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PUBLIC HEARING

before

**SPECIAL COMMITTEE TO INVESTIGATE HAZARDOUS
WASTE DISPOSAL AT MILITARY INSTITUTIONS**

on

Potential Sources of Groundwater Contamination Posed by Hazardous
Waste Disposal at the Lakehurst Naval Air Engineering Center

October 17, 1985
Lakehurst Naval Air Engineering Center
Building #33 - Consolidated Mess Hall
Lakehurst, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Assemblywoman Marlene Lynch Ford, Chairwoman
Assemblywoman Jacqueline Walker
Assemblyman John T. Hendrickson, Jr.
Assemblywoman Barbara F. Kalik
Assemblyman Jorge A. Rod

ALSO PRESENT:

Mark O. Smith
Office of Legislative Services
Aide, Special Committee to Investigate Hazardous
Waste Disposal at Military Institutions

New Jersey State Library

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ASSEMBLYWOMAN MARLENE LYNCH FORD (Chairwoman): Good morning. I think we will get started. This is the New Jersey Legislature's Special Committee to investigate toxic spilling at military installations in the State. I want to thank you all for coming here today.

Before we open up the public portion of the hearing, I think there are some housekeeping matters I would like to put on the record as to appearances by individuals today. We had the opportunity last week to hear from a representative of the New Jersey Department of Environmental Protection. He was George Tyler, Assistant Commissioner of DEP. Mr. Tyler testified, and was quite candid and helpful. At that time, we informed him that we would be holding a hearing today in Lakehurst, and that we expected to have representatives from the Environmental Protection Agency, as well as the military, with respect to this problem.

As a result of that, I assumed that Mr. Tyler would be interested in this hearing and would send a representative down to at least hear what was going on, on behalf of his Department. As a matter of fact, we subsequently sent a letter to him, asking that he appear or send a representative on behalf of his Department. I am advised that late yesterday, at approximately 4:30 or 5:00, a letter was delivered to the Committee Aide indicating that neither Mr. Tyler nor a representative of his staff would appear because of scheduling problems.

I am quite familiar with the staffing of the Department of Environmental Protection, since we review it every year in terms of the budget. There never seems to be a problem in producing 10 or 20 people at budget hearings, so I am a little surprised that they didn't have the staffing to produce someone at this hearing today.

Notwithstanding that, I am not going to suggest that there has been any effort to evade this; however, I do think that a question comes up for the Committee's consideration as to whether or not we should invoke, pursuant to this Committee's delegation of power under the resolution creating the Committee, any subpoena power. So, I would like to throw that out to my Committee members for discussion, and I

guess I should introduce them. To my right, is Assemblyman Jack Hendrickson, representing the Ninth District, which includes Lakehurst; to my left, Assemblyman Jorge Rod, who also represents the Ninth District down here in Ocean County. We expect to be joined shortly by a few other members of the Committee, but I do not want to delay these proceedings any further. If there is any discussion on that proposal, I would like to hear from the Committee members. Jorge?

ASSEMBLYMAN ROD: Yes, Madam Chairman. In accordance with Paragraph 3 of Assembly Resolution 168, which was adopted September 12, 1985, I would like to move for a resolution to give the Chair the subpoena power to acquire witnesses and produce documents pertaining to the subject from the different agencies. I would like to put that in the form of a motion, Madam Chairman.

ASSEMBLYWOMAN FORD: Mr. Hendrickson?

ASSEMBLYMAN HENDRICKSON: I find difficulty in subpoenaing members of any of our departments, in particular, DEP. Holding these types of hearings two or three weeks before an election, and now to come out and subpoena powers of an individual that testified for hours, I find a little tough to bear. I know the Pinelands Commissioners are here, and as a member of that, and as living in the Pinelands, this has been rehearsed and gone over, and gone over, and gone over. I have confidence in the Commissioner of the Department of Environmental Protection that he will be producing as many people as he can at the Pinelands hearing, which is also on October 24. So, there will be another opportunity, if that is what we are after, to take their time to go over everything they have already gone over. I commend the Captain for requesting all legislators who were interested to be at a hearing that he, the Commanding Officer of this Base, held. He explained to the people at that time just exactly what was happening and what they had done over the last 10 years.

