous experiences of prime contractors. The Committee is of the opinion that the fact that contract vendors in Section E, F, G and H would necessarily have had to obtain the required licenses would serve as a strong indication of their ability to satisfactorily perform the required tasks. The issue of the evaluation of the

documented experience of subcontractors where applicable, will be discussed in more detail during the discussion of Section 6.3.6 below. The Committee concluded that it was inappropriate, if not impossible, to evaluate the capabilities of the various subcontractors to be used in the performance of this contract. The intent of the RFP is clearly to establish that the prime contractor is responsible for the quality and responsiveness of work performed by his subcontractor(s).

#### R.F.P. Section 6.3.6

"If subcontracting is planned at the time of bid submission, and the identity of the subcontractor(s) to be used is known, bidders should submit the following information on said subcontractors with bidder's bid response proposal."

1. Name of proposed subcontractor.
2. Address of proposed subcontractor-include phone number.
3. Name(s) and addresses of responsible operating officers of subcontracting firm.
4. Description of nature and extent of work or services to be performed or equipment to be supplied by subcontractor.
5. Evidence of similar experience in performing work described in No. 4 above (references-including name and phone number of individuals to contact for reference check).

#### Committee Analysis

The reader should note that Addendum #2 (Attachment 2) contained a revised 3.10 section as follows: "Bidders shall supply in writing the following information for all subcontractors used in performing any work performed under a contract resulting from this RFP.

1. Name of subcontractor.
2. Address of subcontractor-include phone number.
3. Name(s) and addresses of responsible operating officers of subcontracting firm.
4. Description of nature and extent of work, services or equipment performed or supplied by subcontracting firm.

NOTE: It remains the responsibility of the prime contractor to ensure that the two hour response time is met (where applicable) by all subcontractors. The prime contractor remains responsible for all work performed by any subcontractor he employs."

It should be noted that the RFP, on the reverse side of the Golden Rod coversheet Form #PB-122, contained as Section 3.5 of the standard terms and conditions a statement on subcontracting or assignment that reads as follows; "the contract may not be subcontracted or assigned by the contractor, in whole or in part,

without the prior written consent of the Director of the Division of Purchase and Property. Such consent, if granted, shall not relieve the contractor of any of his responsibilities under the contract. In the event that a bidder proposes to subcontract for the services to be performed under the terms of the contract award, he shall state so in bid and attach for approval a list of said subcontractors and an itemization of the services in the specifications shall be construed as creating any contractual relationship between subcontractor and the State."

Addendum #2 made it quite clear to prospective bidders that subcontracting was allowed only for categories A, B, G and H. The Committee made the decision during the evaluation process that the failure of a bidder to address the subcontracting issue, or the failure to submit all information required, by any or all of the above referenced RFP sections would constitute, in all cases, a minor deviation.

R.F.P. Section 6.3.7

"Bidders must complete and submit with their response proposal a Health and Safety Plan (HASP) document structured for on-site personnel to minimize their personal injury, illness, and potential environmental impairment associated with the contracted remedial action. This plan must cover at a minimum, the areas listed below:

- A) listing of personnel protective equipment (including respiratory protection) to be used, including make, model, and any required certification documentation.
- B) listing of safety equipment (including make and model) to be used, such as: fire extinguishers, portable eye wash stations, air monitoring equipment, etc.
- C) Medical surveillance program.
- D) Personal hygiene requirements.
- E) Training program including training protocol.
- F) Special medical procedures to be available.
- G) Contingency plans for emergency procedures, spill prevention response, and evacuation plans."

Committee Analysis

The Committee discussed the required HASP plan by (Section A through G) and attempted to determine the applicability of each of these sections to the various categories of work to be performed. 6.3.7a and 6.3.7b were considered to be mandatory bid submission items for all categories of work A through H. The Committee took a broad definition of what constituted an adequate response to these sections. The Committee noted that the RFP was quite clear on the issue that the contractors are responsible for providing all personnel protective and safety equipment needed to adequately and safely perform the required work. The Committee did not take into consideration the level of

detail, such as make and model of the equipment to be used. The Committee felt that such detail was not pertinent to the evaluation process. Categories 6.3.7c and 6.3.7d were deemed by the Committee to be non-essential as far as the evaluation process was concerned. This determination is applicable to all categories of work A through H.

6.3.7e, was determined by the Committee to be an important and mandatory bid submission item. This determination was applicable to all categories of work A through H.

6.3.7f was determined by the Committee to be a non-essential for both bid submission and evaluation purposes across all categories of work A through H.

6.3.7g was determined by the Committee to be a mandatory bid submission item across all categories of work A through H.

#### Summary

The analysis and findings of the Evaluation Committee as discussed above can be viewed in technical purchasing terms as follows:

1. All items discussed above that were determined to be mandatory submission items had to be both submitted with the bid proposal and have been deemed by the Committee to be adequate. Failure to submit these mandatory items or an inadequate response as determined by the Committee are, in all cases, to be deemed major deviations and must be considered cause for the bidder's proposal to be considered non-responsive.
2. Any bid submission item or evaluation criteria discussed above that was found to be either not applicable to a particular category or non-essential for bid evaluation and award by the Committee should, in all cases, be viewed as a minor deviation. Therefore, any items so deemed by the Committee were not considered by the Committee to be grounds for a bidder's proposal to be considered non-responsive.

The "Committee Analysis of Proposal Evaluation Sheets" regarding various proposal submissions has been summarized on Attachment #4.

The following is a general discussion of the methodology employed by the Committee in evaluating the cost proposals of the bidding firms.

Addendum #2 Section 5.0 revised reads in part as follows: (See Attachment #2).

"Bidders responding to any and all categories A through H must bid on all items listed in Schedule A (Labor) and B (Equipment) for said categories. Bidders are reminded that subcontracting is allowed in categories A, B, G and H only."

The intent of the RFP was to insure that the bidders submit cost proposals that were uniform and comparable. However, upon investigation and review of the bids submitted, it was apparent that there were numerous discrepancies.

Schedule A and B were modified by addendum #2. One apparent error in Schedule B is that various items of equipment that must be purchased by the State are listed with price blanks for "hourly operating rates and daily standby and operating rates" (e.g. sorbents).

Another discrepancy was the fact that certain pieces of equipment (e.g. portable sanitation unit) do not lend themselves to either an hourly or standby rate.

The Committee allowed for flexibility in this area as long as the bidder submitted a price which could be logically interpreted. Thus, if the bidder met the above criteria his proposal was considered to be responsive.

A cost analysis of the bid proposals was very cumbersome because of volume and extent of pricing information generated. The following methodology was adopted by the Committee with respect to labor and equipment prices submitted for categories A through G. Category H (Disposal) was dealt with in a different manner and is discussed in a separate section that follows.

Cost analysis of Schedule A and Schedule B pricing was only performed for those bidder's proposals which passed the Committee's initial technical qualification screening. The first step in this analysis process was to determine that the bidder had, in fact, submitted both required cost Schedules and that each included a quoted price for the applicable labor classifications and equipment items.

Once a positive determination was made, the following steps where taken to arrive at a combined average hourly rate for an individual firm.

A. Labor Rate Schedule (A)

All labor personnel classifications for a particular category of work were averaged across all three shifts for rate per hour Monday thru Friday, rate per hour Saturday, and hourly rate per hour Sundays and Holidays. The determination to average all listed labor personnel classifications, for all shifts and days of the week was made because it is impossible to determine for any particular "emergency spill response" the type of personnel classification or the shift and day required by DEP. The applicable hourly rates were averaged using DEP's Apple II computer. The result of this averaging was a single average hourly rate across all labor classifications. This average hourly rate for labor is one component of the total cost analysis.

B. Equipment Rate Schedules (B)

Pricing for equipment schedules was vast. In an attempt to evaluate this data the Committee together with DEP technical personnel determined key pieces of equipment for each category of work to be performed. Once this determination was made for a category, this criteria was applied equally to all bidders submitting cost proposals in that category. For an individual firm, the applicable rates bid for the key pieces of equipment were averaged using DEP's Apple II computer. The result was an average daily rate for equipment used considering "one (1) to seven (7) days," and

"seven (7) days and over" for both operating and standby rates where applicable.

The established daily rate described above is then divided by 24 hours to develop an average hourly rate for key pieces of equipment. This "average hourly rate" for key equipment is the second component for cost analysis.

The final stage in the cost analysis was to add together the average hourly rate for labor and the average hourly rate for key equipment to arrive at a sum total which will be considered the combined average hourly rate (Labor and Equipment) used for ranking purposes in each region. (See cost analysis sheets, Attachment 7).

NOTE: All Cost Analysis Sheets reflect net terms.

The final area to be discussed in reference to cost analysis is Disposal, Category H. Upon review of the cost proposals submitted by the various bidders it was determined that the breadth of information supplied was vast. Bidders were allowed to submit prices on one or more disposal methods and one or more subcategories within any particular disposal method. The bidders took advantage of this latitude and apparently bid only those categories in which they were particularly interested in performing work.

It was determined that a discrepancy existed in the RFP document. This discrepancy concerned the fact that the RFP specifically instructed all bidders submitting bids to bid both labor and equipment schedules for each category A-H. It is clearly evident to the Committee that the intent of the RFP was not to require bidders in the disposal category to bid on labor classifications. The RFP was quite clear on the issue that all transportation and incidental costs were to be included in the bidders lump sum price for a particular method of disposal. With respect to the labor category as it related to disposal the following should be noted: It was never the intent of DEP technical personnel to have the disposal vendor provide any services other than the actual transportation and disposal of hazardous waste materials. It is clear that the contract vendors for categories A and B under this RFP will perform any and all services that require a separate breakdown of labor cost. The result of this analysis is that the Committee did not consider in any manner the labor sheets submitted by some of the disposal vendors. No equipment pricing is applicable to the disposal category.

As discussed above, it became evident to the Committee that there were simply too many variables involved in the cost matrix to allow a determination of which firm was the over-all low bidder. This lead the Committee to the conclusion that no pre-established ranking of vendors as determined by cost would be possible at the time of contract award. It is the recommendation of the Committee that all bidders who submitted responsive proposals to the RFP in disposal category H be given contract awards. DEP technical personnel will make the determination of who the low bidder is once the type of material to be disposed of has been precisely determined. This low bidder will then be utilized for the disposal of the hazardous materials in question. If the identified low bidder for a particular waste disposal cannot accept the job, for justifiable reason, the next lowest vendor for that disposal method and type of waste will be engaged.

#### IV. COMMITTEE AWARD RECOMMENDATIONS

The following section of the report deals with an individual discussion of each particular firm's proposal. The bids submitted are discussed in alphabetical order. The reader should use Attachment #5, Committee Summary - Proposal Evaluation Sheets for each individual firm in conjunction with Attachment #4 Evaluation Committee Analysis of the Proposal Evaluation Sheet.

By cross referencing Attachment #4 with Attachment #5 the reader will be able to determine the responsiveness of any bid proposal.

Twenty-three (23) bidders submitted bid response proposals to RFP X-213. A summary of the bids submitted and of the contract award recommendations is contained in Attachment #6 Bid Submission and Contract Award Summary. This Attachment will serve to note that a bid was submitted for a particular category of work within a certain region and will also inform the reader of the Committee's decision on whether or not a contract was awarded pursuant to that bid.

Section 3.30 of the RFP stipulates that "The State will award a maximum of 10 contracts per category within each region." The intent of the RFP was clearly to establish a multiple award concept by region and category. It is important to note that in technical purchasing terms the contract award recommendations of the Committee do not entail the bypass of any low bidders. The award recommendations of the Committee were made to all bidders who submitted bid response proposals that were technically responsive to RFP requirements and who did not take any major exceptions or deviations to critical areas of the RFP document. No responsive bid proposals submitted were excluded from contract awards due to pricing factors.

##### A.C. Schultes

The firm of A.C. Schultes submitted a proposal for category G (Well Drilling) in the central and southern regions.

##### Technical/Organizational Support & Experience:

The Committee noted the following major deviations: Failure to submit information required by section 6.1.2, 6.3.7e, and 6.3.7g of the RFP. The committee also made note of the following minor deviations in the bid of A.C. Schultes. Failure to submit responses to Sections 6.1.4, 6.3.3, 6.3.6, 6.3.7(c), 6.3.7(b) and 6.3.7(f). The balance of the bid proposal was deemed to be responsive and adequate by the Committee.

##### Cost:

A.C. Schultes failed to submit the required Schedule A (labor) for category (G). The Committee deemed this to be a major deviation. The RFP was quite clear that both labor and equipment Schedule (A&B) must be submitted. Without this information the Committee was unable to reach any conclusion concerning this bidder's labor costs. The Committee discussed this issue at length and was in agreement that there seemed to be a strong possibility that the bidder intended to include his labor rates on the equipment schedule. However, no mention of this possibility was made by the bidder.

In summary it is the recommendation of the Committee that due to the major deviations noted above in both the technical proposal and cost proposal of A.C.Schultes, that this firm not be awarded a contract.

CECOS International, Inc.

The firm of CECOS International, Inc. submitted a bid for Category H (Disposal) in the northern, central and southern regions.

Technical/Organizational Support & Experience:

The Committee determined that the firm of CECOS International, Inc. has submitted a proposal that is fully responsive to the RFP requirements with the single exception of one minor deviation with respect to Section 6.1.4.

Cost:

The Committee made note that CECOS qualified their cost proposal by a series of footnotes. The Committee determined that these footnotes are not to be considered as exceptions or deviations from the RFP requirements. An example of these footnotes is "minimum shipment quantity is five (5) drums." Under the format by which DEP will make use of the disposal contracts these qualifications are not a problem. When DEP technical personnel have determined the exact type of materials and quantity to be disposed, they will proceed to select the lowest bidder for that particular item. At this point CECOS' footnotes which qualify their bid will be considered for determining their relative cost ranking.

In summary, it is the recommendations of the Committee that this firm be awarded contracts for Category H in the north, central and southern regions of the state.

Clean Industry Inc.

The firm of Clean Industry Inc. has submitted a proposal for categories A (Petroleum Cleanup) and B (Hazardous Cleanup) in the central region. In addition this firm has submitted a bid for Category H (Disposal) in the northern, central and southern regions.

Technical/Organization Support & Experience:

The firm of Clean Industry Inc. has submitted a proposal that is fully responsive to the RFP requirement.

Cost:

This firm submitted a cost proposal for categories A and B that was deemed by the Committee to be satisfactory. The cost proposal submitted by Clean Industry Inc. for category H contains some minor problems. These problems were evidenced by the fact that three (3) line item categories were rejected by the Purchase Bureau due to uninitialed price changes. The Committee agreed that these uninitialled price changes are insignificant when considering the total number of line items bid for Category H.

Therefore, it is the recommendation of the Committee that this firm be

awarded contracts for all line items bid in Category H with the exception of the three items that were rejected for uninitialed price changes.

In summary, it is the recommendation of the Committee that the firm of Clean Industry, Inc. be awarded a contract in categories A and B for the central region and Category H with the exceptions noted above for the northern, central and southern regions.

Clean Venture, Inc.

The firm of Clean Venture Inc. has submitted a proposal for Categories A (Petroleum Cleanup) and B (Hazardous Cleanup) in the northern, central and southern regions.

Technical/Organization Support & Experience:

Clean Venture Inc.'s proposal is fully responsive to all technical and organizational requirements of the RFP with the exception of one minor deviation in Section 6.3.7(b).

The cost proposal is generally in accordance with the requirements of the RFP. However, the firm took exception to a major RFP requirement concerning their bid for water borne equipment. They placed a footnote on the cost sheet associated with this equipment, which reads as follows:

- (1) "Hourly or daily rates to start when equipment leaves storage or berthing site. Fraction of a day will be charged at full rate."

It should be noted that Section 3.21 of the RFP states that "contractors will not be compensated for travel time or mileage to or from the site."

The Committee determined that the exception taken by this firm to the above quoted provision of the RFP constitutes a major deviation. Therefore, it is the recommendation of the Committee that this firm not be awarded a contract for the water borne equipment section.

However, the Committee feels that this firm should be awarded a contract for the remainder of their equipment bid.

In summary, it is the recommendation of the Committee that the firm of Clean Venture Inc. be awarded contracts for Categories A and B in the north, central and southern regions of the state with the exception of water borne equipment as indicated above.

Continental Vanguard, Inc

The firm of Continental Vanguard, Inc. submitted a proposal to perform work in Categories A (Petroleum Cleanup) and B (Hazardous Cleanup) in the southern zone of the state. Continental Vanguard also submitted a proposal for category H in the southern region.

Technical/Organizational Support & Experience:

Continental Vanguard, Inc. submitted a proposal that was responsive to the technical and organizational support and experience submission requirements of the RFP.

Cost:

The Committee has noted in the cost proposal a major deviation from the RFP requirements for Categories A and B.

Addendum No. 2 (Attachment #2), Section 5.0 revised reads in a part as follows "bidders responding to any and all categories A through H must bid on all items listed on Schedule A (labor) and B (equipment) for said category."

RFP Section 5.1.2.2 deals with the scope of work for petroleum and/or hazardous materials cleanup operations. During the submission period for written questions the following questions concerning the bidding requirements for Section 5.1.2.2 was raised. The applicable quote from Addendum No. 2 is quoted in full below:

"Question: If we do not submit a bid on all the equipment on the list in 5.1.2.2 does that eliminate us from being a Category A contractor? Answer: Yes. If a contractor does not have a piece of equipment, subcontracting has been allowed for this category."

It is important for the reader to recognize the importance of the fact that subcontracting was allowed in both Categories A and B. Subcontracting was allowed to insure that a prime contractor, who did not own or have available a particular piece of equipment, could subcontract and therefore have at its disposal all equipment necessary to respond under Categories A and B.

The Committee determined that the bid of Continental Vanguard Inc. did not meet the stipulations of the RFP, Section 5.0 Revised as quoted above. This vendor failed to indicate any type of pricing for eight (8) pieces of equipment required by equipment rate Schedule B. One of these items, the oil water separator (portable), was in fact, one of the items that had been deemed a key equipment item by the Committee for purposes of cost ranking. The other items that were not bid by Continental Vanguard, Inc. included vacuum trucks-greater than 6,000 gallon capacity, small boat greater than 19 foot with motor, dump trucks greater than 30 cubic yards, power road sweeper, pumps-scavenger type recovery system, generator-less than 2,000 watt and water borne equipment-self-propelled skimming barges.

The Committee also noted a major deviation in the cost proposal of Continental Vanguard Inc. for Category H.

Section 5.6 of the RFP entitled Disposal Services reads in part as follows "The unit bid price will include all transportation and incidental costs involved from receipt of the waste to final disposal." Continental Vanguard, Inc. takes exception to the above referenced RFP requirement. On the cover sheet to their pricing in the pricing schedule for disposal, they indicate that, "transportation is not included in the disposal pricing. Transportation will be based on ICC Tariff attached." Note that all other recommended contract vendors for disposal have included transportation in their unit cost. Therefore, the Committee has determined that an equal footing problem exists, due to the nature in which this vendor bid transportation pricing for disposal. The Committee has deemed this to be a major deviation and is cause for this firm's bid to be considered non-responsive in the area of disposal.

In summary, it is the Committee's recommendation that the firm of Continental Vanguard not be awarded contracts for all categories for which they bid.

#### Eastern Environmental Services

The firm of Eastern Environmental Services submitted a proposal to provide services in Categories B (Hazardous Cleanup), C (Leak Detection), E (Explosives Removal & Disposal), F (Inspection of Pipes), G (Well Drilling) and H (Disposal) in both the northern and central regions of the state.

#### Technical/Organizational Support & Experience

The firm of Eastern Environmental Services failed to submit both a technical and organizational support and experience proposal. The bid of Eastern Environmental Services contained numerous major and minor deviations too lengthy to list, in all categories bid. The only items submitted by the firm were the various pricing sheets for the categories bid.

#### Cost:

The bid pricing sheet submitted by this firm contained four (4) uninitialed price changes.

Because this firm failed to submit any technical or organizational support and experience bid submission as required by the RFP, the Committee did not further evaluate this firm's proposal.

In summary, it is the recommendation of the Committee that this firm not be awarded contracts for any of the categories bid.

#### ENSI Environmental Services

The firm on ENSI Environmental Services submitted a proposal to perform work in categories A (Petroleum Cleanup), B (Hazardous Cleanup), D (Explositivity Detection), E (Explosives Removal & Disposal) and H (Disposal) in the northern, central and southern regions of the State.

#### Technical/Organizational Support & Experience:

The Committee noted that the technical and organizational support and experience proposal of ENSI contained major deviations from the RFP. Section 6.1.3. was a major deviation for all categories bid. Also, a major deviation occurred because the firm failed to submit the information required by Section 6.3.5 for categories A, B and D. The Committee then determined that the Health and Safety Plan of this firm was deficient. Section 6.3.7 subsections a, b, e and g were all determined to be major deviations for all categories bid.

The Committee noted minor deviations in the proposal as follows: Section 6.1.6 for all categories. Also in the Health and Safety Plan under Section 6.3.7 subsections c, d and f for all categories bid.

Cost:

The labor rate schedules were generally responsive to the RFP requirements except under category E for which this firm failed to indicate any personnel available or rates for a licensed blaster. The equipment rate schedules for all categories contained numerous major exceptions to the RFP requirements. The firm failed to bid numerous required items of equipment for all categories. The applicable section of the RFP concerning this requirement is discussed under the committee's section Continental Vanguard found earlier in this report. The Committee has determined that this is a major exception to a critical RFP requirement, and is reason for rejection of this bidder's proposal.

Section 3.2.1 reads in part that "contractors will not be compensated for travel time nor mileage to or from the site." ENSI took exception to RFP requirements by stating that their rates were based on portal to portal; that mileage would be charged at 35¢ per mile; and that tolls for bridges, tunnels, turnpikes and toll road would be reimbursable at cost. The Committee determined these exceptions are clearly major deviations to critical RFP requirements and are grounds for rejection of the bidder's proposal.

The cost proposal for Category H appears to be responsive. However, due to the major deviations in the technical and organizational support submissions of this proposal as related to disposal that firm is not eligible for award in this category.

In summary, it is the recommendation of the Committee that the firm of ENSI not be awarded contracts for any categories bid.

Fairfield Maintenance Company

Fairfield Maintenance Company submitted a proposal to provide work under Category C (Leak Detection) in the north, central and southern regions of this state.

Technical/Organizational Support & Experience:

Fairfield Maintenance Company failed to submit any technical or organizational support and experience proposal. The bid contained numerous major and minor deviations to RFP requirements. In the interest of space, these deviations are not noted in the body of the report. The reader is referred to the Committee Summary-Proposal Evaluation Sheet for this firm (Attachment #5).

Cost:

Fairfield Maintenance Company submitted Labor and Equipment cost Schedules for Category C that were incomplete. The Committee has determined that the cost proposal submitted by this firm is adequate and that the bidder's proposal should be considered non-responsive.

In summary, it is the recommendation of the Committee that the firm of Fairfield Maintenance Company not be awarded a contract for the category bid.

Freehold Cartage, Inc.

Freehold Cartage, Inc. submitted a proposal to provide service in Categories A and B in the north, central and southern regions of the state.

Technical/Organizational Support & Experience

The Committee has concluded that Freehold Cartage has submitted a proposal that was fully responsive to all technical and organizational support and experience requirements of the RFP.

Cost:

With regard to the price schedules submitted by this firm, the Committee noted that the Purchase Bureau has rejected one line item for an uninitialed price change. This particular item was the hourly rate - operating rate for double diaphragm air pump - 2 inch. The Committee has concluded that this rejection is a minor item and should not affect the overall award of contracts. The firm of Freehold Cartage has qualified their bid for water-borne equipment by stating that "not to be included for two hour response time." Because of this exception, the Committee determined that the firm of Freehold Cartage is not eligible for contract award for water borne equipment. However, the Committee feels that since the bidder has met the intent of bidding on every item, and that all other pricing sheets are completely responsive, contracts should be awarded for all other equipment bid.

In summary, it is the Committee's recommendation that the firm of Freehold Cartage be awarded contracts for all categories of service bid in all regions of the state with the exception of water borne equipment and double-diaphragm and pump categories under Categories A and B.

Handex Corporation

The firm of Handex Corporation has submitted a proposal to provide service in Category G in the north, central and southern regions of the state.

Technical/Organizational Support & Experience:

The Committee has reached the conclusion that the firm of Handex Corporation has submitted a bid proposal that is fully responsive to all technical and organizational support and experience requirements of the RFP.

Cost:

The bidder chose not to provide unit price quotes for certain pieces of equipment. For example, under the Category of "Cores" on Schedule B, a footnote relating to "pump test" is provided in lieu of a price. This footnote instructs the State to calculate the price from other components of labor and equipment previously bid. Since the bidder met the test of intent of the RFP by offering some type of pricing, the Committee decided that this bidder's approach was only a minor deviation.

In summary, it is the Committee's recommendation that the firm of Handex Corporation be awarded contracts for all regions of the state in the G Category.

I.P.S.I

The firm of I.P.S.I. submitted a proposal to provide services in categories A and B for the central region of the state.

Technical/Organizational Support & Experience:

The Committee has determined that the proposal of I.P.S.I. was non-responsive to certain major RFP requirements. These major deviations are listed as follows: failure to submit Sections 6.1.1, 6.1.2, 6.1.3, 6.1.5, 6.3.2, 6.3.4 and 6.3.5.

The Committee also made note that the proposal of I.P.S.I. contained minor deviations as follows: Section 6.1.4, Section 6.3.3 and Section 6.3.6.

Cost:

The cost proposal submitted by I.P.S.I. contained numerous uninitialed price changes which were deemed by the Purchase Bureau to be mandatory rejection items.

In summary, it is the recommendation of the Committee that I.P.S.I. not be awarded contracts in the categories and regions bid.

Marine Systems, Inc.

Marine Systems, Inc. submitted a proposal for categories A and B in the central region of the state.

Technical/Organization Support & Experience:

The Committee deemed that the bid of Marine Systems Inc. contained numerous major and minor deviations to RFP requirements. The major deviations are listed as follows: Section 6.1.1, Section 6.1.2, Section 6.1.3, Section 6.1.5, Section 6.3.2, Section 6.3.4, and Section 6.3.5.

The minor deviations are as follows: Section 6.1.4, Section 6.3.3 and Section 6.3.6.

Cost:

The cost proposal of Marine Systems Inc. contained numerous uninitialed price changes. The Purchase Bureau rejected these items as required by Bureau Regulations.

In summary, it is the recommendation of the Committee that Marine Systems, Inc. not be awarded contracts for the categories and region bid.

Mid-Atlantic Refinery Service

Mid-Atlantic Refinery Service submitter a proposal to provide services in Categories A and H in the southern region of the state.

Technical/Organizational Support & Experience:

The Committee deemed that the proposal of Mid-Atlantic Refinery Service is fully responsive to all RFP requirements for technical and organizational support and experience proposals.

Cost:

Mid-Atlantic's cost proposals for category A and H were fully responsive to RFP requirements.

In summary, it is the recommendation of the Committee that Mid-Atlantic Refinery Service be awarded a contract for categories A and H in the southern region.

New England Pollution Control Company  
(NEPCCO)

NEPCCO submitted a proposal for categories A, B, D and G in north, central and southern zones of the state.

Technical/Organizational Support & Experience:

The Committee determined that NEPCCO has taken a major exception to the 2 hour response time required by categories A, B and D. NEPCCO also took exception to the twelve (12) hour response time required in category G for equipment. These exceptions have been deemed by the Committee to constitute major deviations and are reason for this proposal to be considered non-responsive. The applicable RFP section, as previously discussed, is 6.1.1. It was also determined that the 6.1.2 was a major deviation for categories A, B and D.

A minor deviation was noted in Section 6.1.4. All other technical and organizational support and experience submissions by NEPCCO were deemed to be responsive.

Cost:

NEPCCO has taken certain exceptions to various RFP requirements. They have taken exception on the cost sheets to the two hour response time for certain major pieces of equipment. For example, NEPCCO has stated that dump trucks will be available within 12 hours. In addition, water-borne equipment will be available in 24 hours and other heavy equipment will be available in 12 hours. These notes on the pricing sheets are clearly major exceptions to the two hour time requirement.

NEPCCO has taken exception to the RFP provision dealing with major materials consumed in the abatement of an emergency. RFP Section 1.6 deals with payment for materials and reads as follows: "The State will pay for major materials consumed in the abatement of each emergency based on the vendor's cost as substantiated by invoices. The State will allow as a mark-up a rate schedule not to exceed the following percentages" (see Addendum #2, Attachment #2) under references and questions t 1.6 for new mark-up percentages allowed). NEPCCO has taken specific exception to this critical RFP provision by stating that "NEPCCO is an authorized distributor for a number of items of equipment and materials required for this contract. Enclosed are suggested list prices for

these items which we will utilize in billings under this contract." This exception is clearly a major deviation from RFP requirements and is cause for this proposal to be considered non-responsive for categories A, B, D and G.

Addendum #2 (Attachment 2) has a Question and Answer that deals specifically with the question of decontamination of equipment:

"Question: Does decontamination of equipment and personnel on the job site have to be figured into our regular hourly rate? Answer: Yes."

NEPOCO takes specific exception to this RFP requirement by stating: "decontamination of equipment is not included in our prices." This is clearly a major deviation and exception to a critical RFP requirement and is cause for this bidder's proposal to be deemed non-responsive for categories A, B, D and G.

NEPOCO takes exception to various RFP requirements concerning subcontractor pricing. It is the intent of the RFP that the prime contractor guarantee that rates charged by any subcontractors employed will be incorporated into the prime contractor's bid prices. The bid proposal states that "We cannot predict what additional sub-contractors will be used, nor can we insure that their rates will be compatible with those listed in the cost proposal Section 6.2." The Committee has deemed this exception to be a major deviation for all categories bid.

NEPOCO failed to bid certain pieces of equipment required under category G, e.g. caliper, TV camera, packer testing, etc. In addition, NEPOCO states for category G equipment that "all equipment listed above will be available for 12 hour response time when practical/possible." These are major deviations.

In summary, the Committee recommends that this firm not be awarded contracts in any categories bid.

#### O.H. Materials Company

O.H. Materials submitted a proposal for categories A, B, D, E and G in the north, central and southern regions of the state.

#### Technical/Organizational Support & Experience:

The Committee determined that O.H. Materials submitted a proposal that is fully responsive to all the RFP requirements for technical and organizational support and experience for categories D, E and G. For categories A and B the Committee determined that O.H. Materials' proposal is responsive to all RFP requirements for technical and organizational support and experience with the exception of the 2 hour response time. The Committee has found that this deviation constitutes a major deviation under categories A and B, and is grounds for their proposal to be considered non-responsive. This deviation is discussed in detail in the section below.

#### Cost:

O.H. Materials generally submitted a cost proposal that was responsive. However, in reference to the equipment rate schedules bid for categories A and B, O.H. Materials takes numerous exceptions to the 2 hour response time. O.H. Materials qualified various items of equipment by placing the following statement in their cost proposal, "this equipment generally cannot be on scene

within 2 hours of notification. It has been our experience that much of this equipment is not needed during the initial response efforts. In addition, the NJDOT's regulations prohibit the transportation of overheight, overwidth, or overweight during periods of darkness or on weekends without special permits. Special clearances, during emergency actions, are normally arranged on a case-by-case basis." The Committee has deemed that this exception is clearly a major deviation from a critical RFP requirement. It is the Committee's determination that O.H. Materials is creating an open-ended qualification for their response time. Therefore, it is the recommendation of the committee that O.H. Materials not be awarded contracts for categories A and B in the north, central and southern zones of the state.

The cost proposal of O.H. Materials for categories D and E was determined by the Committee to be fully responsive to RFP requirements.

The Committee has also concluded that the cost proposal of O.H. Materials for category G is responsive. O.H. Materials took a footnote exception to certain items of equipment. However, the Committee has determined that these exceptions relate only to materials and not to equipment. Therefore, this exception is within the confines of the RFP. In addition, category G (well drilling) has a correlated response time of 12 hours. This extended response time will allow DEP program personnel to procure needed materials through alternate sources. This is additional justification for excepting the footnote taken by O.H. with regard to certain special order items of material.

In summary, it is the recommendation of the Committee that O.H. Materials be awarded contracts for categories D, E and G in the north, central and southern regions of the State. Also, it is the recommendation of the Committee that O.H. Materials not be awarded contracts under categories A and B in the north, central and southern zones.

Resource Technology Services, Inc.

Resources Technology Services, Inc. submitted a bid proposal for Category H in the north, central and southern regions of the state. This firm also submitted a bid for Category E, in the southern region of the state. For Category E region the Committee has determined that Resources Technology, Inc. submitted a proposal that contains major deviations to certain RFP requirements. These sections that are considered major deviations are Sections 6.1.1 and 6.1.2. The Committee has noted minor deviations for Sections 6.3.3 and 6.3.6. The balance of the bid submission of Resource Technology, Inc. for Category E was deemed to be responsive.

For Category H the Committee has deemed that this firm submitted a bid that is responsive to all major RFP requirements. Two minor deviations were noted in Section 6.3.3 and 6.3.6.

Resources Technology, Inc. submitted a cost proposal fully responsive to all RFP requirements for both Categories E and H.

In summary, it is the Committee's recommendation that this firm be awarded a contract for Category H in the north, central and southern zones of the State. This Committee recommends that this firm not be awarded a contract for Category E in the southern region of the State.

Rollins Environmental Services

Rollins Environmental Services submitted a bid for Category H in the north, central and southern regions of the State.

Technical/Organizational Support & Experience:

The Committee deemed that the proposal of Rollins Environmental is fully responsive to all RFP requirements for technical organizational support and experience.

Cost:

Rollins Environmental submitted a cost proposal that is qualified by the addition of a charge for demurrage. Webster's Dictionary defines demurrage as follows: "1. the detention of a vessel, as in loading or unloading beyond the time agreed upon. 2. The similar detention of a railroad car, truck, etc. 3. A charge for such detention." No provision for demurrage was made by the RFP, this exception clearly places the firm on an un-equal footing from that of the other firms that have been recommended for contract award in Category H. The Committee concluded that this is an unacceptable deviation and should not be allowed.

It is the recommendation of the Committee that Rollins Environmental Services be awarded a contract for Category H in all three regions with the condition that demurrage be disallowed. In the event that Rollins Environmental chooses not to accept this conditional award by the State, it is recommended that no contract be awarded to this firm.

In summary, it is the Committee's recommendation that Rollins be awarded a contract for Category H with the conditions stipulated above.

SCA Chemical Services

SCA Chemical Services submitted a bid for Category H in the north, central and southern regions of the State.

Technical/Organizational Support & Experience:

The Committee determined that SCA Chemical Services submitted a proposal that is fully responsive to all technical organizational support and experience requirements of the RFP.

Cost:

This firm has submitted a cost proposal that is fully responsive to all RFP requirements.

In summary, it is the recommendation of the Committee that SCA Chemical Services be awarded contracts for the Category H, in the north, central and southern regions of the State.

S and W Waste, Inc.

S and W Waste, Inc. submitted a bid for Categories B and H in the north, central and southern regions of the State. The Committee felt that it was the intent of this firm to bid only Category H.

It was unclear to the Committee whether a final determination could be made that this bidder did in fact intend to bid on Category B. If this bidder did intend to bid Category B, his bid was totally non-responsive to major RFP requirements. Therefore, this Category was not further evaluated by the Committee and was deemed to be non-responsive.

The Committee determined that the proposal of S and W Waste, Inc. for Category H is non-responsive to certain major RFP requirements including failure to respond to the following Sections: 6.1.3, 6.1.5, 6.3.2, 6.3.7 subsections a, b, e and g. The following minor deviations were also noted 6.1.1, 6.1.2, 6.1.4, 6.1.6, 6.3.3, 6.3.4, 6.3.5, 6.3.6, and 6.3.7 subsections c, d and f.

Cost:

This firm submitted a cost proposal for Category H that was responsive to RFP requirements.

In summary, it is the recommendation of the Committee that no contracts be awarded to this firm for all categories bid.

Stablex-Reutter Inc.

Stablex-Reutter Inc. submitted a bid for Category D, in the southern region only.

Technical/Organizational Support & Experience:

The Committee determined that the proposal of Stablex-Reutter Inc. is fully responsive to all RFP requirements for technical and organizational support and experience.

Cost:

The cost proposal submitted by Stablex-Reutter Inc. was responsive to all RFP requirements.

In summary, it is the recommendation of the Committee that Stablex-Reutter Inc. be awarded a contract for Category D in the southern zone.

Triangle Resource Industry

Triangle Resource Industries submitted a proposal for Category H in the north, central and southern regions of the state.

Technical/Organizational Support & Experience:

The Committee deemed that Triangle Resources is fully responsive to all RFP requirements for technical and organizational support and experience.

Cost:

Triangle Resource Industries submitted a cost proposal that is responsive to all RFP requirements.

In summary, it is the recommendation of the Committee that Triangle Resource Industries be awarded a contract for Category H in the north, central and southern regions of the State.

Underwater Techniques, Inc.

Underwater Techniques, Inc. submitted a proposal for Categories A and B in both the central and southern regions of the State.

Technical/Organizational Support & Experience:

The Committee determined that this firm submitted a proposal that was fully responsive to all RFP requirements for technical and organizational support and experience.

Cost:

The cost proposal submitted by Underwater Techniques Inc. was deemed by the Committee to be fully responsive to all RFP requirements. The Committee noted that the Purchase Bureau has rejected one (1) single line item hourly rate bid by this firm for an uninitialed price change. The fact that this firm will not be awarded a contract for this one line item is not significant and will not alter the Committee's recommendation to award contracts for service.

In summary, the Committee recommends that Underwater Techniques Inc. be awarded contracts for Categories A and B in the central and southern regions of the State.

Waste Conversion, Inc.

Waste Conversion, Inc. submitted a proposal for Category H in the north, central and southern regions of the State.

Technical/Organizational Support & Experience

The Committee determined that the bid submitted by Waste Conversion Inc. is fully responsive to all RFP requirements.

Cost:

The cost proposal submitted by this firm was deemed by the Committee to be responsible to RFP requirements.

In summary, it is the recommendation of the Committee that Waste Conversion Inc. be awarded a contract for Category H, in the north, central and southern regions of the State.

V. Ranking of Recommended Contractors

Section 3.30 of the RFP entitled Selection procedures concerns the establishment of three (3) emergency regions. The counties contained in the regions are detailed in this section.

Attachment #8 contains a cost ranking by region and category of the recommended vendors. Attachment #8 contains for each region and each category a listing of recommended contractor vendors and the initial rotation list to be used by DEP when services under this contract are required. Attachment #8 contains a summary of the combined costs analysis for each recommended vendor. This analysis also contains both the average hourly rate for labor and the average hourly rate for key equipment items.

Cost was the only factor considered in establishing the initial ranking of contract vendors. The RFP contained certain references under Section 7.0, proposal evaluation, to various criteria that would be used in selecting contract vendors. Those sections read as follows:

Section 7.1.1, "The total resources available to the bidding organization, consisting of but not limited to, adequate manpower and equipment and vendor or liability prior contract performance."

Section 7.1.4, "The most advantageous rates for equipment considering capacity and, availability."

Section 7.1.5, "The most favorable labor rates including base rates for various skill levels."

It should be noted that with respect to the above criteria, the Committee determined that it was difficult, if not impossible, to fairly evaluate a firm's capability to adequately respond to an emergency based on the information required to be submitted in the bidders proposals regarding number(s) of manpower (labor) and equipment available. The above factors were not considered criteria for contract awards, or in the ranking of recommended contractors.

VI. Evaluation Committee Recommendation to Award Contracts  
Notwithstanding Appeal

Purchase Bureau regulations Section 17:12-3.5(b) stipulates that "the Director, Division of Purchase and Property may, in those instances where failure to award contract will result in substantial costs to the State of New Jersey, or in those instances where the public exigency so requires, award contract notwithstanding the above provisions. The Director shall document all cases where such action is required and shall notify all interested parties".

The "Standing Evaluation Committee" strongly recommends that the Director, Division of Purchase and Property exercise the above option and award the contracts pursuant to RFP X-213 notwithstanding appeal. Services related to emergency cleanup and removal of hazardous substances for the State of New Jersey DEP are presently being performed under a waiver of advertising. The authority for these services to be performed under the existing waiver expires on February 28, 1983. The DEP, Bureau of Management Services, encountered

significant difficulty in obtaining concurrence of vendors to perform these services under a waiver basis even for the three month period in effect. It is doubtful that the DEP, Bureau of Management Services, will be able to obtain the concurrence of the vendors in order to continue providing services on a waiver basis beyond February 28, 1983. The Evaluation Committee is convinced that it will be in the State's best interests to have contracts pursuant to RFP X-213 awarded, in place, and in effect on May 1, 1983 in order to provide this critical service.

Your expeditious review and approval of the Committee's award recommendations is respectfully requested.

STANDING EVALUATION COMMITTEE SIGNATURE SHEET

<u>NAME</u>	<u>DEPARTMENT</u>	<u>SIGNATURE</u>
David F. Kinney	Treasury - Purchase Bureau	<u>David F. Kinney</u>
Howard Reading	Office of the Spill Fund Administrator	<u>Howard Reading</u>
Dr. Dhun Patel	Department of Health Disinterested 3rd Party	<u>Dhun Patel</u>
Charles A. Strano	DEP - Bureau of Management Services	<u>Charles A. Strano</u>
Thomas Allen	DEP - Bureau of Field Operations	<u>Thomas J. Allen</u>

**PURCHASE BUREAU  
ADVERTISED BID PROPOSAL**

STATE OF NEW JERSEY  
Department of the Treasury  
Division of  
Purchase and Property

FISCAL  
YEAR

8 3

For Purchase Bureau Use Only

ACCOUNT NUMBER						
ORGANIZATION	FUND	PROGRAM	OBJECT	COST CENTER	PROJECT ACTIVITY	EXTENDED NUMBER
N/A	N/A	N/A	N/A	N/A	N/A	N/A

VENDOR NAME AND ADDRESS							THIS BID PROPOSAL WILL BE PUBLICLY OPENED AND READ AT 2:00 P.M. ON	DATE OF BID OPENING
							April 22, 1983	
							THIS PROPOSAL SHOULD BE RETURNED IN THE SELF ADDRESSED ENCLOSED ENVELOPE AT OR BEFORE 2:00 PM ON ABOVE DATE TO NJ STATE PURCHASE BUREAU, 3RD FLOOR, 135 WEST HANOVER STREET, TRENTON, N.J. 08625 PROPOSALS WILL NOT BE ACCEPTED AFTER ABOVE TIME AND DATE.	
							ADDRESS ALL INQUIRIES AND CORRESPONDENCE TO DATE OF TYPING	
							Mr. Boyarsky (609) 292-2190	BUYER 3/22/83
							PURCHASE BUREAU, CN 230, TRENTON, N.J. 08625	

BILL TO: ENTER COMPLETE NAME AND ADDRESS							SHIP TO:
Department of Environmental Protection							Same as Bill to:
FOLD	Division of Waste Management						
MARK	CN 402						
Trenton, NJ 08625							

COMMODITY CODE	OBLIG CODE	BUYER CODE	PROC CODE	COMPL CODE	BOND CODE	REQUISITION NUMBER	BOND NO.
79419	--	33	--	--	--	R X-395	-----

**NOTE: TELEPHONE AND /OR TELEGRAPH BIDS ARE NOT ACCEPTABLE**

INSTRUCTIONS TO AND INFORMATION TO BE COMPLETED BY VENDOR: This is an ADVERTISED BID. Note details and conditions concerning Annual Bid Bond, or Certified Check described below. Read all instructions, terms and conditions on front and back of proposal and fill in completely. Any price sheet attached should be completely filled in and returned with proposal. Bidder must sign proposal in ink. Failure to return all parts of this proposal may result in rejection of this bid. Any price correction made by erasure, correcting fluid or cross-out must be initialed.

ITEM NO.	QUANTITY	UNIT	DELIVER THE FOLLOWING ITEMS F.O.B. DESTINATION-DESCRIPTION	UNIT PRICE	AMOUNT
			<p>The purpose of this Request-for-Proposals (RFP) is to engage a contractor to conduct a Feasibility Study to investigate the presence of hazardous substances and develop and evaluate remedial alternatives to determine the most cost-effective and environmentally sound remedial action to be undertaken at the Friedman Property site.</p> <p>All services shall be performed in accordance with the attached specifications.</p> <p>Notice - Bid deposit is not required for this proposal. Failure to hold price(s) for the period indicated on your bid, may result in debarment or suspension.</p> <p><u>Important Note:</u> <u>Mandatory Site Inspection</u> 3/30 or 3/31/83 Time and place specified in Section 4. 13 of this R.F.P. <u>Mandatory Bidder's Conference</u> 4/5/83 at time and place specified in Section 4. 14 of this R.F.P.</p>		

CHECK ONE BLOCK		<p>This is an Advertised Bid. Bid must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than 10% of the amount of the bid, unless otherwise specified in Additional Terms and Conditions. An Individual Bid Bond or Annual Blanket Bid Bond issued by an insurance or surety company authorized to do business in the State of New Jersey, and acceptable to the Director, Division of Purchase and Property will be accepted as meeting this requirement.</p>					<p>This Annual Blanket Bid Bond is to cover the period ending June 30th next, and must be on file on or before the date and time of bid opening. Annual Blanket Bid Bond must be in a sufficient amount to cover the required deposit of all bids under consideration. The successful bidder(s) will be required to submit a Performance Bond for 10% of the amount of any order(s) and/or contract(s) placed as a result of this proposal, unless otherwise specified in Additional Terms and Conditions.</p>							
<input type="checkbox"/> ANNUAL BID BOND ON FILE <input type="checkbox"/> INDIVIDUAL BID BOND ATTACHED <input type="checkbox"/> CERTIFIED CHECK ATTACHED														
1. CASH DISCOUNT TERMS CASH DISCOUNT TERMS OF LESS THAN twenty DAYS WILL NOT BE CONSIDERED AS FACTORS IN AWARD OF CONTRACT.						3. PRICES QUOTED FIRM TO ISSUE PURCHASE ORDER UNTIL FOLLOWING DATE		4. TELEPHONE NUMBER						
5. DELIVERY, UNLESS OTHERWISE SPECIFIED IN THE PROPOSAL, CAN BE MADE → <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>DAYS</td> <td>WEEKS</td> </tr> <tr> <td colspan="3">AFTER RECEIPT OF ORDER</td> </tr> </table>							DAYS	WEEKS	AFTER RECEIPT OF ORDER			2. BIDDER'S FEDERAL EMPLOYER'S IDENTIFICATION NUMBER		
	DAYS	WEEKS												
AFTER RECEIPT OF ORDER														
6. SIGNATURE OF BIDDER (BID MUST BE SIGNED)						7. TITLE		DATE						

STATE OF NEW JERSEY  
DEPARTMENT OF THE TREASURY

All Affirmative Action inquiries should be directed to:  
**AFFIRMATIVE ACTION  
SUPPLEMENT TO BID SPECIFICATIONS**

Affirmative Action Office  
Department of the Treasury  
State House - CN 211  
Trenton, New Jersey 08625  
Telephone No. (609) 292-5475

During the performance of this contract the contractor agrees as follows:

1. The contractor or subcontractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The contractor, however, will take affirmative action to insure that minority group members are employed and are not discriminated against during employment. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Treasurer or any political subdivision or agency delegated responsibilities by him pursuant to P.L. 1975, c.127.
2. The contractor or subcontractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex or national origin.
3. The contractor or subcontractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice advising the labor union or workers' representative of the contractors' commitments under this specification and under rules, regulations and orders promulgated by the State Treasurer pursuant to his authority under P.L. 1975, c. 127. The contractor shall post copies of this notice in conspicuous places available to all employees and applicants for employment.
4. The contractor or subcontractor will comply with all rules and regulations and orders promulgated by the State Treasurer pursuant to P.L. 1975, c. 127 and with all provisions of N.J.S.A. 10:2-1 through 10:24, as amended and supplemented from time to time.
5. The contractor or subcontractor will furnish all information and reports required by rules, regulations and orders promulgated by the State Treasurer pursuant to P.L. 1975, C. 127 and/or pursuant to any authority delegated this political subdivision or agency by the State Treasurer. The contractor will permit access to his books, records, and accounts by a duly appointed representative of the State Treasurer for purposes of investigation to ascertain compliance with rules, regulations and orders adopted pursuant to P.L. 1975, c. 127 and pursuant to the provision of N.J.S.A.10:2-1 through 10:2 4 and all rules and regulations promulgated thereunder.
6. In the event of the contractor noncompliance with this specification or of any rules, regulations, or orders promulgated by the State Treasurer pursuant to P.L. 1975, c. 127 or with the provision of N.J.S.A. 10:2-1 through 10:2 4 or rules or regulations promulgated thereunder, this contract may be cancelled, terminated, or suspended in whole or in part, and the contractor may be declared ineligible by the State Treasurer for further public works contracts. Such other sanctions as may be adopted by the State Treasurer pursuant to P.L. 1975, c. 127, may be imposed for the aforementioned violations.
7. The Contractor or subcontractor will include all of clauses 1 thorough 6 above in every subcontract or purchase order unless exempted by P.L. 1975, c. 127 or rules, regulations or orders promulgated thereunder by the State Treasurer, so that all of the aforementioned clauses will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the State Treasurer may direct as a means of enforcing such provisions, including sanctions for noncompliance.
8. For the purpose of this specification, the following terms shall have the following meanings:
  - a. "Affirmative Action" means procedures which establish hiring and employment goals, timetables, and practices to be implemented with good faith efforts, for minority group members.
  - b. "Minority group members" means persons who are Black, Spanish American, Asian, or American Indian.

**ADDENDUM**

The following provisions shall supplement and be part of all reference to discrimination in employment contained herein as stated in P.L. 1975, Chapter 127:

"During the performance of this contract, the contractor agrees as follows:

- a. The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status or sex. The contractor

will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status or sex. Such action shall include, but not be limited to the following employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause;

b. The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin ancestry, marital status or sex;

c. The contractor or subcontractor where applicable, will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment."

In addition, as stated in N.J.S.A. 10:5-4.1, any unlawful discrimination against any person because of the physical handicap of such person, shall be prohibited unless the nature and extent of the handicap reasonably precludes the performance of the particular employment.

No firm may be issued a purchase order or contract with the State unless they comply with the Affirmative Action regulations.

For firms of 50 or more employees: A vendor information report must be completed and returned to the Bureau of Purchase prior to or at the time of an award. An Affirmative action plan approved by the Federal Government or the N.J. Affirmative Action Office is an acceptable alternate.

In the space provided indicate whether your firm has met any of the requirements listed above. Indicate the number of the N.J. Affirmative Action Certificate of Approval in the space provided.

For firms of less than 50 employees: Vendors of less than 50 employees are required to complete an affidavit of Affirmative Action.

INDICATE IN THE APPLICABLE BOXES BELOW WHETHER YOU HAVE MET ANY CRITERIA FOR COMPLIANCE WITH THE NEW JERSEY AFFIRMATIVE ACTION REGULATIONS. YOUR BID WILL BE ACCEPTED EVEN IF YOU ARE NOT IN COMPLIANCE AT THIS TIME. IF, HOWEVER, YOU ARE THE LOWEST RESPONSIVE BIDDER AND HAVE NOT YET COMPLIED WITH THE AFFIRMATIVE ACTION REGULATIONS, WE WILL SEND YOU THE AFFIRMATIVE ACTION DOCUMENTS FOR COMPLETION PRIOR TO AWARD. YOU MUST RETURN THE COMPLETED DOCUMENT TO US WITHIN SEVEN DAYS AFTER YOU RECEIVED A NOTICE OF INTENT TO AWARD.

**FIRMS OF 50 OR MORE EMPLOYEES**

- A VENDOR AFFIRMATIVE ACTION EMPLOYEE INFORMATION REPORT WAS SUBMITTED TO PURCHASE BUREAU.  
 A FEDERAL CERTIFICATE OF APPROVAL HAS BEEN RECEIVED (PROOF OF THIS WILL BE REQUIRED AT TIME OF AWARD).