If you wish to subpoena, you have that power and the majority of the Committee can do it; however, I think it is very, very politically motivated, rather than actually trying to find the facts. Let's find the facts, and stay out of the newspapers. That is what I have been doing over the years.

ASSEMBLYWOMAN FORD: Jack, let me just assure you that at the rate we're going here, I think we may be conducting hearings well beyond the election. That certainly is not the motivation of this Committee.

Secondly, it is the absence of representatives from both the Environmental Protection Agency and the Department of Environmental Protection here today, when they had a great deal of advance warning about this hearing, that suggests to me that perhaps in the future we should assure the presence of these individuals at future hearings. That is really the purpose of it. Certainly, any member of the Committee can convey, through me, their request for subpoenas, and if it is the sense of the Committee that I should be delegated that power, that is what I am looking for here today.

ASSEMBLYMAN ROD: May I, Madam Chairman?

ASSEMBLYWOMAN FORD: Yes, Mr. Rod.

ASSEMBLYMAN ROD: I think it is a situation where there are certain documents this Committee has not received. We requested those documents. My feeling is that I would like to move this as quickly as possible. I think the Chair should have the privilege of subpoena power so we do not delay this matter any longer. I think every second, every minute, every day, every week counts. I don't see anything wrong with it. I think it is something I would like the Committee to use to get these documents as soon as possible.

ASSEMBLYMAN HENDRICKSON: Madam Chair, if I--

ASSEMBLYWOMAN FORD: Jack, may I just introduce Assemblywoman Barbara Kalik?

ASSEMBLYMAN HENDRICKSON: Sure; I'm sorry.

ASSEMBLYWOMAN FORD: Assemblywoman Kalik has just joined us; she is also a member of this Committee. I will yield to you, Mrs. Kalik.

ASSEMBLYWOMAN KALIK: I would just request a very quick briefing to tell me where we are.

ASSEMBLYWOMAN FORD: We just started. I raised the question-- I noted that we have been in communication with both the Environmental Protection Agency and the Department of Environmental

Protection. At our hearing last week, we advised Mr. Tyler that we would be meeting today at Lakehurst, and we expected to hear from the military and from representatives of the Environmental Protection Agency.

It was subsequent to that hearing that we felt-- We had assumed that DEP would be interested in this hearing, and that some representative from DEP would appear here to at least monitor the proceedings. Rather than just continue on that assumption, we sent a letter to Mr. Tyler on October 15, requesting that he appear voluntarily, or that members of his staff appear, so that when any questions came up we would have the opportunity to then ask him -- to save time -- to explain those questions.

Late yesterday, around five o'clock, we received a letter from Mr. Tyler indicating that neither he nor his staff was available, that they all had prior commitments, and that it would be totally impossible for them to send anyone down here. Just to reiterate what I said before, because as Chairman of the Appropriations Committee, Mrs. Kalik, you know that there is usually not a shortage of staff to attend our meetings. Without making any assumptions as to motivation, I was just suggesting that in the future, maybe we should formalize these requests by way of subpoena issuance. That is what the discussion was. I believe Assemblyman Rod moved a resolution to delegate to me, as Chair, the authority to issue subpoenas for the production of witnesses, as well as documents, in these proceedings.

ASSEMBLYWOMAN KALIK: Thank you.

ASSEMBLYMAN ROD: That is correct, Madam Chairman.

ASSEMBLYWOMAN KALIK: I would just like to say that there were some very specific questions I asked at last week's hearing, if you recall, which I wanted to re-ask at this week's hearing. Since there is no one here to ask, I am very disappointed. So, I would have to go along with that request.

ASSEMBLYMAN HENDRICKSON: Madam Chairman, may I ask a question?

ASSEMBLYWOMAN FORD: Yes.