**FIRMS OF LESS THAN 50 EMPLOYEES**

- AN AFFIRMATIVE ACTION AFFIDAVIT HAS BEEN SUBMITTED TO THE PURCHASE BUREAU.  
 NONE OF THE ABOVE.

A N.J. AFFIRMATIVE ACTION CERTIFICATE OF APPROVAL HAS BEEN RECEIVED, THE NUMBER IS \_\_\_\_\_

THE EXPIRATION DATE IS \_\_\_\_\_

I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT TO THE BEST OF MY KNOWLEDGE.

Firm Name \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Bid Identification No. \_\_\_\_\_

**VENDOR: PLEASE COMPLETE AND SIGN THIS RETURN IT TO THE PURCHASE BUREAU WITH YOUR BID PROPOSAL.**

## State of New Jersey

DIVISION OF PURCHASE AND PROPERTY

PURCHASE BUREAU

STOCKHOLDER DISCLOSURE FORM

Name \_\_\_\_\_

Address \_\_\_\_\_

City &amp; State \_\_\_\_\_

List the names and addresses of all individuals, partnerships, corporations or any other owner having 10% or greater interest in the corporation or partnership named in Item 1. If a listed owner is a corporation or partnership, then list the names and addresses of holders of 10% or more interest in that corporation or partnership. If additional space is necessary, list on an attached sheet. If there are no owners with 10% or more interest in your company, enter "None" below.

Complete affidavit at bottom of form. If this has already been submitted to the Purchase Bureau, use the form for any changes and complete the affidavit.

NAME	ADDRESS	Street	City/Twp.	County	State	Zip
President of the firm (Type or print name)	Phone _____					

I certify that:

- List of stockholders names and addresses has been submitted to the Purchase Bureau and it is current and correct to the best of my knowledge, with the exceptions as listed above.
- The list of stockholders above is current and correct to the best of my knowledge.
- There are no stockholders holding 10% or more interest in this corporation or firm to the best of my knowledge.
- Firm is a sole ownership and not subject to corporation or partnership disclosure requirement.

Signature of Authorized Representative \_\_\_\_\_

Type or Print Name \_\_\_\_\_ Title \_\_\_\_\_

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

VENDOR: PLEASE COMPLETE AND SIGN THIS FORM AND RETURN IT TO THE PURCHASE BUREAU WITH YOUR BID PROPOSAL OR, TO PREFILE, RETURN TO THE FOLLOWING ADDRESS: Purchase Bureau

CX230

10 W. Hanover St.

Newark, NJ 07102 08825

REQUEST FOR PROPOSAL  
FOR  
Feasibility Study  
Friedman Property  
Upper Freehold Township Monmouth County

S T A T E O F N E W J E R S E Y

DEPARTMENT OF THE TREASURY  
DIVISION OF PURCHASE AND PROPERTY  
PURCHASE BUREAU - 4TH FLOOR  
135 WEST HANOVER STREET  
TRENTON, NEW JERSEY 08625

March 22, 1983

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FRIEDMAN PROPERTY

Upper Freehold Township, Monmouth County

**1.0 Purpose and Intent**

The purpose of this Request-for-Proposal (RFP) is to engage a contractor to conduct a Feasibility Study to investigate the presence of hazardous substances and develop and evaluate remedial alternatives to determine the most cost-effective and environmentally sound remedial action to be undertaken at the Friedman Property site.

It is the State's intent to award a fixed price contract with an additional work clause to accomplish this Feasibility Study. This will be satisfied by performing the seven (7) tasks specified in Section 7.0, the Scope of Work (SOW) and by performing any additional items involving expansion of tasks necessary to complete the study. The fixed price quoted must be based on and supported by detailed cost schedules as required in Section 8.4.

**2.0 Background**

**2.1 General**

**2.1.1 Location** - The Friedman Property is located in Upper Freehold Township, Monmouth County, New Jersey. The site is just across the boundary from Plumstead Township, Ocean County, at the intersection of Routes 537 and 539. Several homes and two trailer parks are located within one-quarter mile of the site.

According to the Upper Freehold Township Tax Maps, the Site is found on the property designated as lot 12, Block 35. The Site is an open area, bounded by the roads mentioned and stretches back to a wooded marsh area which receives drainage from the Site.

**2.1.2 Site History** - The Friedman Property was allegedly used for the dumping of hazardous chemical wastes, as well as domestic garbage, in the late fifties and early sixties. The wastes were subsequently covered; there is no visible evidence of them today. The site was identified as a hazardous waste dump in February, 1980 by the NJDEP Division of Hazard Management. This Agency arranged for Upper Freehold Township to erect a snow fence around the site. NJDEP installed four (4) monitoring wells in 1980. In July, 1981 Fred C. Hart Associates, acting as a Field Investigation Team for the USEPA, performed a limited site investigation at the Friedman Property.

A Remedial Action Master Plan (RAMP), dated August 6, 1982 has been developed by USEPA for this Site to outline a course of action for pursuing a long term, permanent

remedial response to the problem created by the presence of hazardous substances. A Cooperative Agreement, between NJDEP and USEPA, was executed September 23, 1982 to award financial assistance to New Jersey to undertake the Feasibility Study to be awarded as a result of this RFP. The Agreement states that the Study, is to determine the most environmentally sound, cost-effective remedial action plan to mitigate the environmental hazards posed by hazardous substances located at the Friedman Property and to provide for implementation of a remedial action at the Site.

- 2.1.3 Environmental Setting - The site covers a half-acre area and consists primarily of field weed type vegetation, with some small trees and shrubs. It is located adjacent to a swampy area which drains into an unnamed tributary to Lahaway Creek. A small feeder stream once crossed the property and discharged into the swamp. This stream has since been piped and covered by NJ Department of Transportation. Waste materials were apparently dumped into ditches and pits which were then covered over.

The tributary adjacent to the Site flows northwestward into Lahaway Creek, from there Lahaway Creek flows southwestward into Crosswicks Creek, which flows northwestward until it finally discharges into the Delaware River near Trenton. As far as is known, surface water leaving the site is not used as a direct source of potable water supply anywhere along this route. However, it is used extensively for irrigation. The environmental habitat, floral and faunal populations downstream from the site are unknown; however, the USGS quadrangle map does indicate that a number of cranberry bogs are located along the tributary upstream from the Friedman Property.

There is documentation of groundwater contamination at the site. A NJDEP Regional Geology Report for the nearby Goose Farm site indicates that several important aquifers are present in the area, the most important being the Mt. Laurel-Wenonah.

2.1.4 Supplemental Information

Supplemental Information is provided in Attachment I. This package consists of any information available to the public that NJDEP has concerning the site. This information is provided to assist prospective bidders in responding to this RFP.

3.0 Definitions:

Bidder - Vendor submitting a bid response for the purpose of obtaining a State Contract/Purchase Order.

Cash Discount - Discount allowed off invoice for prompt payment.

Close Consultation, Coordination or Communication - The contractor will telephone, write or meet with regulatory officials, whichever means of contact is appropriate, to discuss specific aspects of this Project.

Contract - For Purposes of this document a contract is composed of the RFP, the bidder's response proposal and the resultant agreement or purchase order.

Contractor - Consultant/Firm to which a bid is awarded to perform a service or provide goods as specified in the RFP at the price(s) quoted.

Date Prices are Firm to Issue Contract - The date after which the bidder will not accept the contract if awarded by the State.

Director - Director, Division of Purchase & Property, Department of the Treasury; by statutory authority, contracting officer for the State of New Jersey.

Existing Data - All non-confidential documents on file with NJDEP and EDPA region #2 e.g. sampling and analysis reports, site inspection forms, preliminary Site investigation reports (by private consultants), Remedial Action Master Plans, and any other file notes and memos.

Hourly Rate - An all inclusive rate which includes for the purpose of this document all direct and indirect costs including but not limited to; travel, overhead, fee or profit, clerical support, safety and other equipment (including decontamination), materials, supplies, managerial and other support above the levels mentioned in this RFP, and the cost of all documents, forms, and reproduction thereof.

Bidders should be aware that hourly rate compensation also includes portal to portal expenses. Professional or technical time spent in traveling to and from the work site or employee's normal work station should not be included in any of the manpower estimates.

Note: Management at a level higher than project management and clerical and support staff at a level lower than technicians are not to be considered in the direct man-hours level-of-effort required, but should be considered as overhead.

Invoice - State billing form - AR50 or AR50/54.

Issuing Office - Purchase Bureau, Division of Purchase & Property.

NJDEP - New Jersey Department of Environmental Protection.

Regional Project Coordinator - A Federal (USEPA Region II) representative to oversee activities for the Project and ensure coordination at the Federal level involving the State and the contractor.

Response Proposal - The bidders response to the (RFP)..

RFP - Request for proposal; invitation to bid.

SOW - Scope of Work.

State - Director of Purchase & Property or his designee acting under statutory authority as contracting officer for the State of New Jersey.

State/NJDEP On-Scene Coordinator - The DEP representative designated to have on-site responsibility for field operations.

State/NJDEP Project Officer/(Project Manager) - State (NJDEP) representative designated to have primary responsibility for the project.

State/NJDEP Site Manager - State (NJDEP) individual assigned the management and coordination duties involving all aspects of the Project.

Total Bid Price - Total firm, fixed price for the seven (7) tasks covered in the RFP.

USEPA - United States Environmental Protection Agency

Using Agency - Instrumentality of government using service furnished by Contractor. In this instance, the using agency is NJDEP.

Vendor - Any entity which sells goods and services.

40 CFR, Part 33 - United States Environmental Protection Agency - "Procurement Under Assistance Agreements"

## GENERAL INTRODUCTION TO BIDDERS

### A. ADVISORY INFORMATION

The information given in this section is advisory and is intended as a preface to the other sections of this RFP. More detailed definitions of standard terms and phrases, general bidder's instructions and contractor requirements are given in subsequent RFP sections.

### B. IMPORTANT REMINDERS FOR COMPLETING BID PROPOSALS

State bidding is governed by many rules. The rules protect you as bidder and taxpayer. They assure that every bidder is treated the same way, and prevent any chance for favoritism, or even the appearance of favoritism.

Some rules are flexible; others can't be broken. Here are some which are hard and fast. (Refer to Section 4.12 for statutory citation and detail.) Please review them carefully when you prepare your bid. If you don't comply, your bid will be rejected.

#### 1. BID DELIVERY

We must receive bids by the time and at the place designated for opening. If you mail your bid, allow enough time for delivery. Even if postal or carrier errors delay your bid, we can't accept it. Bidders are urged to be sure that their package is clearly identified as a bid. The exterior of all bid packages should be labeled with the bid identification number (X or R #), final bid opening date and procurement specialist's name. This will help insure that your bid is properly directed once received by the Purchase Bureau. If you plan to deliver the bid yourself (a good idea), allow enough time for your trip.

If you experience an accident or other emergency while en route, you can ask that the bid opening be delayed for you up to one hour by calling the Purchase Bureau Supervisor at (609) 292-4751. If your bid is late, it will be rejected. That's the law.

#### 2. SIGNATURE

An unsigned bid will NOT be accepted, as it has no binding effect.  
MAKE SURE YOUR BID IS SIGNED.

#### 3. PRICES AND ALTERATIONS

Don't submit prices in pencil. Type or write them in ink. If you change your price, you must initial the revised price or that price will be invalid, and the item disqualified (this includes "whiteouts"). This policy is meant to protect the State and you the bidder.

#### 4. LITERATURE AND BID INFORMATION

If the RFP requires you to submit price lists, product literature or other information with the bid, make sure you supply it. You won't be allowed to do this after bids are opened. WE CANNOT EVALUATE YOUR BID WITHOUT IT.

##### 5. BIDDER'S CONFERENCE/SITE INSPECTION

If mandatory attendance is required by the RFP, make sure you do or we can't accept your bid. Conferences and site inspections are scheduled to answer your questions, clarify an RFP requirement or see the job site first-hand. If you experience a problem while en route, call ahead to the Purchase Bureau Supervisor who may be able to arrange a delay. See Sections 4.13 and 4.14 for key dates.

## **4.0 BIDDERS' INFORMATION**

### **4.1 Proposal Preparation**

Bidders are to follow instructions contained in Section 8.0 of this document in preparing and submitting their response proposal. Bidders are advised to thoroughly read and understand the entire RFP document prior to preparing and submitting their bid response proposal.

### **4.2 Cash Discounts**

Bidders are encouraged to offer cash discounts. Discounts for periods of less than 20 days will not be taken into consideration in determining the lowest responsive bid price.

### **4.3 Tax Exemptions**

The State is exempt from State sales or use taxes and Federal excise taxes and such taxes are not to be included in the bidder's price quotation. The State's Federal excise tax exemption number is 22-75-0050k.

### **4.4 Liability Copyright - Bid Response Proposal**

Bidders are cautioned that the entire contents of every bid response proposal publicly opened and read is a public record.

### **4.5 Cost Liability**

The bidder shall bear all costs associated with bidding including response proposal preparation, site visitation or any travel connected with submission of the response proposal.

### **4.6 Ownership Disclosure**

Contracts cannot be issued for any work, goods or services unless the bidder, either prior to or with the bid submission has disclosed the names and addresses of all its owners holding 10% or more of the firm's stock or interest. Refer to NJPL 1977 Chapter 33. A Disclosure Form is included as part of this RFP for your convenience.

### **4.7 Anti-Collusion Clause**

Bidder's signature on the response proposal certifies that the bidder is in compliance with the provisions of Section 5.9 of this RFP.

### **4.8 Obtaining Essential Information**

**4.8.1** The Director reserves the right to obtain any information he sees fit to determine the ability of the bidder to supply the level of service the State has the right to expect from a Contractor. This includes factors needed to evaluate the financial capability of the bidder to complete the requirements of the RFP.

- 4.8.2 State representatives may be assigned to visit locations presently serviced or to inspect the bidder's establishment prior to making an award.
- 4.8.3 The Director reserves the right to request a bidder to explain in detail how he arrived at his bid price.
- 4.8.4 In general, the Director, Division of Purchase & Property reserves the right to obtain and evaluate any information required to award a contract.

#### 4.9 Director's Right of Final Bid Acceptance

The Director reserves the right to reject any and all bids, or to award in whole or in part as deemed to be in the best interests of the State. He shall have authority to award orders or contracts to the bidder best meeting specifications and bid conditions who is determined to have offered the most advantageous bid to the State, price and other factors considered.

#### 4.10 Contracts Resulting From This RFP

- 4.10.1 Bidders are cautioned that all terms and conditions contained within this RFP, and any addendum to this RFP, will become part of the contract awarded as a result of the RFP whether stated in whole, in part, or by reference (see Section 5.0).
- 4.10.2 The contents of the bidder's response proposal as accepted by the Director will become part of any contract awarded as a result of this Request for Proposal.

#### 4.10.3 Additional Conditions

The bidder is hereby notified that, in addition to terms and conditions specified elsewhere in this RFP, the State intends that all aspects of the bidding procedure, contract/award procedure, and subsequent actions carried out under the contract awarded pursuant to this RFP, shall also be governed by the provisions and requirements of 40CFR, Part 33. (Interim-final rule, dated May 12, 1982). Copies will be available at the bidder's conference. The bidders should pay special attention to the requirements of this Part concerning subcontracting.

#### 4.11 Informalities in Bidding

Pursuant to New Jersey Administrative Code Title 17, Chapter 12, Subchapter 2.4 , the Director, Division of Purchase and Property reserves the right to waive any minor informalities not in compliance with the specifications, terms and conditions of the invitation to bid (RFP).

#### 4.12 Automatic Rejection of Bids

Pursuant to New Jersey Administrative Code Title 17, Chapter 12, Subchapter 2.5, bids shall be rejected automatically for the following reasons:

- ° Failure to sign the bid document.
- ° Bid not received on time.
- ° Bid submitted in pencil.
- ° Failure to provide bid security when required.
- ° Failure to attend mandatory bidders' conference.
- ° Failure to attend mandatory site inspection.
- ° Failure to initial price alterations.
- ° Failure to file Stockholders Disclosure.
- ° Failure to file Affirmative Action Form within seven (7) days after receipt of notice.

#### **4.13 Mandatory Site Inspection**

Bidders are cautioned that attendance at the site inspection is mandatory. Attendance is a prerequisite and requirement for bid submission. Bidder(s) which fail to attend and register at the site will be disqualified from submitting bid response proposals in response to this RFP.

##### **4.13.1 A DEP representative will be on-site on the following scheduled dates:**

<u>DAY</u>	<u>DATE</u>	<u>TIME</u>
<u>Wed</u>	<u>March 30</u>	<u>10:00A.M.</u>
<u>Thurs</u>	<u>March 31</u>	<u>10:00A.M.</u>

##### **4.13.2 All visitors to the site will be required to execute a release holding the State harmless for personal or other injuries and/or damages which may occur during the course of the site visit. Bidders will not be granted access to the site unless the aforementioned release is executed.**

Important note! The above referenced release form will also serve as the Registration Form for attendance at the mandatory site inspection. Failure to execute this form may, therefore, lead to a disqualification of your firm!

##### **4.13.3 The state of New Jersey advises all prospective bidders and other persons that is without complete knowledge as to the content and nature of the hazardous substances on the site, and in the soil and air surrounding the site, and further that it is without complete knowledge as to the nature or the degree of the hazards which might arise therefrom. The State of New Jersey further advises that the minimum level**

of protection recommended is level "D" indicating a low hazard rating pursuant to applicable federal standards. Any person or persons who enter upon the site, examine the site, or conduct any activity on or in the vicinity of the site do so at their own risk. The State of New Jersey assumes no liability whatsoever for any damages, loss or injury of any kind arising in anyway from such entry upon, examination of or activity on or in the vicinity of the site by any person or persons.

Prospective bidders, vendors and contractors agree that, if given permission to enter upon and examine the site for the purpose of this RFP, said prospective bidder, vendor or contractor shall be solely responsible for and shall keep, save, and hold harmless the State of New Jersey and its employees from and against any and all claims, demands, suits, actions, recoveries, judgement and costs and expenses in connection therewith on account of loss of life, property, or injury or damage to the person, body or property of any person, agency or corporation, which shall arise from or result directly or indirectly from said entry upon, inspection of, or activity upon or in the vicinity of the site, pursuant to this RFP.

#### **4.14 Mandatory Bidder(s) Conference**

- 4.14.1 Date: April 5, 1983  
Time: 9:30 A.M.  
Location: N.J. Division of Purchase and Property  
Purchase Bureau, 135  
West Hanover Street, Basement  
Bid Reading Room.  
Trenton, N.J. 08625

- 4.14.2 Attendance at the bidders' conference is a prerequisite and a requirement prior to bid submission. Firms which do not attend will be disqualified from submitting proposals in response to this RFP. The purpose of the bidders' conference is to answer questions and comments regarding the content of this RFP.

#### **4.15 Questions and Inquiries**

- 4.15.1 It is the policy of the Division of Purchase and Property to accept questions and inquiries in writing from Bidders. Bidders must submit written questions in advance of or at the time of the bidders' conference. Answers will be given at the bidders' conference and/or in the form of a written addendum to the RFP.

Oral explanations or instructions given over the phone prior the bid submission date shall not be binding.

- 4.15.2 All written questions must be directed to the individual designated below in advance of or at the bidders' conference.

Sheldon Boyarsky  
Supervising Procurement Specialist  
Purchase Bureau  
135 West Hanover Street CN 230  
Trenton, N.J. 08625

4.15.3 Carbon copies of all questions must also be sent to:

Dr. Marwan M. Sadat, Administrator  
Hazardous Site Mitigation Administration  
Division of Waste Management  
8 Hanover Street  
CN-028  
Trenton, N.J. 08625

and

Mr. Charles A. Strano, Chief  
Bureau of Management Services  
DEP  
88 East State Street  
Trenton, N.J. 08625

4.16 Response Date

4.16.1 In order to be considered, proposals must arrive at the Purchase Bureau and be time stamped prior to the date and time specified as the 2:00PM bid due date.

4.16.2 Bidders mailing their bid responses are cautioned to allow for normal mail delivery time to ensure receipt of their bid response proposals by the Purchase Bureau on time.

5.0 Contract/General Terms And Conditions

All terms and conditions within this section will be incorporated into any contracts resulting from this Request for Proposal. See Section 4.10 for statement.

5.1 Compliance - State Laws

It is agreed and understood that any contracts and/or orders placed as a result of this RFP shall be governed and construed, and the rights and obligations of the parties hereto shall be determined in accordance with the laws of the State of New Jersey.

5.2 Compliance - Laws

The contractor must comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done hereunder.

5.3 Termination of Contract

The State reserves the right to terminate any contract entered into as a result of this RFP provided written notice has been given by the Director of the Division of Purchase and Property to the contractor at least 30 days prior to such proposed termination date. For cause, the Director of the Division of Purchase and Property may terminate any contract by giving contractor 5 days notice of such termination.

**5.5    Liability Copyright - Contract**

The contractor shall hold and save the State of New Jersey, its officers, agents, servants and employees, harmless from liability of any nature or kind for or on account of the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used in the performance of this contract.

**5.6    Corporate Authority**

All firms incorporated outside of the State must file a Certificate of Authority with the Secretary of State at the Department of State, State House, Trenton, New Jersey, within seven days of notification of intent to award.

**5.7    Prevailing Wage Act**

New Jersey Prevailing Wage Act P. L. 1963 Chapter 150 is made part of every contract entered into by the State where applicable. The bidder's signature on the response RFP is his guarantee that neither he nor any subcontractors he might employ to perform the work covered by this proposal are listed or are on record in the Office of the Commissioner of the Department of Labor as one who has failed to pay prevailing wages in accordance with the provisions of this Act.

**5.8    Non-Discrimination**

There shall be no discrimination against any employees who are employed in the work covered by this contract or against any applicant for such employment because of sex, race, religion, color or natural origin. This provision shall include, but will not be limited to, the following: employment, upgrading, demotion or transfer, recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The contractor shall insert a similar provision in all subcontracts for services covered by this RFP. The contractor must also comply with an appropriate (and applicable) subagreement provisions found in 40CFR33, Subpart F - 33.1005 - 33.1030 and NJSA 10:2-1 through 10:5-31 through 10:5-38 and all rules and regulations issued thereunder.

**5.9    Anti-Collusion Clause - Contract**

The contractor does hereby warrant and represent that this contract has not been solicited or secured, directly or indirectly, in a manner contrary to the laws of the State of New Jersey and that

said laws have not been violated and shall not be violated as they relate to the procurement or the performance of the contract by any conduct, including the paying or consideration of any kind, directly or indirectly, to any State employee, officer or official. The contractor must also comply with appropriate (and applicable) subcontract agreement provisions found in 40 CFR, 33, Subpart F - 33.1005 - 33.1030.

5.10 Firm Pricing

All prices quoted shall be firm and not subject to increase during the period of the contract. In the event of a price decrease during the contract period, the State shall receive the full benefit of such reduction on any undelivered or uncompleted good or service and for all subsequent goods or services provided during the balance of the contract. The Director shall be notified in writing of such reductions(s) within (5) days of the effective date.

5.11 Availability of Funds

The State's obligation hereunder is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the State for payment of any money shall arise unless and until funds are made available each year by the Legislature.

5.12 Records

The contractor shall maintain complete, accurate and detailed records of all the personnel, equipment, materials and supplies devoted to the work performed under this contract by it and others employed by it and others obliged to be employed by it. In addition, a daily field log must be maintained for all fieldwork. The Director or his authorized representatives may at all reasonable times audit such records. The records retention requirement is for a minimum of five (5) years.

5.13 Access to Records

In addition to terms stated elsewhere in this contract, the State of New Jersey, USEPA, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access, upon demand, to any books, documents, papers and records of the contractor which are directly pertinent to this contract, for the purpose of making audit examination, excerpts, and transcriptions. The contractor shall insert identical rights of access for these parties into any subcontractor agreement the contractor enters into under this contract. Failure to meet the requirements of this section shall be considered a breach of the entire contract. The contractor must also comply with appropriate (and applicable) subagreement provisions found in 40CFR33, Subpart F - 33.1005 - 33.1030.

5.14 State Energy Conservation Plan

The contractor shall be cognizant of the mandatory standards and policies relating to energy efficiency which are contained in any State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

**5.15 Grantor (EPA) Agency Patent and Copyright Policy Notification**

Pursuant to the provisions of section 14 (g) of Federal Management Circular A-102, Attachment "O" that USEPA has reporting and rights provisions concerning patents to be found at 40 CFR, Part 30, and copyright data reporting requirements and rights which are stated at 40 CFR, Part 30. Accordingly, should any discovery or invention arise or be developed under this contract during its operation, that discovery or invention should be subject to the reporting and rights provisions of subpart D or 40 CFR Part 30 and Appendix B of Part 30 and the contractor shall report the discovery or invention to US EPA through the State and shall otherwise comply with the State's (as grantee) responsibilities under subpart D of 40 CFR, Part 30. The contractor also hereby agrees that the disposition or rights to any invention or discovery made under this contract will be in accordance with the terms and conditions of Appendix B or 40 CFR Part 30. The contractor shall include identical requirements in all subcontracts it enters into under this agreement.

The contractor also agrees that any data, including but not limited to reports, drawings, manuals, computer programs and plans, developed, produced or otherwise accumulated by the contractor under this agreement shall be subject to the rights in the United States as set forth in subpart D or 40 CFR, Part 30 and in Appendix C to 40 CFR, Part 30, including the right to reproduce and disclose any and all such materials for whatever purpose it may have. The contractor hereby agrees to issue the State's responsibilities as provided in said Appendix C during the course of this contract. If any of the subject materials produced under this contract are considered by the contractor to be copyrightable, the contractor may proceed to copyright them, subject to the provisions of Appendix C and the rights of the United States except that the State and the United States hereby reserve a royalty-free, non-exclusive and irrevocable license to duplicate and disclose any and all such materials for whatever purpose they may have. The contractor will include provisions establishing identical rights in the State and the United States in any of its sub-contracts under this agreement.

**5.16 Ownership of Material**

Ownership of all data, material and documentation gathered and prepared for the State pursuant to this contract shall belong exclusively to the State subject to the rights of the USEPA under the cooperative agreement.

**5.17 Prime Contractor Responsibilities**

The State will consider the prime contractor to be the sole point of contact with regard to contractual matters and the prime contractor will be required to assume sole responsibility for the complete effort stipulated in the Request For Proposal.

The contractor is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all SOW TASKS specified under this contract. The contractor shall, without additional compensation, correct or revise any errors, omissions, or other deficiencies in his reports, test results, drawings and other services, including subcontractors work.

The contractor shall perform the professional services necessary to accomplish the SOW TASKS required to be performed under this contract and applicable USEPA requirements in effect on the date of execution of the USEPA/NJDEP Cooperative Agreement for this project.

The NJDEP's or USEPA's approval of reports, test results, drawings, and incidental work or services furnished hereunder shall not in any way relieve the contractor of responsibility for the technical adequacy of his work. Neither the NJDEP's nor USEPA's review, approval, acceptance, or payment for any of the services shall be construed as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract.

#### **5.18 Subcontractors**

If any part of the work covered by this contract is to be subcontracted, the contractor shall identify the subcontracting organization, in the manner described in Section 8.0 and the contractual arrangements made therewith, and state what services are being subcontracted. All subcontractors must be approved by the State prior to awarding this contract. If during the term of this contract the prime contractor finds it necessary to replace subcontractors identified in their original proposal, the State will consider such subsequent assignments or replacements, provided however, ten (10) days written notice is given by the contractor and written approval is obtained pursuant to Section 5.19.

#### **5.19 Substitution of Personnel or Subcontractor**

If, during the term of the contract, the contractor or subcontractor cannot provide the personnel as proposed and requests a substitution, that substitution must be an approved equal or better. The contractor or subcontractor will provide detailed resume qualifications and justification which will be forwarded to the State/NJDEP Project Officer and Director, Division of Purchase and Property, for approval prior to any personnel substitution.

The contractor will identify the organization, officers, and the contractual arrangement made therewith, and state the detailed qualifications and justification which will be forwarded to the State/NJDEP Project Officer and the Director, Division of Purchase and Property for approval prior to the commencement of any work by the recommended substitute subcontractor.

#### **5.20 Liquidated Damages**

If the contractor is unable to meet the seven month project schedule, the State may impose liquidated damages for any delay

incurred in the completion of the deliverables at the rate of \$500.00 per day based on a seven-day week. The maximum liability of the contractor will be \$50,000.00 These sums will be considered liquidated damages and not a penalty. A performance bond is not required.

5.21 Indemnification

The contractor shall be solely responsible for and shall keep, save, and hold harmless the State of New Jersey and its employees from and against any and all claims, demands, suits, actions, recoveries, judgements, and costs and expenses in connection therewith on account of the loss of life, property, or injury or damage to the person, body, or property of any person, agency, corporation, or government entity, which shall arise from or result directly or indirectly from the work and/or materials supplied by or arising out of the performance of this contract. The contractor's liability under this contract shall continue after the termination of the contract with respect to any liability, loss, expense or damage, resulting from acts occurring prior to termination. This indemnification obligation is not limited by, but is in addition to, the insurance obligation contained in this agreement.

5.22 Insurance

The contractor shall secure and maintain in force for the term of the contract the following minimum insurance coverages. Within 10 days of date of notification of intent to award, the contractor shall provide the State of New Jersey with current certificates of insurance certifying coverage and containing the provision that the insurance shall not be cancelled for any reason except after 30 days written notice to be directed to the State of New Jersey, Director, Division of Purchase and Property as indicated in Section 5.22.5.

5.22.1 Comprehensive General Liability insurance as broad as the standard coverage from currently in use in the State of New Jersey which shall not be circumscribed by any endorsements limiting the breath of coverage. The policy shall include an endorsement (broad form) for contractual liability, an endorsement for completed operations liability and shall include the State of New Jersey as an additional insured. Limits of liability shall not be less than one million dollars per occurrence for bodily injury liability and not less than one million dollars per occurrence for property damage liability.

5.22.2 Comprehensive Automobile Liability insurance covering owned, non-owned, and hired vehicles with minimum limits of one million dollars per occurrence for bodily injury and property damage liability combined.

5.22.3 Workers Compensation insurance applicable to the laws of the State of New Jersey and any other state where the consultant will be active under this contract, and

Employers Liability insurance with a limit of not less than \$25,000. The policy shall be endorsed to include coverage under the United States Longshoremen's and Harbor Workers Compensation Act and any other Federal Workers Compensation Law which may apply to the Contractor's operations.

**5.22.4 Errors and Omissions**

An errors and omissions insurance policy with limits of not less than \$500,000.00 to be in force and in effect at all times which will indemnify the prime contractor plus all subcontractors and the State of New Jersey for direct loss which may be incurred due to problems or errors with the Friedman Feasibility Study, regardless of contractor/subcontractor negligence.

**5.22.5 Insurance Certificate(s)**

The certificate(s) of insurance should include the bid ID #, name of bid and buyer's name. Certificate(s) should be forwarded to Sheldon Boyarsky, Supervising Procurement Specialist, CN230, Purchase Bureau, Trenton, N.J. 08625.

**5.23 Remedies**

All claims, counterclaims, disputes, and other matters in question asserted or raised by the contractor, arising out of or relating to the contract entered into pursuant to this RFP, or the breach thereof, will be subject to the New Jersey Contractual Liability Act.

**5.24 Confidentiality Agreement - (Contract)**

The executed Confidentiality Agreement (Attachment II) will become a part of all contracts awarded pursuant to this RFP.

**5.25 40CFR, Part 33 (Interim - Final Rule, Dated 5/12/82).**

All contract(s) awarded pursuant to this RFP will be governed by 40CFR, Part 33 (Interim - Final Rule, dated 5/12/82). This provision will be of particular note where subcontracting is involved.

**5.26 License & Permits**

The contractor shall be required to obtain and maintain, during the term of this contract, all licenses, permits, authorization, or any documents required by Federal authorities, State Government, County and Municipal governments, wherever necessary to perform this contract. The contractor shall supply the State with evidence that such applicable licenses, permits, authorization or other required documents have been obtained. Said evidence shall be submitted subsequent to contract award.

**5.27 Clean Air and Water Certification**

The State may require from the contractor prior to contract award a certification that he and his subcontractors are presently in compliance with (and shall continue in compliance with for the term of the contract) all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 (b), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11728, and the EPA regulations (40 CFR Part 15).

#### **5.28 Adverse Notification**

The contractor will promptly notify the State NJ/DEP Project Officer prior to and after award of the receipt of any communication from the Assistant Administrator for Enforcement, USEPA or his or her designee, indicating that any facility proposed for use for the performance of the contract is listed on or under consideration to be listed on the USEPA List of Violating Facilities. If applicable, the facilities will be identified.

The contractor will include this certification in every subcontract he executes under this contract.

The result of this disclosure may impact on the contractor's use of the facilities.

#### **5.29 Existing Data**

Subsequent to contract award, the State will make available to the contractor existing State data and will make arrangements with USEPA Region II to obtain necessary information that in the State's judgement may be useful for successful project completion.

#### **5.30 Assistance on Legal Action**

Contractor's personnel and the personnel of its subcontractors may be required to provide assistance to the State in the form of participation in legal actions against alleged responsible parties for violation of state and/or federal environmental law regarding any of the operations said bidder or its subcontractors is involved in under the contract that shall arise out of this RFP. This assistance may include the preparation of reports and assisting State and/or Federal attorneys in preparation of the government's case, as well as testimony in Court (expert and/or other types of testimony), testimony at depositions and the preparation and execution of interrogatories and affidavits.

The State will reimburse the contractor for such assistance as described above at the prevailing rate for the contractor's employees's primary classification at the time services are required.

The contractor shall insert an identical obligation to provide such assistance in all subcontractor agreements to perform work under any contract(s) resulting from this RFP. Failure to meet the requirement of this section shall be considered a breach of this contract.

### 5.31 Invoicing

Payment to the contractor will be made upon submission to NJDEP of itemized billings, referring to completion of Task(s), as shown in price Schedule "A" (including all associated deliverables), which the State shall in turn certify for payment. Reimbursement will be made upon a task completion basis only. It should be noted that the \$35,000 cost estimate included by the State in Price Schedule A for Task 4-B (Treatability Studies) will not be paid in the event that the State determines that such studies are not required (see Section 7.4 for specific terms dealing with the State's commitment with respect to this task). The State reserves the right to withhold ten (10) percent of the total payments invoiced as retainage until completion of a final project audit and satisfactory resolution of the audit findings.

### 5.32 Final Payment

Upon satisfactory completion of the SOW TASKS under this contract, as a condition before final payment or as a termination settlement under this contract, the contractor shall execute and deliver to the State a release of all claims against the State of New Jersey arising under or by virtue of this contract except claims which are specifically exempted by the contractor to be set forth therein. Unless otherwise provided in this RFP or by the New Jersey law or otherwise expressly agreed to by the parties to this contract final payment under this contract or settlement upon termination of this contract shall not constitute a waiver of the State's claims against the contractor or his sureties under this contract. The final payment will be for the release of the retainage only, (including any audit adjustments) with the appropriate statement regarding releasing State from any further liabilities.

### 5.33 Additional Work

Any additional work items covered in Schedule "D" approved and executed under this contract will be paid for based on the unit prices bid in the Additional Work Clause Price Schedule D. Any additional labor hours for work determined by the State to be beyond the scope of this contract will be paid at the rates provided in Schedule "B" for all labor categories. The scope and cost of such additional work will be based on a written work plan and cost proposal approved by the State prior to the initiation of the work.

Billing for additional work must be invoiced independent of completion of tasks and in accordance with Section 5.31. Such billings must include detailed supporting documentation of all costs.

The State will not compensate the contractor for professional and technical hours expended in traveling to and from either the work site or the normal work station of the employee.

### 5.34 Project Schedule

5.34.1 All contract work must be completed within seven (7) months from the date of contract award unless a work stoppage order, pursuant to Section 5.36, requires a longer completion date. Due to federal funding constraints all work under Tasks 1 through 5 must be completed and delivered within (14) weeks from the date of contract award. These time frames include submission of all deliverables, review and approval by NJDEP.

5.34.2 If circumstances beyond the control of the contractor result in a late delivery, it is the responsibility and obligation of the contractor to make the details known immediately to the Purchase Bureau, 135 West Hanover Street, Trenton, New Jersey 08625 and to the NJDEP Project Manager.

Any extension of the contract time frames must be approved by both the NJDEP Project Manager and the Division of Purchase and Property.

### **5.35 Approval of Deliverables**

The State (NJDEP) will be responsible for the approval of deliverables for each element of the Tasks 1 thru 4 as required in Section 7.0, within five calendar days from time of receipt by the State. Deliverables required by Tasks 5 and 6 will require 30 calendar days each, from the time of receipt for review and approval.

### **5.36 Suspension or Termination of Performance**

The NJDEP may at any time for valid reason direct the contractor to suspend or terminate work under this approved contract for either a period of time or permanently. Such order shall be given by at least ten days notice in writing which shall specify the period during which work shall be stopped. The contractor shall be paid up until the stop order but subsequent payments shall be held in abeyance until final project decision. The contractor, unless terminated, shall resume work upon the date specified in the stop work order, or upon such other date as the NJDEP may thereafter specify in writing. The period during which work shall have been stopped shall be deemed added to the time of performance. Stoppage of work under this Section shall not give rise to any claim against the State. The contractor must also comply with appropriate (and applicable) subagreement provisions found in 40CFR33, Subpart F - 33.1005 - 33.1030.

## **6.0 Proposal Evaluation**

All proposals will be evaluated by a five-member evaluation committee consisting of personnel from the Department of Environmental Protection, the Department of the Treasury, and one other Department as a disinterested third party.

Bidders who submit a proposal in response to this RFP may be required to give an oral presentation of the proposal to the Evaluation Committee. This will provide an opportunity for the Bidder to clarify or elaborate on his proposal but will in no way change the Bidder's original bid. The Issuing Office will schedule the time and location of these presentations.

The following criteria, not necessarily listed in order of importance, will be used to evaluate proposals. These criteria are general in nature and may be used to develop a more detailed evaluation work sheet.

- 6.1 The lump sum prices and hourly rates as submitted on Price Schedules A and B.
- 6.2 The bidder's Quality Control and Assurance Outline, Health and Safety Outline, Field Sampling Protocol and any other documentation required to guarantee proper performance of work.
- 6.3 The bidders past relevant experience and resources (and subcontractors, where applicable) in performing similar types of services.
- 6.4 Compliance with all Federal, State, and Local regulations and statutes by the contractor, subcontractors and their key personnel.
- 6.5 Bidder's Detailed Technical Proposal submitted for defined SOW Tasks to be performed under this RFP.
- 6.6 The financial capability of the bidders to satisfactorily complete the requirements of this RFP.
- 6.7 Experience of personnel to be assigned, as indicated on required staff resumes.
- 6.8 The ability of the bidder as judged by the State to complete the project within the required time frame with particular reference to staffing, man-hours and skill mix.
- 6.9 The bidder's submission of a bid proposal that is determined to be responsive to RFP requirements for technical, organizational support and experience and cost submissions.

## 7.0 SCOPE OF WORK

The Feasibility Study will involve, at a minimum, the seven (7) tasks which are interrelated and will lead to the recommendation of a cost-effective and environmentally sound remedial action to be undertaken at the Friedman Property Site. The Study will consist of the following tasks:

- Task 1 - Preinvestigation Activities
- Task 2 - Site Investigations
- Task 3 - Selection of Remedial Response Objectives and Identification of Alternatives
- Task 4 - Laboratory and Bench Scale Treatability Studies
- Task 5 - Evaluation of Alternatives
- Task 6 - Conceptual Design and Final Report
- Task 7 - Coordination and Community Relations

It is important in conducting this Study that close coordination with USEPA and NJDEP be maintained to make the regulatory agencies aware of the work underway to allow them to guide the effort or require amendments where necessary.

### 7.1 Task 1 - Preinvestigation Activities

#### Task Description

Prior to the start of any investigative activities the contractor must coordinate with NJDEP and USEPA to obtain approval of the following:

##### 7.1.1 Project Schedule

The contractor shall provide a project schedule by preparing a Task/Activity bar chart or critical path sequence (CPM) showing the initiation, coordination, duration and interdependency of tasks.

NOTE: This schedule must be updated in each monthly progress report.

##### 7.1.2 Health and Safety Plan

A comprehensive site-specific Health and Safety Plan (HASP) must be structured for on-site personnel to minimize their personal injury, illness, and potential environmental impairment associated with the contracted feasibility study. The contractor will be responsible to perform all activities on-site within the guidelines of the agreed-upon health and safety plan which must cover, at a minimum, the areas listed below:

- 7.1.2.1 Listing of personal protective equipment (including respiratory protection) to be used, including manufacturer, model, duration safety period, and any required certification documentation.
  - 7.1.2.2 Listing of safety equipment (including manufacturer, expiration date and model) to be used, such as: fire extinguishers, portable eye wash stations, air monitoring equipment, etc. (Equipment must meet OSHA standards or other acceptable industrial standards).
  - 7.1.2.3 Medical Surveillance Program for contractor's employees.
  - 7.1.2.4 Personal hygiene requirements for contractor's employees.
  - 7.1.2.5 Training Program including training protocol.
  - 7.1.2.6 Special medical procedures to be available at job site.
  - 7.1.2.7 Contingency plans for emergency procedures, spill prevention/response, and evacuation plans.
  - 7.1.2.8 On-site monitoring for personal safety.
- 7.1.2.9 Decontamination Procedures (Equipment & Personnel)
- 7.1.3 Field Sampling Plan
- Development of reliable monitoring data is a critical part of the project. Therefore, considerable importance is attached to quality assurance of the sampling, analysis and data-handling. A detailed site-specific Field Sampling Plan must be prepared for which each field investigation will address the following points:
- 7.1.3.1 Specific number and types of samples required to accurately identify the problem.
  - 7.1.3.2 Location of sampling points
  - 7.1.3.3 Justification for the number and location of the sampling points.
  - 7.1.3.4 Explanation as to the type of data or information which will be collected and intentions for use of the data and information. (environmental and engineering aspects)

## 7.1.4

Quality Assurance/Quality Control (QA/QC) Plan

Any field sampling, collection and analyses conducted shall be documented, and chain of custody procedures shall be implemented in accordance with the criteria specified in USEPA guidance. (If subcontractors are to be used in this effort, the prime contractor has full responsibility for quality assurance of the subcontractor's efforts as well as his own efforts.)

The Quality Assurance/Quality Control Plan shall contain, at a minimum, the guidelines presented in the USEPA document "Interim Guidelines and Specifications for Preparing Quality Assurance Project Management Plan." These documents are available from the State Project Officer subsequent to Contract Award. It should be noted that environmental measurements cannot begin until reaching Quality Assurance Project Plan is submitted and approved by the NJDEP and USEPA. This plan shall also include:

- 7.1.4.1 QA objectives for data measurement, in terms of precision, accuracy, completeness, representativeness and comparability.
- 7.1.4.2 Sampling procedures.
- 7.1.4.3 Sample custody. (Field and laboratory chain of custody procedures)
- 7.1.4.4 Calibration procedures, references, and frequency.
- 7.1.4.5 Analytical testing procedures.
- 7.1.4.6 Data reduction, validation and reporting.
- 7.1.4.7 Internal QA checks and frequency.
- 7.1.4.8 QA performance audits, system audits, and frequency.
- 7.1.4.9 Preventive maintenance procedures and schedule.
- 7.1.4.10 Specific procedures to be used to routinely assess data precision, representativeness, comparability, accuracy and completeness of the specific measurement parameters involved. This section will be required for all QA project plans.
- 7.1.4.11 Quality Assurance Corrective Action.
- 7.1.4.12 QA Reports to Management.

NOTE: Methylene chloride is not to be used in laboratory procedures since it is a suspected contaminant at the site.

7.1.5 Task 1 - Deliverables

- 7.1.5.1 The following deliverables must be submitted to NJDEP and USEPA for review and approval within two weeks (14 calendar days) after contract award. They must be approved prior to the start of investigative activities.
- Bar chart or CPM showing project schedule
  - Health and Safety Plan
  - Field Sampling Plan
  - Quality Assurance/Quality Control Plan
- 7.1.5.2 The contractor shall submit the above deliverables in accordance with the distribution chart provided as Attachment III.
- 7.1.5.3 Effective coordination and communication between the contractor and NJDEP and USEPA is a requirement throughout the period of this study. Requests for information, data, documents, etc. will be coordinated through the NJDEP Site Manager.

7.2 Task 2 - Site Investigations

Task Description

The contractor will utilize the Supplemental Information provided and any other pertinent existing data and conduct on-site investigations of soil, groundwater, surface waters, and local potable wells to determine the types, physical states and extent of hazardous substance contamination, to identify any migration of hazardous substances through the above media and to assess any adverse effects or risks associated with the presence of hazardous substances at the Site.

7.2.1 Background Investigation

7.2.1.1 Previous Investigative Activities

The contractor shall research the existing Remedial Action Master Plan (RAMP) for this Site, dated August 6, 1982 and any other pertinent non-classified data on-file with NJDEP/USEPA for

purposes of summarizing all activities involving the Site. The contractor shall access these documents from the designated NUDEP Site Manager. The contractor will also summarize the previous, relevant investigative activities, including the technical reports, and the reliability of those results.

7.2.1.2 Site Description

Based on the above research prepare a summary of the Site's regional location, pertinent area boundary features and the general physiography, hydrology and geology.

7.2.1.3 Nature of the Problem

Discuss the general nature of the problem relative to the use of the site for hazardous waste disposal.

7.2.2 Field Investigations

Contractors performing work for the State under certain sections of the contract arising out of this RFP will be expected by the State to perform certain investigations utilizing various safety gear at the job site. All safety equipment used by the contractor's employees must meet OSHA standards or other acceptable industrial standards.

The safety equipment to be included by the contractor as a component part may include but not be limited to the following:

Pressure-demand, self-contained breathing apparatus  
Air Cylinder and Supply Services  
Cascade System (capable of on site use available with  
24 hour refill on scene capability)  
Safety Shields on Heavy Equipment  
Decontamination Equipment  
Chemical Resistant Clothing  
General Air Monitoring Equipment  
Disposable Latex Surgical and Rubber Gloves  
Disposable Boots  
Boots, chemical Resistant, Steel Toe and Shank  
Hard Hats  
Rain Gear  
Emergency Eye Wash (Shower)  
Escape Air Packs  
Full Face Mask, Air Purifying, Canister-Equipped respirator  
Disposable Cartridges for Respirators  
Safety Goggles  
Radiation Cards and/or Radiation Testing Kits  
for Personal Exposure

Ear Plugs  
Fire Extinguishers and Refill Service  
First Aid Equipment  
Face Shields  
Acid Base Solution Kits  
2-Way Radio Communications (Intrinsically Safe)

The investigations listed below are expected to accurately and completely describe the conditions related to the presence of hazardous substances. Specifically the investigations under this Task must include (but are not limited to):

7.2.2.1 Soil Investigation

All samples shall be located on site in accordance with the Field Sampling Plan per field soil standard sampling methods ASTM D 1452/65, D 1586/67, D 3350/77. The contractor shall:

- Obtain relatively undisturbed soil samples using appropriate excavating equipment to dig sample pits, and if necessary use split spoon samples of two inches in outside diameter in case of contaminant extension. Continue digging or boring until sample shows no further contamination, or continue boring until you reaching 5 feet below the water table. The contractor may obtain the samples, using the continuous split spoon sampler, from the surface to a depth of 5 feet below the water table.

- Record a complete description of each soil sample taken including physical characteristics, any presence of oils, viscous substances, color changes, groundwater level, soil classification and thickness.
- Provide pertinent soil sample information on well logging charts as appropriate.
- Take representative samples and conduct laboratory analyses as required under Section 7.4.1 in the SOW. The fixed price quoted for all laboratory analyses will be included in Task 4a, on Price Schedule A.

#### 7.2.2.2 Ground Water Investigation

All groundwater sampling well locations will be based on the Field Sampling Plan, and existing sampling data that is available from the NJDEP Site Manager. The contractor will conduct groundwater sampling as necessary to determine:

- depth of water table
- levels of contamination in the groundwater (by concentration - ug/L or ppb)
- contaminant behavior (stability, mobility, biological and chemical degradation)
- projected rate of contamination migration
- direction and flow rate in the aquifers determined to be contaminated, both horizontally and vertically.
- extent of groundwater contamination in the underlying aquifers.
- Geologic profile and cross-section to the depth of contamination as determined above.

Take representative samples and conduct laboratory analyses as required under Section 7.4.1 in the SOW. The fixed price quoted for all laboratory analyses will be included in Task 4a, on Price Schedule A.

#### 7.2.2.3 Surface Water Investigation

All surface water sampling points will be established in the Field Sampling Plan. The contractor shall collect, at a minimum, the following types of samples:

- leachate into any surface waters on or adjacent to the Site (primarily waters flowing into Lahaway Creek)

- instream water and sediment

- upstream and downstream of the Site

The contractor shall conduct surface water sampling to determine:

- levels of contamination in the surface water (by concentration - ug/L or ppb)

- the degree of contaminant migration by surface runoff, leachate and groundwater seepage.

- rate of contamination due to groundwater discharge

- the groundwater/surface water interaction at the Site

Conduct laboratory analyses as required under Section 7.4.1 in the SOW. The fixed price quoted for all laboratory analyses will be included in Task 4a, on Price Schedule A.

#### **7.2.2.4 Potable Well Investigation**

Area resident potable wells shall be sampled within a 750 foot radius from the center of the site. For purposes of satisfying this RFP it is anticipated that eight (8) potable wells will be investigated. The contractor shall determine through a well testing and interview program the following:

- potable well details, such as, date drilled, total depth, diameter, casing materials, completion zone/formation, type pump, etc.

- quality of ground water withdrawn from the potable wells, water levels/dates, production rates, and other relevant information.

Take representative samples and conduct laboratory analyses as required under Section 7.4.1 in the SOW. The fixed price quoted for all laboratory analyses will be included in Task 4a, on Price Schedule A. The contractor shall obtain from the designated NJDEP Site Manager, any existing data on-file concerning area resident potable wells to be utilized in conjunction with his new data in determining the level and migration of contaminants in the groundwater.

#### 7.2.2.5 Hazardous Substances Inventory

During the course of the previously mentioned investigations the contractor shall inventory any uncovered hazardous substances as described below:

- Investigate, record and photograph, if appropriate, quantities of any and all hazardous substances. Any photographs of the hazardous materials shall be included as part of this inventory. This inventory must account for any surface and/or subsurface containerized hazardous substances, e.g. drums, cylinders, bottles, vials, labpacks etc., any impoundments, e.g. lagoons, trenches, pools or pits, etc., any stock piled, heaped and/or dumped hazardous substances, and any leaking, spilled, tracked or leaching hazardous substances.
- Should leaking containers containing hazardous materials be encountered during excavation they must be secured in overpack drums or other approved containers and returned to the excavation upon completion of work in that excavation. All necessary over packs or other approved containers will be supplied by the contractor. The contractor will designate the location and number of said containers on the site map.
- Tabulate sample locations with test results and provide charts and curves, if applicable.
- Take representative samples and conduct laboratory analyses as required under Section 7.4.1 in the SOW. The fixed price quoted for all laboratory analyses will be included in Task 4.a, on Price Schedule A.

#### 7.2.2.6 Site Maps

- a. The contractor shall provide an Area Map of sufficient scale to depict the site and general features within a 2,000 foot radius of the site.
- b. The contractor shall provide a detailed Site Map, of sufficient scale (to be of standard blueprint size 36" x 24"), to depict the Site by identifying the following:
  - property boundaries (designate owners of properties adjacent to the Site)
  - access roads or highways, adjacent existing buildings and other structures

- monitoring and potable well locations (elevations and depths)
- surface water sample locations (elevations and depths)
- soil test pit/bore hole locations (elevations and depths)
- topography (showing two-foot contours) with watershed boundaries, if any
- disposal areas
- contaminated areas

All property boundaries, wells, sampling points, buried drum locations, etc. shall be uniformly identified by rectangular coordinates. The contractor shall obtain from the designated NJDEP Site Manager, any existing data on-file concerning items to be identified on the detailed Site Map.

#### **7.2.3      Proposed Response**

The contractor shall utilize the data obtained in the previously outlined investigations and existing data to assess and summarize the specific on-site and off-site health and environmental effects. A Site-specific statement of purpose for the response, based on the background information and the investigative effort accomplished, shall be provided. The purpose or intent should be stated in terms of components or elements that are amenable to specific remedial measures suited to eliminating contamination at the Site.

#### **7.2.4      Geodetic Markers**

The contractor shall establish one permanent monument with horizontal and vertical information at or near the site boundary to identify the location and elevation of the site. The monument should be tied into the NGS or NJGCS network of the first or second order.

#### **7.2.5      Task 2 Deliverables**

- 7.2.5.1      The contractor shall submit a draft preliminary Report detailing all of Task 2 to USEPA and NJDEP. After the regulatory agencies review and approval, including any revisions or amendments, a final Task 2 Report shall be prepared and submitted within two (2) weeks from the date of approval.

- 7.2.5.2 Effective coordination and communications between the contractor and USEPA and NJDEP is a requirement throughout the period of this Study.
- Requests for information, data, documents, etc. will be coordinated through the NJDEP Site Manager.
- 7.2.5.3 The contractor shall submit deliverables according to the distribution chart provided as Attachment III.
- 7.2.5.4 The detailed Site Map shall be incorporated into the Task 2 Report as an Appendix or Attachment and be removable for reference and review. This map shall be reproduced as necessary, to account for revisions and amendments, and shall be distributed in the Task 2 Report as outlined above.
- 7.2.5.5 All sampling forms, tables, charts and logs (including copies of hard data) shall be incorporated into the Task 2 Report as Appendices or Attachments (with proper reference to them in the body of the Report). All analytical and testing results shall be presented as stated above. All computations and assumptions shall be submitted for USEPA/NJDEP review. Provide all analytical data in machine readable form, punched and verified in accordance with the format provided in Attachment IV.
- 7.2.5.6 The contractor shall fully cooperate with the investigative efforts of the "Evidence Gathering" Contractor by providing access to all data, Site information and test results accomplished under Task 2. Any preliminary, interim and draft reports prepared during the period of the Study should be available for review by the "Evidence Gathering" Contractor. Specific information concerning the "Evidence Gathering" Contractor can be obtained from the Site Manager.

7.3 Task 3 - Selection of Remedial Response Objectives and Identification of Alternatives

Task Description

The contractor shall, in close consultation with NJDEP/USEPA, recommend goals and objectives for the remedial response and identify alternatives to meet these objectives.

7.3.1. Response Objectives and Criteria

The contractor shall identify the site-specific objectives and criteria of the response required based on:

- Information gathered during Task 2
- Local public health and environmental concerns (County/ Township records)
- NJDEP and USEPA requirements and the National Contingency Plan (NCP) or USEPA Interim Guidance
- Other applicable Federal & State Statutes

Specific cleanup criteria shall be developed in accordance with procedures presented in Subpart F of the NCP (or USEPA Interim Guidance), and shall be presented so that levels of site contaminants may be easily compared to the respective cleanup criteria.

Preliminary criteria, developed in close consultation with USEPA and NJDEP, shall be submitted for approval to NJDEP before proceeding on elements of the Feasibility Study affected by the selection criteria.

7.3.2 Identification of Remedial Alternatives

The contractor shall develop alternatives to incorporate remedial technologies, response objectives and criteria, and other appropriate considerations into a comprehensive, site-specific approach. These alternatives must, at least, be capable of accomplishing the response objectives set forth and approved in Task 3-Section 7.3.1 above. Screening of on-site, non-cleanup (e.g., alternative water supply), containment, and no-action approaches shall be accomplished in close consultation with USEPA and NJDEP. The development of remedial alternatives shall include, as a minimum:

- a. A description of appropriate treatment and disposal technologies.
- b. Specific engineering considerations required to implement the alternative (e.g., pilot treatment facility, additional studies needed to proceed with final remedial design).
- c. Environmental impacts and proposed methods for mitigating any adverse effects.
- d. Operation and maintenance/monitoring requirements of the completed remedy.
- e. Off-site disposal and transportation needs.
- f. Temporary storage requirements.
- g. Requirement for safety plans during remedial implementation (including both on-site and off-site health and safety considerations).
- h. A description of how the alternative could be phased into individual operable units. This should include discussion of how various components of the remedy could be implemented individually, or in groups resulting in a functional phase of the overall remedy.

### 7.3.3 Task 3 Deliverable

- 7.3.3.1 The contractor shall submit to USEPA and NJDEP an interim report detailing all of Task 3. After the regulatory agencies review and comments on the draft, it shall be updated to include the USEPA and NJDEP comments and incorporated into the Draft Report to be prepared under Task 5.
- 7.3.3.2 The contractor shall submit deliverables according to the distribution chart provided as Attachment III.
- 7.3.3.3 Effective coordination and communications between the contractor and USEPA and NJDEP are a requirement throughout the period of this Study. Requests for information, data, documents, etc. will be coordinated through the NJDEP Site Manager.

7.3.3.4 All supporting data including engineering data, sketches, drawings, tables, charts and curves shall be incorporated into Task 3 report as Appendices or Attachments (with proper reference to them in the body of the report).

7.4 Task 4 - Laboratory and Bench Scale Treatability Studies

Task Description

The contractor shall conduct any necessary laboratory analysis for the representative samples required under Task 2 of this Scope of Work. The contractor shall evaluate the above data and design bench scale treatability studies. The contractor shall evaluate the effectiveness of the remedial alternatives, based on these studies, and establish the engineering criteria for the design.

7.4.1 Laboratory Sample Analysis

The contractor shall conduct Laboratory analyses for the representative samples collected under Task 2. This laboratory testing shall include at a minimum a Total USEPA Priority Pollutant scan, with confirmation of any detectable organic compounds by Gas Chromatograph Mass Spectrometer (GC/MS) methodologies (EPA 624 and 625, F.R.: V.44, No. 233, dated December 3, 1979). Also identify any suspect or previously identified hazardous and/or toxic substances not detectable by the above analytical methods. Additional analyses should be performed by using the methods outlined in the following references (EPA 600/4-79-020 "Methods for Chemical Analysis of Water and Wastes", and "Standard Methods for the Examination of Water and Wastewater" - 15th Edition - A.P.H.A.). The contractor's QA/QC required under Section 7.1.4 shall specify the analytical testing methods used in the investigation and identification of hazardous substances.

7.4.2 Bench Scale Treatability Studies

The contractor, based on the identified alternatives, shall design bench scale treatability studies that may be necessary for the detailed engineering evaluation of alternatives required in Task 5. The studies shall include the treatment of, but not limited to, leachate, groundwater, surface water runoff, contaminated soils, compatibility of wastes/leachate with proposed site barrier walls, cover and other materials proposed for use in the remedial response activity.

Since the scope of these studies (Schedule A, Task 4b) is unknown at the time of bid, a pre-established amount of \$35,000.00 is to be used for bidding purposes. Sometime during the Study, ideally after completion of Tasks 1 through 3, the contractor shall submit to NJDEP a detailed justification for conducting treatability studies, also including a work plan and cost estimate.

The \$35,000 is a budget estimate if treatability studies are required, however, the contractor will be compensated for his actual cost as approved by D.E.P. prior to work commencement based on hourly rates provided in Schedule "B" for various skill levels.

#### 7.4.3 Task Deliverables

- 7.4.3.1 The contractor shall submit the results of the laboratory samples analyses in the preliminary report under Task 2.
- 7.4.3.2 Prior to conducting any treatability studies, submission of a detailed justification as mentioned above and coordination with NJDEP are necessary to obtain approval for any proposed work.
- 7.4.3.3 The contractor shall submit to USEPA and NJDEP a draft interim report detailing all of Task 4 bench scale treatability studies after completion of Task 4 items. After the regulatory agencies review and comment on the interim draft, this report shall be updated to include the USEPA and NJDEP comments and incorporated into the Draft Report to be prepared under Task 5.
- 7.4.3.4 Effective coordination and communications between the contractor and USEPA and NJDEP is a requirement throughout the period of the Study. Requests for information, data, documents, etc. will be coordinated through the NJDEP Site Manager.

7.4.3.5 All sampling forms tables, charts and logs as a result of treatability studies shall be incorporated into the Task 4 Report as Appendices or Attachments (with proper reference to them in the body of the Report). All analytical and testing results shall be presented as stated above. All computations and assumptions must be available for USEPA/NJDEP review.

## 7.5 Task 5 - Evaluation of Alternatives

### Task Description

The contractor will evaluate and present the practical and alternative remedies identified in Task 3, and recommend the most reasonable cost effective alternatives to USEPA and NJDEP.

#### 7.5.1 Environmental Assessment

The contractor shall perform an Environmental Assessment (EA) for each alternative. The EA shall include, as a minimum, an evaluation of each alternative considering environmental effects, an analysis for mitigating adverse effects, physical or legal constraints, and compliance with CERCLA requirements.

#### 7.5.2 Cost Evaluation

The contractor shall develop a cost evaluation for all feasible remedial action alternatives, and for each phase or segment of the alternative. The cost will be presented as a present-worth cost and will include the total capital cost of implementing the alternative and the present worth of the annual operation and maintenance costs of the alternative. The cost evaluation shall conform to the requirements of the NCP (and interim USEPA guidance). Subsequent to contract award the contractor will be provided the applicable discount rate for computing present-worth cost.

## 7.5.3

Cost-Effectiveness Methodology for Analysis of Alternatives

The contractor shall evaluate each alternative in accordance with the criteria established below. The evaluation criteria shall be applied uniformly to each alternative. From this list of alternatives the most appropriate alternative, given the specific constraints of the project, will be selected. With this objective in mind, a trade-off matrix that enables identification of comparable techniques shall be included. The trade-off matrix is a convenient tool for rating the various alternative techniques against construction cost, operating and maintenance cost, and numerous measures of effectiveness.

The matrix shall include the following measures of effectiveness:

- capital cost;
- operation & maintenance (O & M) cost;
- level of cleanup achievable;
- time to achieve cleanup;
- feasibility;
- implementability;
- reliability;
- ability to minimize adverse impacts during action;
- ability to minimize off-site impacts because of action;
- remoteness of activities (from nearby residences);
- useability of groundwater;
- useability of surface water;

Each of the alternatives is to be rated 1 through 5 for each cost-effectiveness measure. Capital and O & M cost estimates for all alternatives are divided into five cost ranges which are rated 1 (highest cost) through 5 (lowest cost). Ratings are also applied for each of the effectiveness measures, with 1 representing the "worst" score (low effectiveness) and 5 the "best" score (high effectiveness). The cost ratings

(Capital and O & M) and each effectiveness measure rating are to be summed for a given alternative. These two sums are then multiplied together for each alternative to derive a cost-effectiveness rating. The rating for each alternative is compared to those for other alternatives, and the comparable, cost-effective alternatives identified.

The formula for an overall cost-effectiveness rating follows:

$$\text{Cost Effectiveness Rating} = \frac{\text{Capital Cost Rating} + \text{O \& M Cost Rating}}{\text{Effectiveness Rating Sum}}$$

The alternatives examined are then grouped into categories of effectiveness - high, medium and low. Depending on the level of effectiveness judged by EPA and NJDEP to be acceptable, the least costly alternative(s) can be identified. In addition, the evaluation does provide composite cost-effectiveness ratings for each alternative, derived by multiplying individual cost and effectiveness scores.

#### 7.5.4

##### Recommendation of Selected Alternative

The contractor shall recommend the alternative determined to be the most cost-effective resulting from Task 5 (7.5.2 and 7.5.3). Rational for recommending the selected alternative shall be prepared, stating the advantages over the other alternatives considered.

#### 7.5.5

##### Task 5 Deliverable

- 7.5.5.1 The contractor shall prepare and submit a Draft Report for NJDEP and USEPA. The report will incorporate the interim and preliminary reports and shall summarize the results of all work for tasks 2 through 5. It will present the recommended remedial action alternative and will justify its selection as being environmentally sound and cost effective.

- 7.5.5.2 The contractor shall submit copies of the Draft Report according to the distribution chart provided as Attachment III.
- 7.5.5.3 Effective coordination and communications between the contractor and USEPA and NJDEP is a requirement throughout the period of the Study. Requests for information, data, documents, etc. will be coordinated through the NJDEP Site Manager.
- 7.5.5.4 All supporting data shall be incorporated into the Draft Report as Appendices or Attachments (with proper reference to them in the body of the Report).

7.6 Task 6 - Conceptual Design of System(s) to be Implemented and Final Report

Task Description

The contractor shall prepare a conceptual design of the remedial alternative selected by USEPA and NJDEP and incorporate it into a Draft Final Report and, after all necessary approvals, submit a Final Report.

7.6.1 The conceptual design shall include, but not be limited to:

- the selected engineering approach in detail
- implementation schedule
- applicable design criteria
- preliminary site layouts
- operation and maintenance requirements
- budget cost estimates including, operation and maintenance figures
- safety plan, including costs

Any additional design information required for the completion of the feasibility study will be included in this task.

7.6.2 Task 6 Deliverable

- 7.6.2.1 The contractor shall incorporate the Conceptual Design of the remedial alternative selected by NJDEP and USEPA and resulting revisions into the Draft Report and submit to USEPA and NJDEP a draft final report. After the regulatory agencies review and comments on the draft final report, it shall be updated to include the USEPA and NJDEP comments and the Final Report shall be prepared.
- 7.6.2.2 The contractor shall submit the Final Report, including the error free copy, following the approval of the draft final report.
- 7.6.2.3 The contractor shall submit the Draft Final and Final Reports according to the distribution chart provided as Attachment III.

7.7 Task 7 - Coordination and Community Relations

Task Description

The contractor shall provide effective project coordination and be active with respect to Community Relations.

7.7.1 Project Coordination

The contractor shall initiate and maintain the following activities to provide effective coordination:

7.7.1.1 Conduct joint project meetings with members of USEPA and NJDEP to discuss activities underway and results/conclusions from completed Task activities. There must be a meeting prior to the start of work and monthly meetings thereafter to allow for adequate input from the regulatory agencies.

7.7.1.2 Preparation of monthly Technical Progress Reports detailing:

- a. Site identification and activities underway

- b. Status of Task items outlined in the SOW
- c. Update Project Schedule Bar Chart or CPM required under Section 7.1.1
- d. Percent of Completion (e.g. in terms of man hours expended)
- e. Problems or delays experienced during the reporting period
- f. Actions being taken to rectify problems
- g. Activities projected over the next month
- h. Key personnel changes

7.7.1.3 Preparation of monthly Financial Management Reports detailing:

- a. Site activity identification
- b. Billings to date with manpower breakdown for the period
- c. Cumulative billings over the course of the Project
- d. Projection of expenditures for Project completion including an explanation of any significant variation from the original date
- e. A graph of proposed versus actual billings and comparison of actual versus target manhours required. Projections will be maintained until Project completion.

7.7.1.4 Prompt response and compliance to USEPA and NJDEP written comments and directives involving all deliverables. Should questions arise due to comments from the regulatory agencies, the contractor will effectively meet with members of the USEPA and NJDEP to resolve the issue.

7.7.1.5 Attendance will be required at public meetings, project review meetings and any other meetings necessary to the normal progression of the work in this RFP. The contractor is required to act as technical expert concerning this Feasibility Study when attending meetings, making presentations or giving briefings on this Project.

#### 7.7.2 Community Relations

A Community Relations Plan is to be developed and implemented by NJDEP for the sites in Plumstead and Upper Freehold Township. The contractor should anticipate a high level of interest in a remedial action for the Site, requiring information and direction to various legislators and public officials, the news media and other governmental agencies, as well as the general public.

The contractor should be prepared to assist NJDEP with Community Relations including but not limited to the following activities:

- a. providing a Community Participation Coordinator
- b. attending and participating in public information meetings and hearings
- c. developing and distributing fact sheets, news letters, public meeting notices and response summaries
- d. participating in other citizen participation techniques such as group workshops, project seminars, etc.
- e. preparation of any Project documentation, such as diagrams, charts and audio visual aids for public information.

#### 7.7.3 Deliverables

7.7.3.1 The contractor shall submit monthly Technical Progress and Financial Management Reports according to the distribution chart provided as Attachment III.

The Progress Report will list target and actual completion dates for each activity under the seven (7) Tasks, and provide an explanation for any deviation from established Project milestones. Actual and projected expenditures are data required for input to USEPA's Project Tracking System (PTS). Standardized input forms will be provided for monthly dating of Project shares.

7.7.3.2 The contractor shall submit copies of any fact sheets, newsletters, response summaries or other information prepared for the Community Relations Program, to the USEPA and NJDEP for review and file inclusion according to the distribution chart provided as Attachment III.

## **8.0 Proposal Preparation And Submission**

### **8.1 General Information**

- 8.1.1** The bid response proposal as prepared and submitted by the bidder is the State's primary vehicle for obtaining essential information on which contract award decisions are based.
- 8.1.2** The information required to be submitted in the technical, organizational support and experience, and cost sections detailed below has been determined by NJDEP, USEPA and the Purchase Bureau to be essential for use by the State in the bid evaluation and contract award process. The Director, Division of Purchase and Property will use this information as a basis for his determination of which bidder has offered the State the most advantageous bid, price and other factors considered.
- 8.1.3** Bidders are cautioned that their failure to submit at the appropriate level of detail, the information required in the technical, organizational support and experience and cost sections detailed below may result in a determination that the bidder's proposal is non-responsive to RFP requirements. Such a determination may result in your being ineligible for contract award.
- 8.1.4** The following are requested and encouraged in bid preparation.
  - 8.1.4.1** The bid response proposal should be bound in one volume, where practical, and clearly divided and labeled into three easily identified sections as indicated below (i.e. technical, organizational support and experience and cost).
  - 8.1.4.2** The bid response proposal should be prepared in a straightforward, concise and clear manner which will lead to an ease of proper interpretation by the reader.
  - 8.1.4.3** The bid response proposal should be clearly cross-referenced to each applicable proposal preparation subsection in the technical and organizational support and experience submissions. This will serve as a check for the bidder and reader that all required items have been covered.
  - 8.1.4.5** The technical proposal as it relates to detailed description of SCOPE OF WORK (SOW) tasks should be cross-referenced as appropriate.
- 8.1.5** The following practices in bid preparation are discouraged:

- 8.1.5.1 The submission of large volumes of pre-printed or "OFF THE SHELF" information as part of the bid response proposal. (Information that specifically addresses the project at hand is preferred.)
- 8.1.5.2 Mere reiterations of RFP SCOPE OF WORK tasks or simple statements that RFP SOW tasks will be performed. (They do not indicate an understanding of the work to be performed.)
- 8.1.6 Each Bidder submitting a proposal, should deliver one clearly marked original and ten (10) copies of the Proposal package.

Each Proposal package should consist of the PB-5A Form, a table of contents, a detailed Technical Proposal, an Organization Support and Experience submittal, and a completed Cost Proposal. It is desirable that the bidder include a copy of the RFP in each package.

## 8.2 Section 1 - Technical Proposal

This section shall describe the contractor's (and when applicable the subcontractor's) approach and plans for accomplishing the work outlined in the scope of work. Those plans and approaches should be described in sufficient detail to permit the State to evaluate them fairly and with a minimum of possible misinterpretations. Further, the contractor should describe the effort and skills necessary to complete the project. This section shall contain at a minimum the following:

- 8.2.1 A brief introduction outlining the bidder's overall technical approach to complete the total project and illustrating his understanding of the problem that the project is intended to solve.
- 8.2.2 A description of work to be accomplished within each unique step or activity. The bidder's task number should correspond or cross-reference the task numbers used in this RFP.
- 8.2.3 A Project schedule appropriate to the complexity of the effort, indicating submission of all identified deliverables. NOTE: Subsequent to contract award the internal milestone dates may be adjusted with the agreement of the contractor and NJDEP.
- 8.2.4 A Field Sampling Protocol which will address for each proposed field investigation the specific number and type and approximate location of samples. This will be an integral part of the evaluation of the proposed investigative effort. This protocol will be the basis for the Field Sampling Plan specified in Section 7.1.3. If additional samples are deemed necessary after NJDEP and USEPA review, the additional work clause will apply with respect to any additional costs.

- 8.2.5 A generalized Health and Safety Plan. If the bidder has set Health and Safety guidelines these should be submitted with the proposal. This outline will be the basis of the HASP specified in the Scope of Work 7.1.2 which must be detailed and site specific.
- 8.2.6 A generalized Quality Assurance (QA/QC) Project outline. If the lab the contractor will be using has a set QA/QC Program this should be submitted with the proposal. This outline will be the basis of the deliverable QA/QC Plan, specified in 7.1.4, which must be detailed and site-specific.

NOTE: At the discretion of the State Project Officer, each bidder in the competitive range shall be required to demonstrate acceptable performance by analyzing not more than two unknown samples for each parameter anticipated. The results of the analyses of these samples shall be compared to known USEPA results for scoring purposes.

- 8.2.7 A summary of the problems which the bidder might reasonably expect and his solution to those anticipated problems.
- 8.2.8 A signed Attachment II indicating contractor compliance with the confidentiality provisions of this RFP.

### 8.3 Section 2 - Organization Support and Experience

This section shall contain all pertinent information relating to the contractor or subcontractor's substantiation of his qualifications and capabilities to perform the services required by the RFP. Important note: All information required below must be submitted for the prime contractor and all subcontractors. This Section shall contain at least the following information:

- 8.3.1 Location of bidder's headquarters and nearest offices.
- 8.3.2 A chart of the bidder's organization which identifies key project staff members and shows their level of responsibility within that organization.
- 8.3.3 A chart of the project organization with names, by position, title or labor category.

NOTE: The labor categories described below are considered typical professional and technical personnel levels required to accomplish the work specified in the SOW and are to be used for establishing labor rates to be bid under this RFP. If the bidder's own personnel categories/titles vary from those listed below cross references must be provided in the Proposal package.

#### 8.3.4

### Professional

Level 4 - Plans, conducts and supervises projects of major significance, necessitating advanced knowledge and the ability to originate and apply new and unique methods and procedures. Supplies technical advice and counsel to other professionals. Generally operates with wide latitude for unreviewed action or decision.

Typical Title: Project Leader, Chief Engineer

Normal Qualifications: Ph.D. Degree,  
Professional Registration or equivalent  
project assignments

Experience: 10 years or more

Level 3 - Under general supervision of project leader, plans, conducts and supervises assignments normally involving smaller or less important projects. Estimates and schedules work to meet completion dates. Directs assistance, reviews progress and evaluates results; makes changes in methods, design or equipment where necessary. Operates with some latitude for unreviewed action or decision.

Typical Title: Project Engineer, Group Leader

Normal Qualifications: Master's Degree,  
Professional Registration or equivalent  
project assignments

Experience: 6-12 years

Level 2 - Under supervision of a senior or project leader, carries out assignments associated with projects. Translates technical guidance received from supervisor into usable data applicable to the particular assignment; coordinates the activities of juniors or technicians. Work assignments are varied and require some originality and ingenuity.

Typical Title: Engineer, Analyst, Scientist

Normal Qualifications: B.S. Degree or equivalent  
project assignments

Experience 3-8 years

Level 1 - Lowest or entering classification. Works under close supervision of senior or project leader. Gathers and correlates basic data and performs routine analyses. Works on less complicated assignments where little evaluation is required.

Typical Title: Junior, Engineer Trainee

Normal Qualifications: B.S. Degree or equivalent  
Experience: 0-3 years

### Technician

Level 3 - Performs nonroutine and complex assignments. Works under general supervision of a scientist or engineer. Performs experiments or tests which may require nonstandard procedures and complex instrumentation. Records, computes and analyses test data; prepares test reports. May supervise lower level technicians.

Typical Title: Senior Technician  
Experience: 6 years or more

Level 2 - Performs assignments that are normally standardized. Operates testing or processing equipment of moderate complexity. May construct components or subassemblies of prototype models. May troubleshoot malfunctioning equipment and make simple repairs. Extracts and processes test data.

Typical Title: Technician  
Experience: 2-6 years

Level 1 - Performs simple and routine tasks or tests under close supervision. Records test data and may prepare simple charts or graphs. Performs routine maintenance and may install or set up test equipment.

Typical Title: Junior Technicians, Technician Trainee  
Experience: 0-2 years

#### Experience/Qualifications Substitutions

- a. Any combination of additional years of experience in the proposed field of expertise plus full time college level study in the particular field totaling four (4) years will be an acceptable substitute for a B.S. Degree.
- b. A B.S. Degree plus any combination of additional years of experience and graduate level study in the proposed field of expertise totaling two (2) years will be an acceptable substitute for a Masters Degree.
- c. A B.S. Degree plus any combination of additional years of experience and graduate level study in the proposed field of expertise totaling four (4) years or a Masters Degree plus two (2) years of either additional experience or graduate level study in the proposed field of expertise will be an acceptable substitute for a Ph.D. Degree.
- d. Additional years of graduate level study in an appropriate field will be considered equal to years of experience on a one-for-one basis.

- 8.3.5 A list of personnel to be assigned, their function in the project, an indication of each person's position as outlined in Item 8.3.4 and a detailed resume for each person assigned.

- 8.3.6 A manload chart for each activity which will show the commitment of staff members to the project. (use price schedule B)
- 8.3.7 Documentation that clearly explains the contractor's relevant experience in performing similar projects.
- 8.3.8 A financial report or annual report for the most recent fiscal year on which to evaluate financial capability (or a statement from a bank referencing financial capability).

#### 8.4 Section 3 - Cost Proposal

This Section specifies all the cost and price information on which the bidder will base his Proposal. The Cost Proposal to be submitted and used for evaluation purposes will include Price Schedule A to quote a lump-sum price for the Study by task, and, Price Schedule B. to quote hourly rates by task and labor category level. The following cost information is required:

- 8.4.1 A completed Price Schedule A, which shall provide a lump-sum quotation, itemized for each Task defined in Section 7.0.
- 8.4.2 A completed Price Schedule B, which shall provide hourly rates, manhours and costs by task and labor category level.
- 8.4.3 An informational Price Schedule C, which shall summarize costs and manhours by labor category levels and, if applicable, by subcontractors.
- 8.4.4 A completed Price Schedule D which shall provide binding, all-inclusive unit price quotes for accomplishing additional work items, if necessary and approved, for completion of the Study.  
Prices provided in Schedule D shall include all professional and technical manpower required to perform the specified additional work items.
- 8.4.5 Billing to the State based on the cost for completion of Tasks and Activities, consistent with the Project Schedule required by Item 8.2.3.

PRICE SCHEDULE A

<u>Task Number</u>	<u>Task</u>	<u>Cost Bid Per Task</u>	<u>Task Duration/* Period (Weeks)</u>
1.	Preinvestigation activities	\$ _____	<u>2 Weeks</u> _____
2.	Site investigations	\$ _____	_____
3.	Selections of Remedial Response Objectives and Identification of Alternatives	\$ _____	_____
4.	Laboratory and Bench Scale Treatability Studies:	\$ _____	_____
a.	Laboratory Analysis	\$ _____	_____
b.	Treatability Studies	<u>\$35,000</u>	_____
5.	Evaluation of Alternatives	\$ _____	<u>14 Weeks</u> _____
6.	Conceptual Design of System(s) to be Implemented and Final Report	\$ _____	_____
7.	Coordination and Community Relations	\$ _____	_____
TOTAL Price Bid (Tasks 1 thru 7)		\$ _____	xxxxxxxxxxxx
Total numbers of weeks to complete entire project		xxxxxxxxxxxx	_____
			(Total weeks)

\* Number of weeks after contract award including submission of any deliverables, consistent with the project schedule required by Section 8.2.3.

## PRICE SCHEDULE B

Task I

Name of Contractor or Subcontractor	Labor Category Level*	Professional Title**	Number of Manhours	x	Hourly Rate	=	Cost Subtotal
<u>Prof.</u>							
_____	4	_____	_____	_____	_____	_____	_____
_____	4	_____	_____	_____	_____	_____	_____
_____	4	_____	_____	_____	_____	_____	_____
_____	3	_____	_____	_____	_____	_____	_____
_____	3	_____	_____	_____	_____	_____	_____
_____	3	_____	_____	_____	_____	_____	_____
_____	2	_____	_____	_____	_____	_____	_____
_____	2	_____	_____	_____	_____	_____	_____
_____	2	_____	_____	_____	_____	_____	_____
_____	1	_____	_____	_____	_____	_____	_____
_____	1	_____	_____	_____	_____	_____	_____
_____	1	_____	_____	_____	_____	_____	_____
<u>Tech.</u>							
_____	3	_____	_____	_____	_____	_____	_____
_____	3	_____	_____	_____	_____	_____	_____
_____	2	_____	_____	_____	_____	_____	_____
_____	2	_____	_____	_____	_____	_____	_____
_____	1	_____	_____	_____	_____	_____	_____
_____	1	_____	_____	_____	_____	_____	_____

Totals for Task I

(Total Manhours)

(Total Cost)

\* Labor Category Level (See 8.3.4)

\*\* Professional Title = Title per each Resume

## PRICE SCHEDULE B

## Task II

Name of Contractor or Subcontractor	Labor Category Level*	Professional Title**	Number of Manhours	x	Hourly Rate	=	Cost Subtotal
<u>Prof.</u>							
	4						
	4						
	4						
	3						
	3						
	3						
	2						
	2						
	2						
	1						
	1						
	1						
<u>Tech.</u>							
	3						
	3						
	2						
	2						
	1						
	1						

Totals for Task II

(Total Manhours)

(Total Cost)

\* Labor Category Level (See 8.3.4)

\*\* Professional Title = Title per each Resume

## PRICE SCHEDULE B

## Task III

Name of Contractor or Subcontractor	Labor Category Level*	Professional Title**	Number of Manhours x	Hourly Rate	= Cost Subtotal
<u>Prof.</u>					
	4				
	4				
	4				
	3				
	3				
	3				
	2				
	2				
	2				
	1				
	1				
	1				
<u>Tech.</u>					
	3				
	3				
	2				
	2				
	1				
	1				

Totals for Task III

(Total Manhours)

(Total Cost)

\* Labor Category Level (See 8.3.4)

\*\* Professional Title = Title per each Resume

## PRICE SCHEDULE B

## Task IV

Name of Contractor or Subcontractor	Labor Category Level*	Professional Title**	Number of Manhours x	Hourly Rate =	Cost Subtotal
<u>Prof.</u>					
_____	4	_____	_____	_____	_____
_____	4	_____	_____	_____	_____
_____	4	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	.	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
<u>Tech.</u>					
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____

Totals for Task IV

(Total Manhours)

(Total Cost)

\* Labor Category Level (See 8.3.4)

\*\* Professional Title = Title per each Resume

New Jersey State Library

## PRICE SCHEDULE B

Task V

Name of Contractor or Subcontractor	Labor Category Level*	Professional Title**	Number of Manhours x	Hourly Rate	= Cost Subtotal
<u>Prof.</u>					
_____	4	_____	_____	_____	_____
_____	4	_____	_____	_____	_____
_____	4	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
<u>Tech.</u>					
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____

Totals for Task V

(Total Manhours)

(Total Cost)

\* Labor Category Level (See 8.3.4)

\*\* Professional Title = Title per each Resume

## PRICE SCHEDULE B

## Task VI

Name of Contractor or Subcontractor	Labor Category Level*	Professional Title**	Number of Manhours x	Hourly Rate =	Cost Subtotal
<u>Prof.</u>					
	4				
	4				
	4				
	3				
	3				
	3				
	2				
	2				
	2				
	1				
	1				
	1				
<u>Tech.</u>					
	3				
	3				
	2				
	2				
	1				
	1				

Totals for Task VI

(Total Manhours)

(Total Cost)

\* Labor Category Level (See 8.3.4)

\*\* Professional Title = Title per each Resume

## PRICE SCHEDULE B

## Task VII

Name of Contractor or Subcontractor	Labor Category Level*	Professional Title**	Number of Manhours x	Hourly Rate =	Cost Subtotal
<u>Prof.</u>					
_____	4	_____	_____	_____	_____
_____	4	_____	_____	_____	_____
_____	4	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
<u>Tech.</u>					
_____	3	_____	_____	_____	_____
_____	3	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	2	_____	_____	_____	_____
_____	1	_____	_____	_____	_____
_____	1	_____	_____	_____	_____

Totals for Task VII

(Total Manhours)

(Total Cost)

\* Labor Category Level (See 8.3.4)

\*\* Professional Title = Title per each Resume

Firm Name:

PRICE SCHEDULE C  
Labor Categories

Firm Name:	Professional						Technical						Subcontracted Services					
	Total	Level 1	Level 2	Level 3	Professional	Total	Level 1	Level 2	Level 3	Professional	Total	Technician	Professional	Total	Technician	Professional	Total	Technician
Total Man Hours for Project																		
% of Total Professional hrs.	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Hourly Rates																		
Total Cost																		
Percent Total Project Cost																		

PRICE SCHEDULE D

- \$ per linear foot for drilling and installation of monitoring/sampling wells using Schedule 40 PVC (polyvinyl chloride) casing and Schedule 40, (minimum 5 foot) PVC screen.
- \$ per linear foot for drilling and installation of monitoring/sampling wells using Schedule 40 stainless steel casing and Schedule 40, (minimum 5 foot) stainless steel screen.
- \$ per foot of depth for soil sampling, using an appropriate boring device or core sampler, for each additional core hole or soil boring.
- \$ per cubic yard of excavated soil for each additional test pit on the Site.
- \$ unit price per surface water sampling, using appropriate equipment and procedures to sample surface water and bottom sediments at each surface water station.
- \$ unit price per potable well sampling, using appropriate equipment and procedures to determine well water quality near the Site.
- \$ per laboratory test, EPA Test Method, Purgeables - Method No. 624, Priority Pollutant scan by the purge and trap gas chromatographic/mass spectrometer (GC/MS) method.
- \$ per laboratory test, EPA Test Method, Base/Neutrals and Acid/Extractables-Method No. 625, Priority Pollutant scan by gas chromatography/mass spectrometry (GS/MS) method.
- \$ per laboratory test, EPA Test Method, Organochlorine Pesticides and PCBs - Method 608 by gas chromatograph (GS) method.
- \$ per laboratory test, by use of appropriate test methods pursuant to EPA 600/4-79-020, "Method for Chemical Analysis of Water & Wastes," and "Standard Methods for the Examination of Water and Wastewaters," 15th Edition (R.P.H.A.) for metals and inorganics.

ATTACHMENT I

Supplemental Information Package for  
Friedman Property Site

Contents:

- a. Directions to the Site from major transportation routes.
- b. Selected sections from the Remedial Action Master Plan (RAMP) for the Friedman Property:
  - (1) Introduction
  - (2) Survey of Existing Data
  - (3) Preliminary Site Evaluation
  - (4) Appendix "C" - Sampling/Analytical Data

NOTE: Section 4.15 provides any and all bidders the means to obtain more information by writing to the N. J. Division of Purchase and Property.

2. NEWMAN LUMINARY SITE: Northern Edge of the intersection of County Routes 539 & 537, Upper Freehold Township,  
Monmouth County.

DIRECTIONS FROM MAJOR ROADWAYS:

New Jersey Turnpike:      Exit 7A to Route 195 East  
                                195 East to Exit 7, Allentown  
                                Right on Main Street to Route 539  
                                Left on 539 to intersection of 537.

Garden State Parkway:     Exit Route 195 West, proceed to Exit 7, Allentown  
                                Right on Main Street to Route 539  
                                Left on 539 to intersection of 537.

or

Exit State Route 70 to intersection of Route 539  
proceed North on 539 to intersection Route 537.

6.

## 1. INTRODUCTION

### 1.1 Purpose

The purpose of this Remedial Action Master Plan (PAMP) is to provide a general planning tool for use by the organization or agency responsible for overseeing the cleanup of the Friedman Property. A detailed project work statement and cost estimate (Appendix A) have been prepared for the Remedial Investigation, which requires no prerequisite actions or studies. The ensuing Feasibility Study has been described at a project level of detail, with an accompanying budget level cost estimate. Other subsequent tasks have been outlined at a conceptual level only, since their scope, implications and costs are dependent upon previous tasks.

### 1.2 Background and Need

The Friedman Property is located in Upper Freehold Township, Monmouth County, New Jersey. It is an uncontrolled hazardous waste site which has been listed on the United States Environmental Protection Agency's interim list of 115 top-priority disposal sites, making it eligible for remedial action under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), better known as "Superfund". Prior to and independent of Federal involvement at the Friedman Property, the New Jersey Department of Environmental Protection (NJDEP) identified and performed limited testing at the site in order to assess the dangers posed by past disposal

practices. More recently, Fred C. Hart Associates, Inc. performed a limited investigation at the site as a USEPA Field Investigation Team (FIT).

The dumping of hazardous waste materials at the Friedman Property occurred at various times from the late 1950's to the late 1960's or early 1970's.

Since several residences and a trailer park which use water from private wells are located within a quarter-mile radius of the site, there is a potential for adverse health effects.

Analyses of water taken from wells located in the area of waste dumping have shown a low level of contamination of some organics. Sediment samples from various locations on the property showed only trace levels of pollutants.

Presently there exists very little hard evidence to indicate that the site has had any adverse effects upon the public health or the surrounding environment. Although significant negative impacts are possible, they have not been documented. Consequently, the primary initial need at the Friedman Property is to explore the effects of onsite hazardous waste materials. These effects are potentially severe, due to the environmental setting and geographic location of the site. Should ongoing contamination be identified, the prompt implementation of remedial measures might be justified.

## 2. SURVEY OF EXISTING DATA

The Survey of Existing Data for the Friedman Property site was performed in the following manner:

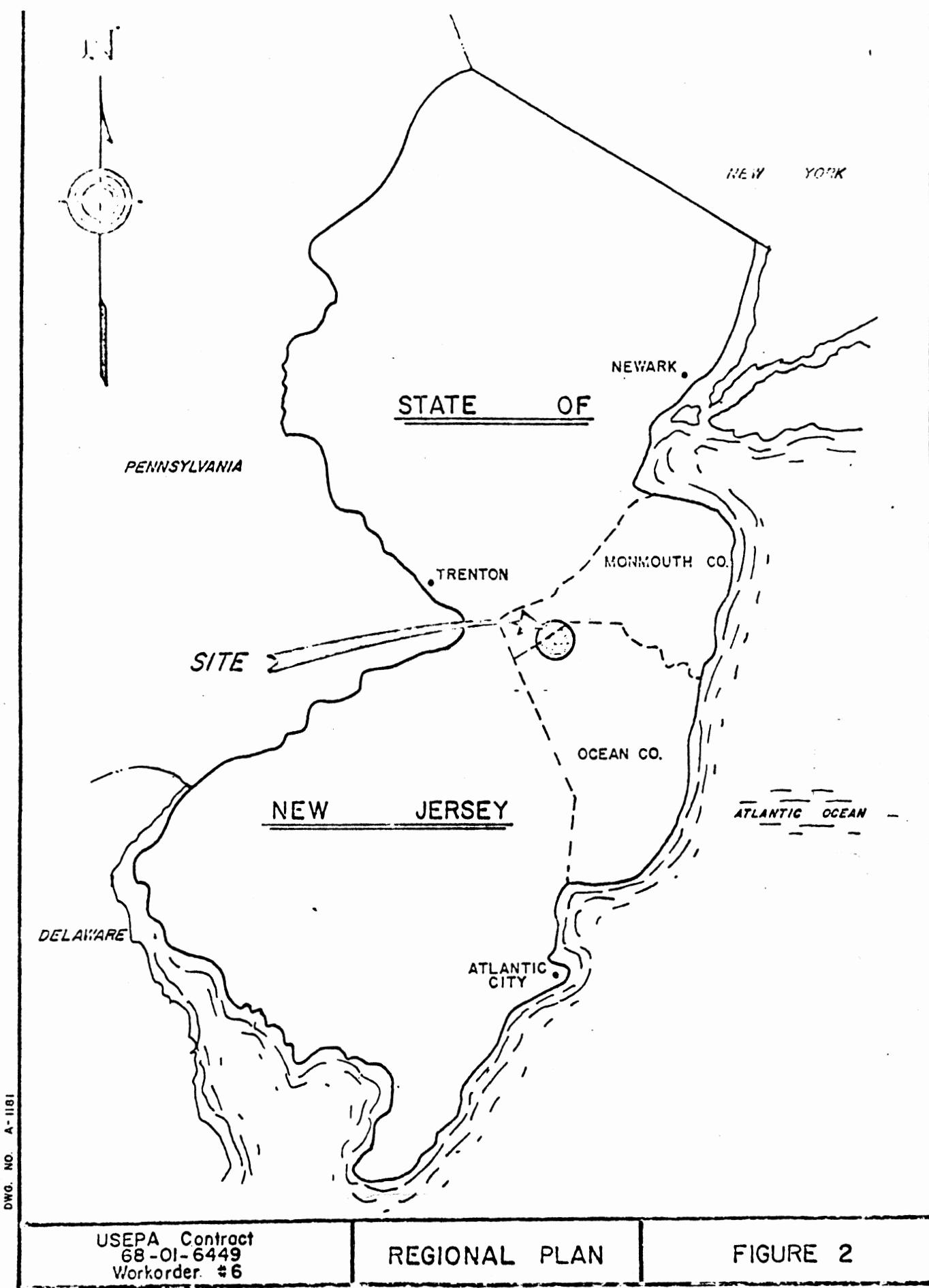
- Site files in the possession of the United States Environmental Protection Agency were reviewed at the USEPA offices in New York, New York (Federal Plaza) and Edison, New Jersey.
- Site files in the possession of the New Jersey Department of Environmental Protection were reviewed at the offices of the Division of Hazard Management in Yardville, New Jersey and the Division of Water Resources in Trenton, New Jersey. Access to NJDEP files was limited, however, as discussed below.
- Several meetings were held with personnel from USEPA and NJDEP.
- The site was visited on December 1, 1981.

The Survey of Existing Data presented in this section is considered to be incomplete. This is the result of impending litigation concerning the Friedman Property which made it impossible to obtain certain information or secure free access to the files of the New Jersey Department of Environmental Protection. After an initial brief reconnaissance visit with the Division of Hazard Management in Yardville and the Division of Water Resources in Trenton, direct access to the files of NJDEP was terminated. Despite this limitation, all available data has been collected and categorized, with deficiencies noted where they are known to exist. All existing but unavailable data noted in this section is in the possession of NJDEP, Divisions of Hazard Management and/or Water Resources. It is

recommended as part of the Remedial Action Master Plan (Section 4), that this existing data base be reviewed, completed and/or verified by NJDEP personnel.

## 2.1. Background

- 2.1.1      Location - The Friedman Property is located in Upper Freehold Township, Monmouth County, New Jersey (Figure 2). The site is just across the boundary of Plumsted Township, at the intersection of Routes 537 and 539 (Figure 3). Several homes and two trailer parks are located within one-quarter mile of the site. (Figure 4).
- 2.1.2      Site History - The Friedman Property was allegedly used for the dumping of hazardous chemical wastes, as well as domestic garbage, in the late fifties and early sixties. The wastes were subsequently covered; there is no visible evidence of them today. The site was identified as a hazardous waste dump in February, 1980 by the NJDEP Division of Hazard Management. This Agency erected a snow fence around the site and installed four (4) monitoring wells in 1980. In July, 1981 Fred C. Hart Associates, acting as a Field Investigation Team for the USEPA, performed a limited site investigation at the Friedman Property. The available analytical results from this investigation are presented in Appendix C.
- 2.1.3      Environmental Setting - The site consists



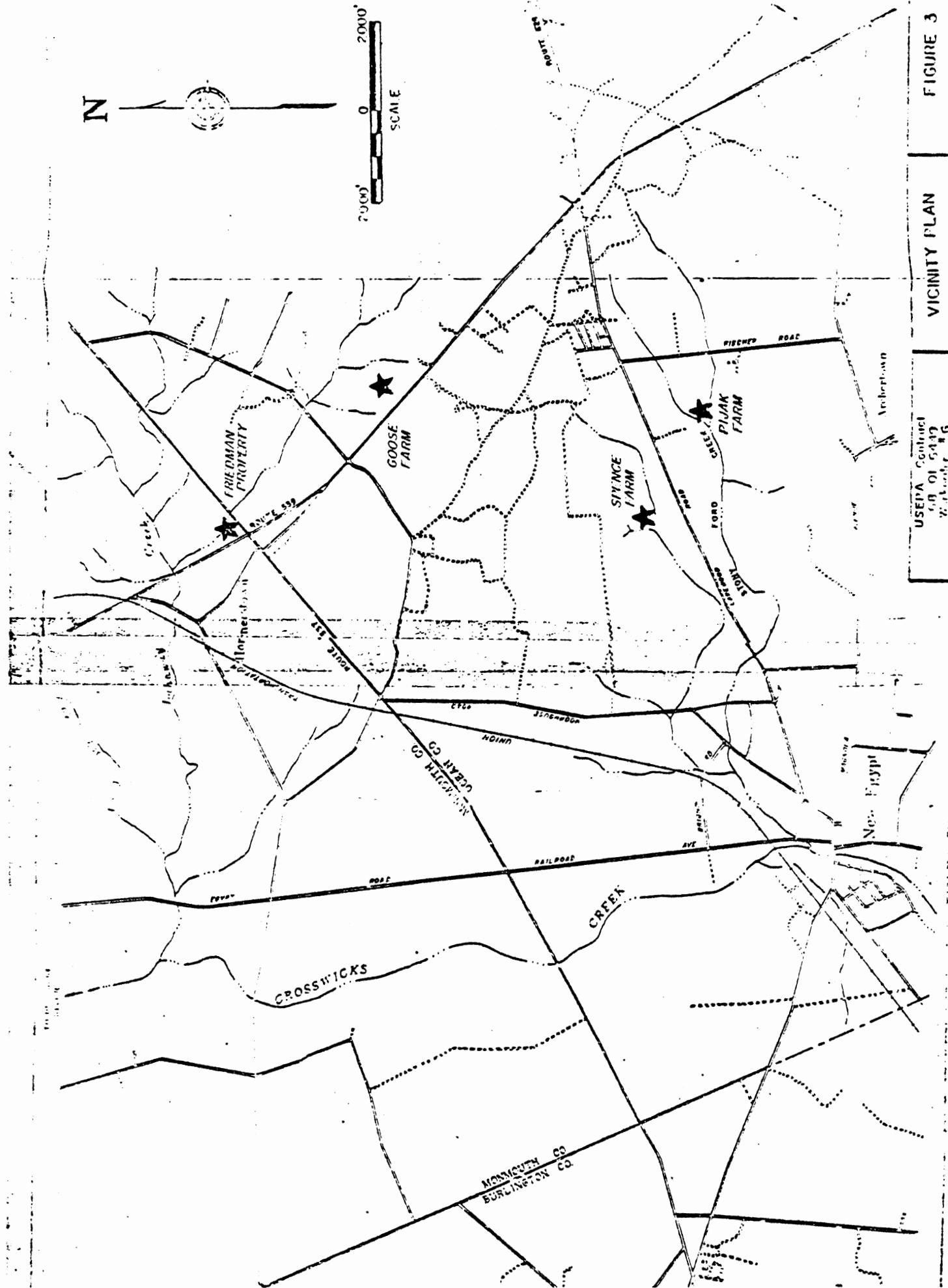


FIGURE 3 VICINITY PLAN

USER'S GUIDE

primarily of field weed type vegetation, with some small trees and shrubs. It is located adjacent to an unnamed tributary to Lahaway Creek. Several small feeder streams once crossed the property and discharged into this tributary. Waste materials were apparently dumped into one or more of these feeder streams, then covered over.

The tributary adjacent to the site flows northwestward into Lahaway Creek, from where it flows westward into Crosswicks Creek, and then northwestward again until it finally discharges into the Delaware River near Trenton. As far as is known, surface water leaving the site is not used as a direct source of potable water supply anywhere along this route. The environmental habitat, floral and faunal populations downstream from the site are unknown; however, the USGS quadrangle map does indicate that a number of cranberry bogs are located along the tributary upstream from the Friedman Property.

There is a potential for groundwater contamination from the site. A NJDEP Regional Geology Report for the nearby Goose Farm site indicates that several important aquifers are present in the area, the most important being the Vincetown and Mt. Laurel-Wenonah. Monitoring well data was not available to ascertain the vertical separation between the buried hazardous waste materials onsite and the water table.

## 2.2 Methods for Determining Extent of Contamination

Figure 5 indicates the approximate locations of suspected hazardous waste materials at the Friedman Property. These locations, which should be confirmed (Appendix A), were identified during conversations with personnel from the NJDEP. The following methods have been utilized or considered to determine the nature, extent and impacts of hazardous wastes at the site.

2.2.1     Visual Inspection - The site has been visually inspected by personnel from NJDEP on numerous occasions, and by a representative of USEPA Region II and URS Company on December 1, 1981 and by the FIT Team in May and June 1981.

2.2.2     Public Input/Affidavits - Shortly after the site was identified in February, 1980, public input was solicited and affidavits were obtained from those actually familiar with and involved in the dumping operations. This information, however, was not available.

2.2.3     Time Sequence Aerial Imagery - A Site Analysis, using Time Sequence Aerial Imagery (1951, 1956, 1962, 1963, 1965, 1974, 1979), was prepared for the Friedman Property by the USEPA Environmental Photographic Interpretation Center in Warrenton, Virginia. Although this was not available until after the initial characterization, NJDEP personnel related to us that it was

checked and found to be consistent with the previously-established site activity profile.

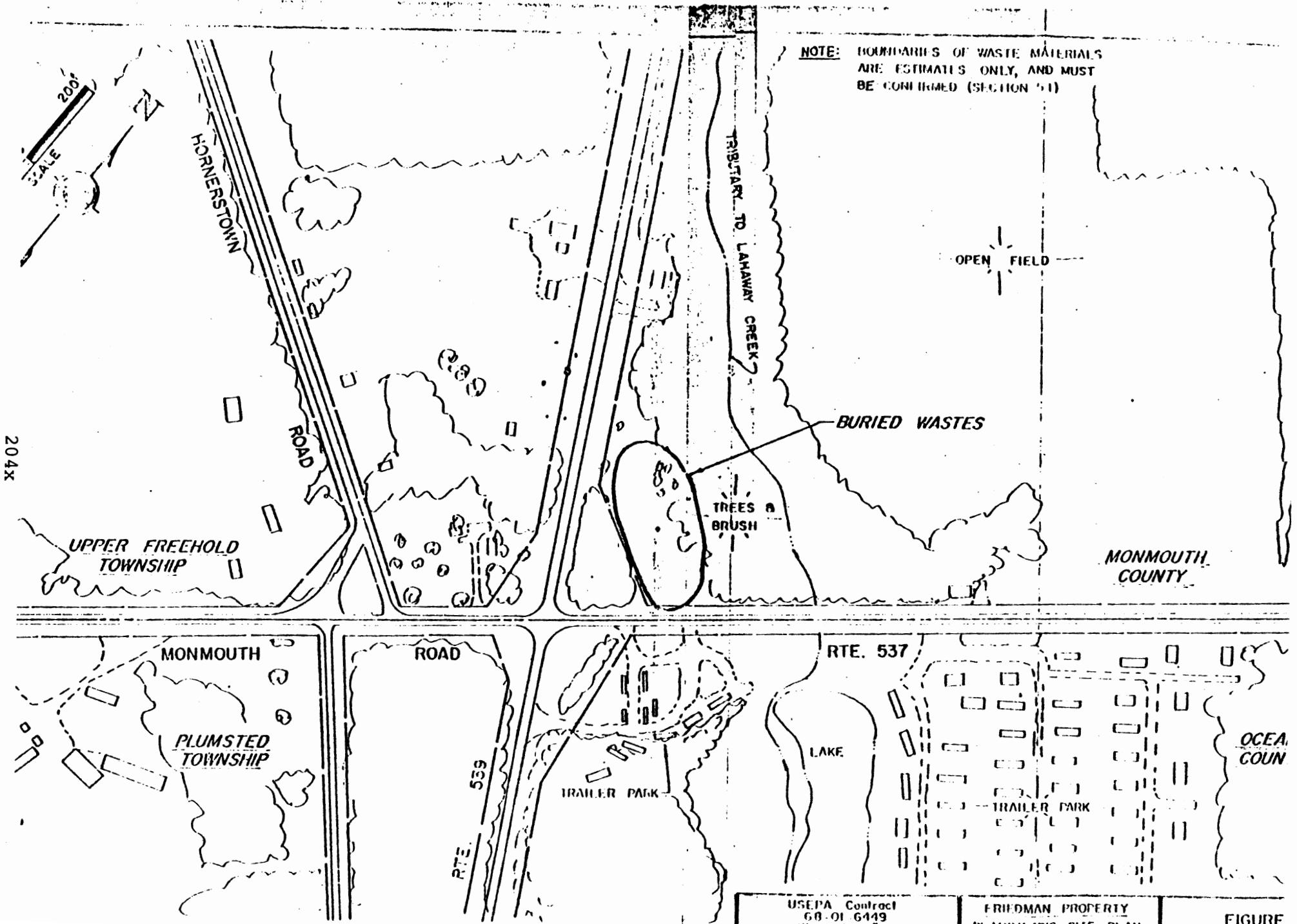
- 2.2.4 Infrared Aerial Imagery - According to personnel from NJDEP, infrared imagery was obtained from the site with the assistance of EG & G, Energy Measurements Group through the United States Department of Energy. The purpose of this analysis was to estimate limits of contamination by the characteristic of vegetative stress. It was determined by NJDEP personnel, however, that the results were inconclusive; the effort was subsequently terminated.
- 2.2.5 Topographic Maps - The only available topographic map of the site, is the large-scale (1:24,000) USGS quadrangle map for New Egypt, New Jersey.
- 2.2.6 Geology Report - There has been no geology report prepared specifically for the Friedman Property. A Regional Geology Report prepared by NJDEP for Goose Farm, approximately one (1) mile to the northeast, contains much information which would undoubtedly be applicable to the Friedman Property also.
- 2.2.7 Metal Detector Survey - An informal metal detector survey was performed at the Friedman Property by NJDEP. The survey was not documented, but the information obtained from it has reportedly been used by NJDEP

internally to evaluate the limits of discarded drums at the site. The instrument used for this survey was a Fourdee/Model 4P2200/DEP32314. Several additional metal detector readings were taken by Fred C. Hart Associates during the FIT investigation. Although several readings were positive, it is unknown whether the readings indicated drums or other metallic objects.

- 2.2.8     Electrical Resistivity Survey - No resistivity survey has been performed at the Friedman Property. Such a survey was, however, performed by NJDEP personnel at Goose Farm and found at that site to be an effective method for estimating the extent of the contaminated groundwater plume.
- 2.2.9     Sampling of Onsite Waste Materials - There have been no samples of onsite waste materials at the site, since these materials are all buried and out of sight.
- 2.2.10    Sediment Sampling - Sediment samples in the streams were taken at six (6) locations by Fred C. Hart Associates as part of the Field Investigation Team (FIT) study. The location at which the samples were taken and the results of the analyses are shown in Appendix C. Trace levels of various organic contaminants were indicated.
- 2.2.11    Surface Water Sampling - Surface water samples were taken as part of the FIT study at six (6) locations onsite and in the adjacent

tributary. The analysis for metals was performed by the USEPA laboratory in Edison, New Jersey; the analysis for organics was performed by Mead Technology Laboratories. The metal concentrations were found to be all close to normal. Trace level contamination of organics was found to exist (Appendix C). The results from upstream and downstream locations were not found to be significantly different.

- 2.2.12 Groundwater Sampling - The NJDEP installed four (4) monitoring wells onsite in 1980. Data concerning these wells, including well logs, is unavailable. One of these wells was sampled by NJDEP in June, 1980 and analyzed by Stablex-Reutter, Inc. The results (Appendix B) revealed the presence of several organic contaminants. Three (3) of these wells were located by the FIT team and sampled in July, 1981. The metal analyses, performed by the USEPA laboratory in Edison, revealed high metal concentrations in each of the wells. The organic analyses of these groundwater samples, performed by Mead Technology Labs, showed significant levels of pentachlorophenol, Bis(2-Chloroethoxy) methane and 1-2 trans-dichloroethylene.
- 2.2.13 Air Monitoring - No air monitoring samples have been taken at the Friedman Property.



### 3. PRELIMINARY SITE EVALUATION

#### 3.1 Data Gaps

The available data seems to indicate that the groundwater at the Friedman Property, at least in the area of dumping, is contaminated. There is no evidence at this time, however, to indicate the extent of this contamination. The available data also does not indicate any contamination of surface water from the site. The data base has been reviewed in its entirety, and data gaps have been identified below. Prior to the acquisition of additional data for the site, it is recommended that the Survey of Existing Data (Section 2) be reviewed and verified by NJDEP.

##### 3.1.1 Physical Site Conditions - The following data gaps have been identified concerning physical conditions at the site:

1. Nature and Extent of Onsite Hazardous Waste Materials - Insufficient data has been provided concerning the nature and extent of onsite waste materials. Since these wastes are not visible, the best source of information concerning them might be testimony from the general public and the dumpers themselves. Although this testimony is reported to exist, it was unavailable for review. The metal detector survey performed by NJDEP was apparently informal and undocumented. The several metal detector readings by the FIT team do not constitute a detailed survey of

the site (Note: the heterogeneous nature of waste materials dumped at the Friedman Property will probably make it impossible to segregate hazardous waste drums from nonhazardous metal debris; however, a metal detector survey can delineate the maximum extent of the two combined waste types.)

2. Topography - There is no topographic map of the Friedman Property at a scale which would permit detailed site work or analysis.
3. Geology and Soils - There has been no detailed investigation of soils, geology and hydrogeology at the site.
4. Spatial Relationship Between Hazardous Waste Materials and Aqueous Transport Media - There is no detailed information concerning the spatial relationship between onsite waste materials and the surface or groundwater media which might potentially transport them offsite. For example, the depth to water table, vertical separation between the water table and waste materials, are all unknown. Additionally, the path and volume of the feeder streams which apparently pass through the dump area are unknown. This information is necessary to determine whether or not

it would be feasible to cap and isolate the hazardous materials onsite.

3.1.2

Transport Media - The following data gaps have been identified concerning the quality and characteristics of transport media at the Friedman Property:

1. Surface water - Samples taken by the FIT team indicate no metals contamination of surface water onsite or in the adjacent tributary. The organic analyses show low levels of organics. The streamflow conditions at the time of sampling are unknown. A follow-up round of samples, under alternate flow conditions, has not been performed. The site lies in a flood prone area identified by the Federal Insurance Administration.
2. Groundwater - Groundwater analyses indicate organic and metal contamination of groundwater onsite. Details concerning the installation of existing groundwater monitoring wells are unavailable. The FIT Team identified three (3) of with wells to be two-inch PVC, and to extend fifteen (15) feet below the top of the casings. Little effort has been made as of this time to identify a potential contaminant plume or to trace its movement. Sampling of nearby supply wells has not been performed.

3. Air - No air monitoring has been performed at the site.

### 3.1.3

Receptors - The following data gaps have been identified concerning the possible impacts of the site upon the public health and environment:

1. Human population - It is reported that the Upper Freehold Township utilizes groundwater for potable supply. Of special concern are the several homes and two (2) trailer parks located very close to the site (Figure 4). The potential for contamination of these sources would logically be addressed in a hydrogeology report for the site, which has not yet been prepared. Secondary groundwater uses, such as irrigation wells, are also logically addressed in such a study. The potential for human contamination from surface water, either by direct or indirect consumption, or by physical contact, is unknown. There are unverified reports that people living on either side of the site have had urinary tract disorders. No backup data for this assertion is available.
2. Environment - The environmental habitat, including floral and faunal populations, at and downstream from the site is unknown.

APPENDIX C

SAMPLING/ANALYTICAL DATA

FRIEDMAN PROPERTY

# Piejack Resources Inc.

The Reutter Building, Ninth and Cooper Streets  
Cranford, New Jersey 07011  
Telephone: 609 - 541-6700 TWX: 7106910547



September 25, 1980

State of New Jersey  
Dept. of Environmental Protection  
Office of the Commissioner  
Office of Hazardous Substances  
PO. # CN 029  
Trenton, NJ 08625

WMII - NO - 007

Attention: Mr. Scott Santora

Reference: Test Report No. S1121-A; OHSC No. 80-2-27-3; Contract No. A-02429

This report covers the chemical analysis conducted to date on the seven (7) Plumsteadville well water and sediment samples that were submitted to Stablex-Reutter Incorporated (SRI) on June 4, 5 and 6, 1980 by the N.J.D.E.P. Office of Hazardous Substance Control (OHSC). The following is a list of the SRI identification numbers and the OHSC sample designations:

<u>SRI Identification Number</u>	<u>OHSC Sample Designation</u>
S1121-1	C# 35759 (site 5, well 1)
S1121-2	C# 35760 (site 5, well 8)
S1121-3	C# 35762 (site 5, well 2)
S1121-4	C# 35763 (site 5, stream)
S1121-5	C# 03531 (site 5, well 4)
S1121-6	C# 03532 (site 8, well 1) <i>Upper Freehold</i>
S1121-7	C# 35776 (site 2, well 1) <i>Piejack</i>

The analytical data developed to date on the above seven (7) well water and sediment samples is detailed in the tables attached to this report.

State of New Jersey  
 Dept. of Environmental Protection  
 Test Report No. S1121-A  
 September 25, 1980

Table I - Inorganic Compounds

<u>Contaminant*</u>	<u>C# 03531</u>	<u>C# 03532</u>	<u>C# 035776</u>
Antimony	0.005	<0.005	0.5 mg/kg
Arsenic	<0.01	<0.01	0.59 mg/kg
Beryllium	<0.01	<0.01	1 mg/kg
Cadmium	<0.01	<0.01	1 mg/kg
Chromium	0.13	<0.05	5 mg/kg
Copper	<0.05	<0.05	5 mg/kg
Total Cyanides	<0.1	1.2	<1.0 mg/kg
Lead	<0.05	<0.05	5 mg/kg
Mercury	<0.02	<0.02	0.2 mg/kg
Nickel	<0.05	<0.05	5 mg/kg
Selenium	<0.002	<0.002	0.35 mg/kg
Silver	<0.01	<0.01	6 mg/kg
Sulfide	<0.2 mg/kg	0.3 mg/kg	0.2 mg/kg
Thallium	<0.05	<0.05	5 mg/kg
Zinc	0.29	0.37	41 mg/kg
Asbestos (fibrous)	NA	NA	NA

\* All results reported as milligrams of contaminant per liter of sample unless otherwise noted.

NA - Not Applicable to the samples.

State of New Jersey  
 Dept. of Environmental Protection  
 Test Report No. S1121-A  
 September 25, 1980

Table II - Acid Extractable Compounds

<u>Contaminant*</u>	C#03531	C#03532	OHSC Sample Designation <u>C#35776</u>
2-Chlorophenol	<0.1	<0.1	(1)
2-Nitrophenol	<0.1	<0.1	(5)
Phenol	0.73	<0.1	(5)
2, 4-Dimethylphenol	0.57	<0.1	(5)
2, 4-Dichlorophenol	<0.1	<0.1	(95)
2, 4, 6-Trichlorophenol	<0.1	<0.1	(5)
4-Chloro-3-methyl-phenol	<0.1	<0.1	(5)
2, 4-Dinitrophenol	<0.1	<0.1	(5)
2-Methyl-4, 6-dinitro-phenol	<0.1	<0.1	(5)
Pentachlorophenol	<0.1	<0.1	(5)
4-Nitrophenol	<0.1	<0.1	(6.2)
Total phenols**	1.0	<0.05 mg/kg	0.22 mg/kg

\* All results reported as milligrams of contaminant per liter of sample unless otherwise noted.

\*\* Those compounds that are measured by the 4-aminoantipyrine method.

\*\*\* Phenolic compounds extracted from this soil sample with deionized water.

# ~~Tex~~-Reutter Inc.

State of New Jersey  
 Dept. of Environmental Protection  
 Test Report No. S1121-A  
 September 25, 1980

Table IIIA - Basic Neutral Extractable Compounds

Contaminant*	OIIIS Sample Designation		
	C#03531	C#03532	C#35776
1, 2-Dichlorobenzene	5	0.5	0 mg/kg
1, 3-Dichlorobenzene	5	0.5	0 mg/kg
1, 4-Dichlorobenzene	5	0.5	0 mg/kg
Hexachloroethane	5	0.5	0 mg/kg
Hexachlorobutadiene	5	0.5	0 mg/kg
Hexachlorobenzene	5	0.5	0 mg/kg
1, 2, 4-Trichlorobenzene	5	0.5	0 mg/kg
bis(2-Chloroethoxy)methane	5	0.5	0 mg/kg
Naphthalene	5	0.5	0 mg/kg
2-Chloronaphthalene	5	0.5	0 mg/kg
Isophorone	5	0.5	0 mg/kg
Nitrobenzene	5	0.5	0 mg/kg
2, 4-Dinitrotoluene	5	0.5	0 mg/kg
2, 6-Dinitrotoluene	5	0.5	0 mg/kg
2-Bromophenyl phenyl ether	5	0.5	0 mg/kg
bis(2-Ethylhexyl) phthalate	5	0.52	0 mg/kg
Di-n-octyl phthalate	5	0.5	0 mg/kg
Dimethyl phthalate	5	0.5	0 mg/kg
Diethyl phthalate	5	0.5	0 mg/kg
Di-n-butyl phthalate	5	0.5	15 mg/kg
Acenaphthylene	5	0.5	0 mg/kg
Acenaphthene	5	0.5	0 mg/kg
Butyl benzyl phthalate	5	0.5	0 mg/kg

\* All results reported as milligrams of contaminant per liter of sample unless otherwise noted.

# Tex-Roller Inc.

State of New Jersey  
 Dept. of Environmental Protection  
 Test Report No. S1121-A  
 September 25, 1980

Table IIIB - Base Neutral Extractable Compounds

<u>Contaminant*</u>	<u>OIIIC Sample Designation</u>	C# 03531	C# 03532	C# 3576
Fluorene		0.5	0.5	33 mg/kg
Fluoranthene		0.5	0.5	40 mg/kg
Chrysene		0.5	0.5	40 ng/kg
Pyrene		6.4	4.0	160 mg/kg
Phenanthrene		0.5	0.5	40 mg/kg
Anthracene		0.5	0.5	50 mg/kg
Benzo(a)anthracene		0.5	0.5	40 mg/kg
Benzo(b)fluoranthene		0.5	0.5	40 ng/kg
Benzo(k)fluoranthene		0.5	0.5	40 ng/kg
Benzo(a)pyrene		0.5	0.5	40 ng/kg
Indeno(1,2,3-c,d)pyrene		0.5	0.5	40 mg/kg
Dibenzo(a,h)anthracene		0.5	0.5	40 mg/kg
Benzo(g,h,i)perylene		0.5	0.5	40 mg/kg
4-Chlorophenyl phenyl ether		<0.5	40.5	40 mg/kg
3,3'-Dichlorobenzidine		0.5	0.5	40 mg/kg
Benzidine		0.5	0.5	40 mg/kg
Bis(2-Chloroethyl)ether		0.5	0.5	40 ng/kg
1,2-Diphenylhydrazine		0.5	0.5	40 mg/kg
Hexachlorocyclopentadiene		0.5	0.5	40 mg/kg
N-Nitrosodiphenylamine		0.5	0.5	40 ng/kg
N-Nitrosodimethylamine		0.5	0.5	40 ng/kg
N-Nitrosodi-n-propylamine		0.5	0.5	40 ng/kg
bis(2-Chloroisopropyl)ether		0.5	0.5	40 ng/kg

\* All results reported as milligrams of contaminant per liter of sample unless otherwise noted.

\*\* Analysis for this compound was not conducted due to the prohibitive cost involved. The likelihood of finding a detectable amount of this compound present in these samples is remote.

*plex Reutter Inc.*

State of New Jersey  
 Dept. of Environmental Protection  
 Test Report No. S1121-A  
 September 25, 1980

Table IV - Purgeable Organic Compounds

Contaminant*	OHSC Sample Designation		
	C#03531	C#03532	C#35776
Acrolein	*	*	*
Acrylonitrile	*	*	*
Chloromethane	ND	ND	ND
Bromomethane	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND
Vinyl chloride	ND	ND	ND
Chloroethane	ND	ND	ND
Methylene chloride	2.0	ND	ND
Trichlorofluoromethane	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND
1,1-Dichloroethane	5.6	(9.5)	ND
trans-1,2-Dichloroethylene	ND	ND	ND
Chloroform	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND
Bis(Chloromethyl)ether	ND	ND	ND
1,1,1-Trichloroethane	6.0	(6.7)	ND
Carbon tetrachloride	ND	ND	ND
Bromodichloromethane	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND
Trichloroethylene	3.7	ND	ND
Dibromochloromethane	ND	ND	ND
Benzene	57	ND	ND
1,1,2-Trichloroethane	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND
Bromoform	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND
Tetrachloroethylene	ND	ND	ND
Toluene	5	ND	ND
Chlorobenzene	ND	ND	ND
Ethyl benzene	0.24	ND	ND
Total Nylenes	0.4	ND	ND
Syrene	ND	ND	ND

\* All results reported as milligrams of contaminant per liter of sample unless otherwise noted.

\*\* Analysis for this compound was not conducted due to the prohibitive cost involved.  
 The likelihood of finding a detectable amount of this compound present in these samples is remote.

ND - None Detected.

State of New Jersey  
 N.J. Dept. of Environmental Protection  
 Cost Report No. S1121-A  
 September 25, 1980

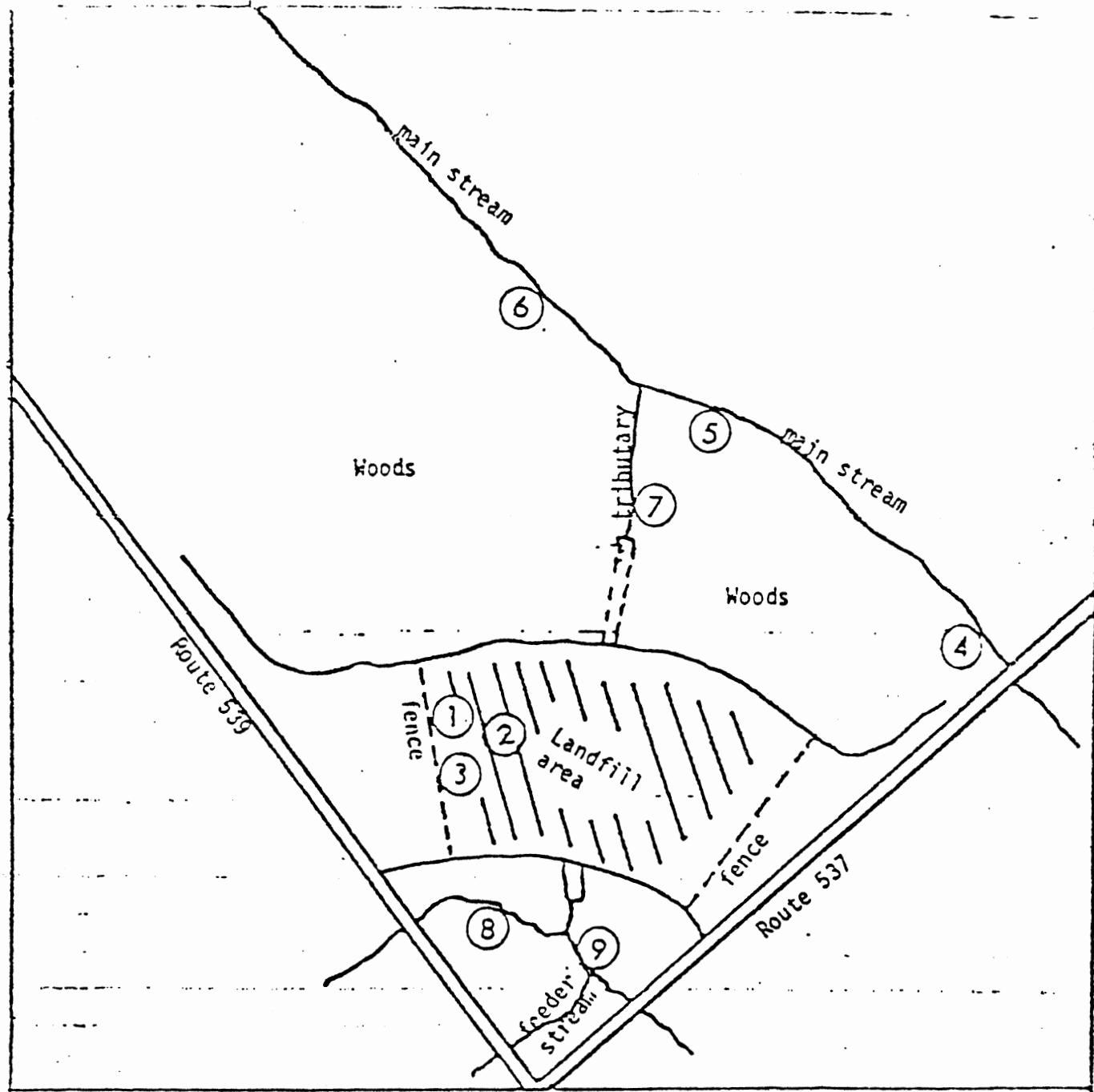
Table V - Pesticidal Compounds and Polychlorinated Biphenyls

<u>Contaminant*</u>	<u>OHSC Sample Designation</u>	
	C#03532	C#35776
Aldrin	0.05	0.1 mg/kg
alpha BHC	0.05	0.1 mg/kg
beta BHC	0.05	0.1 mg/kg
delta BHC	0.05	0.1 mg/kg
gamma BHC	0.05	0.1 mg/kg
Chlordane	0.05	0.1 mg/kg
Dieldrin	0.05	0.1 mg/kg
p,p'-DDE	0.05	0.1 mg/kg
p,p'-DDD	0.05	0.1 mg/kg
p,p'-DDT	0.05	0.1 mg/kg
Endosulfan I	0.05	0.1 mg/kg
Endosulfan II	0.05	0.1 mg/kg
Endosulfan Sulfate	0.05	0.1 mg/kg
Endrin	0.05	0.1 mg/kg
Endrin Aldehyde	0.05	0.1 mg/kg
Heptachlor	0.05	0.1 mg/kg
Heptachlor epoxide	0.05	0.1 mg/kg
Toxaphene	0.05	4.0 mg/kg
Unknown Chlorinated Hydrocarbons***	0.05	0.10 mg/kg
Arochlor 1016	0.25	4.0 mg/kg
Arochlor 1221	0.25	4.0 mg/kg
Arochlor 1232	0.25	4.0 mg/kg
Arochlor 1242	0.25	4.0 mg/kg
Arochlor 1248	0.25	4.0 mg/kg
Arochlor 1254	0.25	4.0 mg/kg
Arochlor 1260	0.25	4.0 mg/kg
2,3,7,8 - Tetrachloro-dibenzo-p-dioxin	**	**

\* All results reported as milligrams of contaminant per liter of sample unless otherwise noted.

\*\* Analysis for this compound was not conducted due to the prohibitive cost involved and the extreme safety precautions required when working with a standard solution. The likelihood of finding a detectable amount of this compound present in these samples is remote.

\*\*\* Quantified as Aldrin.



N  
A

FIGURE 2  
SKETCH MAP  
Plumsted Site #8  
sampling locations  
Fred C. Hart Associates, Inc.  
mR 7/7/81

TABLE 5

INORGANICS	SAMPLE NUMBER								
	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>	D <sub>6</sub>	D <sub>7</sub>	D <sub>8</sub>	D <sub>9</sub>
Aluminum									
Chromium 50	160.0	850.0	320.0	8.0 <sup>a</sup>	6.0 <sup>a</sup>	6.0 <sup>a</sup>	6.0 <sup>a</sup>	6.0 <sup>a</sup>	6.0 <sup>a</sup>
Barium									
Beryllium .0027	7.8	98.0	3.0	<4	<4	<4	2.8	<4	6.5
Cadmium 10	8.0 <sup>a</sup>	21.0	20.0 <sup>a</sup>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cobalt									
Copper	40.0	540.0	61.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron									
Lead 50	170.0	670.0	250.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Nickel 100	40.0 <sup>a</sup>	290.0	120.0	<10.0	<10.0	<10.0	<10.0	10.0 <sup>a</sup>	10.0 <sup>a</sup>
Manganese									
Zinc	870.0	3700.0	1700.0 <sup>a</sup>	20.0 <sup>a</sup>	20.0	8.0 <sup>a</sup>	10.0	67.0	130.0
Boron									
Nanadium									
Calcium									
Magnesium									
Sodium									
Arsenic .0022	5.5	35.0	46.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Antimony	<10.0	40.0 <sup>a</sup>	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Selenium	<1.0	<6.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Thallium	<0.5	2.0 <sup>a</sup>	0.7 <sup>a</sup>	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury .144	<0.2	2.02	.73	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Tin									
Silver	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Nitrate									
Fluoride									
Sulfide									
Cyanide									
pH									
TOC									

all results in ug/l

<sup>a</sup> = estimated value

HAZARDOUS WASTE SITE INVESTIGATION  
Plumsted Site #8  
Upper Freehold Township, N.J.  
(Addendum to Interim Report)

TDD #02-8104-04

December 23, 1981

Participating Personnel:

Fred C. Hart Associates, Inc.

Dave Lipsky, Ph.D, Assistant FIT Leader  
Paresh Parekh, P.E. Sr. Environmental Engr.  
Pete Cangialosi, Sr. Environmental Engineer  
Tom Hughes, Hydrogeologist  
Kuo-I Chen, Chemical Engr.  
Michael Rosenberg, Sr. Environmental Engr.

Report Prepared by:

Michael Rosenberg  
Michael Rosenberg  
Sr. Environmental Engineer

/hs

New Jersey State Library

## BACKGROUND

In the interim report submitted to EPA on July 31, 1981 the only analytical results available were for metals in water samples. This addendum to the interim report includes organic data for both water and sediment samples. Table 1 provides a list of locations sampled, sample type, lab name, and sample number.

## SAMPLING RESULTS

Analytical results for water samples are provided in Table 2 and for sediment samples in Table 3. Monitoring wells D-2 and D-3 revealed concentrations of pentachlorophenol at 160 ug/l and 220 ug/l respectively. These concentrations of pentachlorophenol exceed the suggested no-adverse-effect of 0.021 mg/l recommended for drinking water by the National Academy of Sciences in their publication Drinking Water and Health (1977). Well D-2 also contained significant concentrations of Bis(2-chloroethoxy) methane and 1,2 trans-dichloroethylene. Other water samples did not indicate any of the priority pollutants in significant concentrations. Results from upstream and downstream locations are not significantly different from each other. Sediment samples revealed several base neutral compounds in trace quantities which do not appear to be significant.

## STATE INVOLVEMENT

According to Fred Schmidt of the office of Hazards Management and to Joe Przywer of the Health Dept. New Jersey DEP has collected samples of wellwater at private homes in the vicinity of the Upper Freehold Township site. It is recommended that EPA obtain the results of this sampling prior to any additional sampling by the Field Investigation Team.

SUMMARY OF LOCATIONS SAMPLED - 6/2/81 - PLUMSITE SITE #8

Sample Location	Sample Type	Lab	EPA/Contractor Lab No.
Monitoring Well D1	Metals Organics	EPA Mead Technology Labs	61003 B0529
Monitoring Well D2	Metals Organics	EPA Mead	61004 B0532
Monitoring Well D3	Metals Organics	EPA Mead	61005 B0530
Main Stream at Route 537 Bridge	Metals Organics Sediment	EPA Mead Mead	61006 B0533 B0553
Main Stream immediately downstream of Tributary	Metals Organics Sediment	EPA Mead Mead	61007 B0556 X B0558
Main Stream immediately downstream of Tributary	Metals Organics Sediment	EPA Mead Mead	61008 B0555 B0554
Ributary upstream of main stream	Metals Organics Sediment	EPA Mead Mead	61009 B0534 B0557
Ributary upstream of ceder stream	Metals Organics Sediment	EPA Mead Mead	61010 B0551 B0559
Ceder stream upstream of Tributary	Metals Organics Sediment	EPA Mead Mead	61011 B0552 B0560

Due to limitations of contract lab, sediments analyzed for extractables only.

400 INDUSTRIAL EXTRACTABLES	SAMPLE NUMBER							
	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>	D <sub>6</sub>	D <sub>7</sub>	D <sub>8</sub>
1,1,1,2-Tetrachlorobenzene								
Hexachlorobutadiene								
Hexachloroethane								
Bis (2-chloroethyl)ether								
2-Chloronaphthalene								
1,2-Dichlorobenzene								
1,2-Dichlorobenzene								
1,4-Dichlorobenzene								
3,3-Dichlorobenzidine								
2,4-Dinitrotoluene								
2,6-Dinitrotoluene								
1,2-Diphenylhydrazine								
Fluorene								
4-chlorophenyl phenyl ether								
4-Bromophenyl phenyl ether								
Bis (2-chloroisopropyl) ether								
Bis (2-chloroethoxy)methane				41				
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Isophorone								
Naphthalene								
Nitrobenzene								
N-nitrosodimethylamine								
N-nitrosodiphenylamine								
N-nitrosodi-n-propylamine								
Bis(2-ethylhexyl) phthalate								
Butyl benzyl phthalate								
Di-n-butyl phthalate								
Di-n-octyl phthalate								
Diethylphthalate								
Dimethylphthalate								
Benzo(a)anthracene (1,2-benzanthracene)								
Benzo(a) pyrene								
Benzo(b) fluoranthene								
Benzo(k) fluoranthene								
Chrysene								
Aceanaphthylene								
Anthracene								
Benzo(chi) perylene (1,12-benzoperylene)								

Blank spaces indicate that the chemical was not detected

Results in ug/l

	80549	80550	80552	80553	80554	80551	80555	80556
Acetone								
1,3-butadiene								
(benzene, a,1')-anthracene (1,2,3,6-tetraenzanthracene)								
Indeno[1,2,3-cd] naphthalene								
2,3,7,8-tetrachlorodibenzo p-dioxin (TCDD)								
Benzidine								
Pyrone								

ACID COMPOUNDS

2,4,6-trichlorophenol								
p-chloro-m-cresol								
2-chlorophenol								
2,4-dichlorophenol								
2,4-dimethylphenol								
2-nitrophenol								
4-nitrophenol								
2,4-dinitrophenol								
4,6-dinitro-o-cresol								
Pentachlorophenol	<10	220	160					
phenol								

PESTICIDES

aldrin								
dieldrin								
chlordane								
4,4' -DDT								
4,4' -ODE								
4,4' -DDO								
Alpha -endosulfan								
Beta -endosulfan								
endosulfan sulfate								
endrin								
endrin aldehyde								
heptachlor								
heptachlor epoxide								
Alpha -BHC								
Beta -BHC								
Gamma -BHC								
Delta -BHC								
PCB-1242								
PCB-1254								
PCB-1221								
PCB-1232								
PCB-1248								
PCB-1260								
PCB-1016								

Blank spaces indicate that the chemical was not detected.

Dow Chemical

Tinner

20529 20530 20532 20533 20534 20535 20536 20537 20538 20539 20540 20541 20542 20543 20544

## VOLATILES

Benzene															
Carbon Tetrachloride															
Chlorobenzene															
1,2-Dichloroethane															
1,1,1-Trichloroethane															
1,1-Dichloroethane															
1,1,2-Trichloroethane															
1,1,2,2-Tetrachloroethane															
Chloroethane															
Bis (chloromethyl)ether															
2-Chloroethyl vinyl ether (mixed)															
Chloroform															
1,1-dichloroethylene															
1,2-trans-Dichloroethylene		40		<10											
1,2-dichloropropane															
1,3-Dichloropropylene (1,3-Dichloropropene)															
Ethylbenzene															
Methylene Chloride (Dichloromethane)		10									11	<10			
Methyl Chloride (Chloromethane)															
Methyl bromide (Chloromethane)															
Bromoform (Tribromomethane)															
Bromodichloromethane															
Trichlorofluoromethane															
Dichlorodifluoromethane															
Dibromochloromethane															
Tetrachloroethylene															
Toluene															
Trichloroethylene															
Vinyl chloride															
Acrolein															
Acrylonitrile															

Blank spaces indicate that the chemical was not detected.

THE VARIOUS COMPOUNDS	Weight	PPM	PPM	PPM
Acetone				
1,2,4-Tri-chloroethane				
1,4-Dichlorobenzene				
1,2-Dichloroethane				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
3,3-Dichlorobenzidine				
2,4-Dinitrotoluene				
2,6-Dinitrotoluene				
1,2-Diphenylhydrazine				
Fluoranthene	0.4	0.81		0.9
4-chlorophenyl phenyl ether				
4-Bromophenyl phenyl ether				
Bis (2-chloroisopropyl) ether				
Bis (2-chloroethoxy)methane				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Isophorone				
Naphthalene				
Nitrobenzene				
N-nitrosodimethylamine				
N-nitrosodiphenylamine				
N-nitrosodi-n-propylamine				
Bis(2-ethylhexyl) phthalate			0.3	0.4
Butyl benzyl phthalate				
Di-n-butyl phthalate				
Di-n-octyl phthalate				
Diethylphthalate				
Dimethylphthalate				
Benzo(a)anthracene (1,2-benzanthracene)	<0.2			
Benzo(a) pyrene		0.2	0.8	0.9
Benzo(b) fluoranthene		<0.5		
Benzo(k) fluoranthene	<0.2	0.3	0.71	0.9
Chrysene	<0.2			
Acenaphthylene			0.2	<0.2
Anthracene	0.4	0.2	0.97	0.8
Benzo(chi) perylene (1,2-Benzoperylene)			<0.5	<0.5

Blank spaces indicate that the chemical was not detected

### Results in ug/g

	0.4			
1,3,5-tris(4-phenyl)-6-methylbenzene (1,3,5,6-tetraphenylhexane)	0.3	0.5	0.37	0.8
Indeno (k,4,3- <i>cd</i> ) pyrene	<0.5			
2,3,7,8-tetrachlorobiphenyl			0.5	0.5
p,p'-DDT (DDO)				
benzofuran				
Pyrene	<0.5	<0.5	0.97	0.8

ACID COMPOUNDS

2,4,6-trifluorophenol							
p-chloro- <i>m</i> -cresol							
2-chlorophenol							
2,4-dichlorophenol							
2,4-diisopropylphenol							
2-nitrophenol							
4-nitrophenol							
2,4-dinitrophenol							
4,6-dinitro- <i>o</i> -cresol							
pentachlorephenol							
phenol							

PESTICIDES

aldrin							
dieldrin							
chlordan							
4,4' -DDT							
4,4' -ODE							
4,4' -ODD							
Alpha -endosulfan							
Beta -endosulfan							
endosulfan sulfate							
endrin							
endrin aldehyde							
heptachlor							
heptachlor epoxide							
Alpha -BHC							
Beta -BHC							
Gamma -BHC							
Delta -BHC							
PCB-1242							
PCB-1254							
PCB-1221							
PCB-1232							
PCB-1248							
PCB-1260							
PCB-1016							

Blank spaces indicate that the chemical was not detected.

OSB  
Tirex

OSB 2000A 2000L 2000P 2000Q

VOLATILES

Benzene						
Carbon Tetrachloride						
Chlorobenzene						
1,2-Dichloroethane						
1,1,1-Trichloroethane						
1,1-Dichloroethane						
1,1,2-Trichloroethane						
1,1,2,2-Tetrachloroethane						
Chloroethane						
Bis (chloromethyl)ether						
2-Chloroethyl vinyl ether (mixed)						
Chloroform						
1,1-dichloroethylene						
1,2-trans-Dichloroethylene						
1,2-dichloropropane						
1,3-Dichloropropylene (1,3-Dichloropropene)						
Ethylbenzene						
Methylene Chloride (Dichloromethane)	≤0.01	≤0.01	≤0.01	0.045	0.01	0.02
Methyl Chloride (Chloromethane)						
Methyl bromide (Chloromethane)						
Bromoform (Tribromomethane)						
Bromodichloromethane						
Trichlorofluoromethane	≤0.01		≤0.01		≤0.01	
Dichlorodifluoromethane						
Dibromochloromethane						
Tetrachloroethylene						
Toluene						
Trichloroethylene						
Vinyl chloride						
Acrolein						
Acrylonitrile						

Blank spaces indicate that the chemical was not detected.

ATTACHMENT II

All contracts executed under this RFP shall include the following language on confidentiality:

It is agreed that the contractor shall hold in trust and not reveal to any third party except as provided in this contract between the State of New Jersey and the contractor, any and all confidential information as defined herein. The contractor shall require its employees and subcontractors to comply with the provisions of this contract as it pertains to confidentiality.

Confidential information shall include:

Confidential Work Product

1. The entire work product and results involved in this contract including results and opinions of the contractor:
  - a. The contractor obligations regarding DEP confidential information that was already known to the contractor prior to its disclosure to the contractor by the Department of Environmental Protection, that is or become publicly available, that is rightfully received by the contractor from third parties without accompanying secrecy obligation, or that is approved by DEP and USEPA for the contractor to release shall not be considered confidential.
  - b. Upon request by the Department of Environmental Protection, termination or expiration of this contract, the contractor shall deliver to the Department of Environmental Protection all items including but not limited to drawings, blueprints, descriptions, or other papers or documents which may contain any confidential information. The contractor shall be permitted to retain a copy of all returned materials for its own confidential files.
  - c. Nothing contained herein shall be interpreted to interfere with or impose any limitation on the expression of professional judgement by the contractor within the content of its reports, nor shall it restrict disclosure required of the contractor by State or Federal Law.

Lawyer/Client Privilege

2. Any and all communications:
  - a. Between the contractors and the New Jersey Attorney General or his deputies;
  - b. Between DEP and the New Jersey Attorney General or his deputies;
  - c. Between the contractors and EPA attorneys and their assistants;

ATTACHMENT II (continued)

- d. Between the contractors and the U.S. Attorney or his deputies;
- e. Between DEP and EPA attorneys or their assistants; and
- f. Between DEP and USEPA employees concerning the conduct, preparation theory, strategy, or opinions relating in progress contemplated or completed.

The contractor may release such information to third parties only to the extent it has obtained the written consent of the Director of the New Jersey Division of Waste Management or Deputy Attorney General and Regional Counsel of USEPA Region II. It is the intention of the parties that the confidentiality matters coming within this paragraph (#2) shall continue beyond the completion of all the work involved in this contract, unless specifically waived in writing by the State of New Jersey and USEPA as specified herein.

The undersigned agrees to the above mentioned confidentiality provisions.

(Signature) \_\_\_\_\_

(Title) \_\_\_\_\_

**ATTACHMENT III**  
**Distribution of Deliverables**

	<u>Report/Deliverable</u>	<u>NJ DEP</u>	<u>USEPA Region II</u>
Task 1	Project Schedule	8	10
	Health & Safety Plan	8	10
	Field Sampling Plan	8	10
	Quality Assurance Plan	8	10
Task 2	Preliminary Report	8	10
Task 3	Interim Report	8	10
Task 4	Interim Report	8	10
Task 5	Draft Report	12	10
Task 6	Draft Final Report	12	22
	Final Report	12	22
Task 7	Technical Progress	2	4
	Monthly Reports		
	Financial Management	2	4
	Progress Report		
	Fact Sheets, Newsletters, etc.	2	4

Copies should be distributed as follows:

**NJDEP:** Ferdinand Metzger, Site Manager  
 Bureau of Site Management  
 Hazardous Site Mitigation Administration  
 Division of Waste Management  
 8 Hanover Street  
 CN-028  
 Trenton, NJ 08638

**USEPA  
 Region II:** Donald Deieso, Regional Project Coordinator  
 U.S. Environmental Protection Agency  
 Region II  
 26 Federal Plaza  
 New York, NY 10278

ATTACHMENT IV

State Format for Machine Readable Data

Contents:

- a. Form VST-008 - to be filled-in for each sampling location and submitted with the data.
- b. Instructions for coding data cards - record all data for a given sample by key punching cards according to the following format.

Note: Refer to Deliverable Section 4.2.5.5 for using the above Attachment.

STORED WATER QUALITY FILE - STATION LOCATION STORAGE																																																																															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
AGENCY CARD (A CARD)																																																																															
AGENCY CODE (Left Justify)				(Blank)				UNLOCK AFTER (day's)				UNLOCKING KEY (Left Justify)				INDIVIDUAL STORED DATA NAME, LOCATION, AGENCY, TELEPHONE (Optional Comments - will not be stored)												(Blank)				LOCK AFTER VR MO				CONTROL CODE																																											
1	-	8	9	-	12	13	-	15	16	-	17	-	24	25	-	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80											
STATION TYPE CARD (T CARD)																																																																															
A STRING OF VALID COMBINATIONS OF STATION TYPE CODES SEPARATED BY SLASHES																																																																															
(Blank)																																																																															
STATION CARD (S CARD)																																																																															
SORT NO	PRIMARY STATION CODE (Left Justify)								(Blank)								STATION ALIASES												FIPS CODES				(Blank)				CONTROL CODE																																										
1	2	3	4	10 11								23 24								(1) SECONDARY STATION CODE (Left Justify)				(2) SECONDARY STATION CODE (Left Justify)				(3) SECONDARY STATION CODE (Left Justify)				67 68 69 70 - 72 73				77 78 79 80																																											
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LATITUDE/LONGITUDE CARD (HEADER CARD 8)																																																																															
SORT NO	(Blank)				LATITUDE (Zero Fill)				LONGITUDE (Zero Fill)				(Blank)				P C	D	TOTAL STATION DEPTH	(Blank)																																																											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	-	27	28	29	30	31	32	33	(Blank)																																																	
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RMS CARD (HEADER CARD 1)																																																																															
SORT NO	(Blank)				TERM MAJ BASIN	TERM MIN BASIN	TERM MAJ BASIN	TERM MIN BASIN	TERM STREAM NO	LEVEL 1 MILES		LEVEL 2 INDEX		LEVEL 2 MILES		LEVEL 3 INDEX		LEVEL 3 MILES		LEVEL 4 INDEX		LEVEL 4 MILES		LEVEL 5 INDEX		LEVEL 5 MILES		LEVEL 6 INDEX		LEVEL 6 MILES		LEVEL 7 INDEX		LEVEL 7 MILES		LAST LEVEL USED																																											
1	2	3	4	5	6	7	8	9	10	11	-	13	14	-	16	17	18	-	20	-	25	26	-	31	32	-	36	37	-	41	42	-	45	46	-	50	51	-	54	55	-	59	60	-	64	65	-	69	70	-	75	76	-	80																									
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RMS CARD (HEADER CARD 2)																																																																															
SORT NO	(Blank)				TERM MAJ BASIN	TERM MIN BASIN	TERM MAJ BASIN	TERM MIN BASIN	TERM STREAM NO	LEVEL 8 INDEX	LEVEL 8 MILES	LEVEL 9 INDEX	LEVEL 9 MILES	LEVEL 10 INDEX	LEVEL 10 MILES	LEVEL 11 INDEX	LEVEL 11 MILES	LEVEL 12 INDEX	LEVEL 12 MILES	(Blank)																																																											
1	2	3	4	5	6	7	8	9	10	11	-	13	14	-	17	18	-	21	22	-	25	26	-	29	30	-	33	34	-	37	38	-	41	42	-	45	46	-	49	50	-	52	54	(Blank)																																			
(Blank)																																																																															
MAJOR/MINOR BASIN CARD (HEADER CARD 3)																																																																															
SORT NO	STATION LOCATION MAJOR BASIN NAME												STATION LOCATION MINOR BASIN NAME												LOCATION BASIN CODES				(Blank)																																																		
1	2	3	4	37 38												Major Minor Sub				74 -				79 80																																																							
(Blank)																																																																															
LOCATION DESCRIPTION CARD (HEADER CARD 4)																																																																															
SORT NO	LOCATION OF SITE: LANDMARK NAMES, ETC																												(Blank)																																																		
1	2	3	4	51 52																												(Blank)																																															

### The Storage Card (SC Card)

This card is used to code the remaining information to be coded in a ?04 WQGSTOR storage procedure: the station code, dates, depths, parameters and parameter values, and other pertinent information. All fields are separated by commas. This card follows either the AC agency card or the standard A card.

If more than one data card is required to record all data for a given sample, the data may be coded on the card up to column 80. Remaining data are then coded on a second card, and as many other continuation cards, as required. Up to 100 parameters and associated values can be specified in one set of SC and continuation cards.

The length and content of the fields on the SC card are variable, and depend upon storage requirements, the manner in which parameter values were recorded, and other such variables. The fields of the SC card must be arranged and coded in the following sequence:

field 1	Card Type Code
	The letters SC must be coded in columns 1 and 2, followed by a comma in column 3.
field 2	Station Code
	This field must be coded with an alpha-numeric primary or secondary station code to which the information on the card pertains. This code is to be followed by a comma.
field 3	Beginning Date and Time
	The date on which the sample was taken, or in the case of a composite sample, the beginning date the sample was collected. The date must be in the format:  yyymmddttt, where yy is the year, mm the month, dd the day, and ttt the time in hours and minutes, expressed in terms of a 24-hour clock. Time is optional.  The field is to be followed by a comma.

field 4

Ending Date and Time

This field is coded only for composite data, and is of the format yyymmddttt as described above, followed by a comma.

field 5

Depth

The depth at which the sample was taken is expressed in the format

D [M] [B  
V  
P  
D  
C] XXX, where M and B, V, P, D, and C are all optional, but where only one value within each pair of brackets may be specified, and where XXX is the depth.

The permissible values for this field are:

- B - the depth to the bottom of the water column
- V - a vertically-integrated sample taken from the surface to the depth recorded
- P - a pore sample which consists of the water extracted from a core sample
- D - a sediment sample taken at the bottom using a sediment sampler such as an Ekman or a Peterson dredge
- C - a core sample taken at bottom using a core sampler such as a Phlegar or a Wilding sampler

All values specified will be in feet unless the value includes an M which indicates the values are in meters.

If a sample has been stored with a depth value, all samples having the same date and time must have a numerical value coded for depth, i.e., surface depths must be coded as 000, not as blanks.

This field is to be followed by a comma.

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field 6

Composite Value Type

This field is used only with sophisticated composite data, and is used to indicate the composite value type. One of the following values may be specified:

- A indicates an average sample
- H indicates a maximum value
- L indicates a minimum value
- N or # indicates the number of observations within the sample
- S indicates a standard deviation
- U indicates a sum of squares
- V indicates a variance
- C indicates coefficient or error
- X indicates a coefficient of variance
- E indicates skewness
- F indicates kurtosis
- Z indicates the number of samples in the composite that exceeds established limits
- % indicates precision
- \$ indicates accuracy
- B when none of the above apply

If coded, the field is to be followed by a comma.

field 7

Space/Time Composite

This field is used only with sophisticated composite data, and indicates whether the sample was collected over a period of time or space, or both. One of the following values may be specified:

- S indicates space
- T indicates time
- B indicates both space and time
- F *Flow Proportion Composite*

If coded, the field is to be followed by a comma.

field 8

Sample Type

This field is used only with sophisticated composite data, and indicates what type of sample was collected. One of the following values may be specified:

- C indicates the samples were collected continuously
- G indicates the samples are individual grab samples, but that the actual number are not to be reported
- GNxx xx is a two-digit number depicting the number of individual grab samples in the collection
- B blank, when none of the above apply

If coded, the field is to be followed by a comma. For sophisticated composite samples, fields 6, 7, and 8 must all be accounted for.

field 9

Parameter Code

This field is used to specify the parameter code whose value is to be stored. The field is coded in the format

PXXXXX which stores the parameter Xxxxx with the next field (data item) as its value. Leading zeros need not be coded.

As many pairs of this field and the next field may be coded as required. A comma must follow each parameter code specified. A complete list of the STORET parameter codes is referenced within Appendix B.

field 10

Parameter Value

This field is used to specify the value to be stored for the parameter code specified in the preceding field. If a remark code is used, it must be the last character in the value. Remark codes are defined in Table 4-2 located within this section.

Parameter values may be designated via either fixed point or floating point numerical notation. The general expression for the format of the data field is:

.XXXXXXX ESPP

where

- 1) The designation .XXXXXXX represents a fixed point number or the mantissa of a floating point number which may include from one to seven digits plus a decimal point. The decimal point may occur in any position or be omitted. When floating point notation is used the decimal point is assumed to be immediately to the left of the first numerical digit or the position indicated.
- 2) The blank constitutes an exponent separator. Its use is optional. ~~emitted~~
- 3) The designation S indicates the sign of the exponent. It may be coded plus (+), minus (-), or ~~left blank~~. A plus code will cause the decimal point to be moved to the right, a minus code will cause it to be moved to the left, and a blank will maintain the indicated position. Use of the exponent sign (E) is optional. If a code is not provided the exponent is assumed to be positive.
- 4) The designation PP represents the value of the exponent. Two numerical digits must be coded if floating point notation is used. This code controls the extent of movement of the decimal point from the indicated position.

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Correct codes for the numbers 5, 7.5, 0.1, and 98,500 are 5, 7.5, 0.1 or 1.0E-01, and 98500 or 9.85E04 or 9.85 E04 or 9.85E+04, respectively.

As many pairs of this field and the preceding field may be coded as required.

A comma must follow each value specified.

#### Continuation Card

If all of the parameter values cannot be coded on a single SC card, a continuation card may be used. The last character coded on the SC card must be a comma, as a parameter value cannot be split and continued onto a continuation card. The continuation card has no special fields or codes; coding of parameter values may begin in column one, and proceed as above. The last character that must be coded on a continuation card is a comma.

#### Abbreviated SC Card

When coding multiple SC cards within a single storage run for identical stations, dates, times, and depths (fields 2 through 5), a '\$' may be coded in their stead, which automatically assumes that the values of these fields are as specified in the preceding fully-coded SC card.

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4.2.3.1 EXAMPLE OF STORING NEW PARAMETRIC DATA USING THE WQGSTOR INPUT PROCEDURE (TYPE ?04)

Store the following 1980 parametric data for station M075, agency 14AGNFS9, using the WQGSTOR storage procedure. The 18 July sample was a bottom sample, and the 19 July sample was a core sample. All depths are in feet. The values listed for 20 July were average and high composite sample values, respectively, and both were space composites of individual grab samples.

DATE	TIME	DEPTH	P=620	P=300	P=650
17 July	-	100	.2	10.8	.01
18 July	2 pm	200	.1	10.8	<.01
19 July	-	1	.2	10.5	.04
20 July	12-4 pm	100	.2	10.6	.02
20 July	12-4 pm	100	4	15	3

0	1	2	3	4	5	6	7	8
12345678901234567890123456789012345678901234567890123456789012345678901234567890								

```
?START
?04
AC,A=14AGNFS9,UK=SECRET,USER=NAME OF USER STORING DATA,
SC,M075,800717,D100,P620,.2,P300,10.8,P650,.01,
SC,M075,8007181400,DB200,P620,.1,P300,10.8,P650,.01K,
SC,M075,800719,DC001,P620,.2,P300,10.5,P650,.04,
SC,M075,8007201200,8007201600,D100,A,S,G,P620,.2,P300,10.6,P650,.02,
SC,$,H,S,G,P620,4,P300,15,P650,3,
```

0	1	2	3	4	5	6	7	8
12345678901234567890123456789012345678901234567890123456789012345678901234567890								

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