ASSEMBLYMAN HENDRICKSON: There must be some documents I do not have. I would specifically request, for the public record, documents that have shown the necessity of a subpoena power, and I would be very happy to go along with it. In all of my time spent here, I have seen nothing, other than a 1981 document, which does have problems. If you are privy to information that I am not, I would very much appreciate receiving it.

ASSEMBLYWOMAN FORD: Okay. It is not so much a question of what we have received from DEP; it's a question of what we have not received. For example, on September 5, we requested information regarding the Bayonne Naval Yard, the Raritan Arsenal, and the Fredericktown place, as well as information about McGuire. The information about McGuire arrived just prior to-- It was hand delivered yesterday at approximately 4:30. The other information has not been forthcoming.

So, that is my concern. There is certain documentation we have requested which we are not receiving.

ASSEMBLYMAN HENDRICKSON: I would have no problem with anything on Bayonne. What I would appreciate-- I did not have an agenda, so I had no idea that people would have to be here to answer to Bayonne and other military bases. I thought this particular hearing-- My comment on DEP is, there has been so much time spent by Senator Connors and myself with these people on this very issue. Because it is in my district, the Ninth Legislative District, I direct all of my comments to Lakehurst.

ASSEMBLYWOMAN FORD: Oh, I agree with that.

ASSEMBLYMAN HENDRICKSON: Are there any documents, so the press knows -- so the press knows-- Is there any documentation I do not have that there is pollution in Lakehurst?

ASSEMBLYWOMAN FORD: I don't think that is an appropriate matter for discussion at this point in time. I don't think that is something which will be revealed in these proceedings. The basic question is, it is an ongoing problem, Jack, as to our ability to receive documentation.

With regard to this particular hearing, I guess I am a little disturbed that we couldn't shake down a single representative from the two major agencies which are involved with this issue.

ASSEMBLYMAN HENDRICKSON: Is the concern Lakehurst or other military establishments?

ASSEMBLYWOMAN FORD: Right now -- as we stated at our last hearing, and as has been otherwise stated -- the initial hearings will be on Lakehurst. Last week was Lakehurst; this week is Lakehurst. In fact, the purpose of this hearing and the agenda, is basically to allow the military to testify at a public hearing. This is the first public hearing at Lakehurst. I know they had a briefing -- the initial hearing -- which I was not invited to. I could not attend the second meeting, to which I got a two-day advance invitation, but I did send, Jack, as you know, my aide, Joseph Hunt, to that meeting. He filled us in on what was done there.

I think there is a need to have this type of open public discussion about this, and to give the military, certainly, an opportunity to address our specific questions in a public forum.

ASSEMBLYMAN HENDRICKSON: I will reiterate that at the last hearing the Captain called here, I specifically asked publicly that we, as legislators, have availability to him at any time we necessarily had to, if we heard any other rumors as to the problems at Lakehurst. At that hearing, he very openly said, "Any time, come to me, and I will disclose whatever there is to be disclosed." He said that very openly.

ASSEMBLYWOMAN FORD: I don't think there has been any problem in terms of military cooperation with this. We will get to that. I think they should be commended for their full efforts to place this out in public. There is no question as to that.

But, on the issue, Assemblywoman Kalik--

ASSEMBLYWOMAN KALIK: I received this. (Mrs. Kalik holds up paper she is referring to.) I don't know whether you have a copy of this Natural Resources confidential letter regarding what they feel is an unacceptable long-term health risk. I know we don't want to get anyone nervous or excited, and I keep saying that is not what our purpose is. I have to tell you, though, without getting anyone excited

or concerned, I still think we ought to be concerned about the health risks here. I would like, personally, to have this document entered into the record, because this gets me nervous.

I don't know whether you have received a copy, but I know Jack keeps asking about documentation.

ASSEMBLYWOMAN FORD: May we deal with the motion on the subpoena issue first, and then move on to that?

ASSEMBLYWOMAN KALIK: This is why I will, in fact, support a subpoena, because I don't think we are getting the information we need.

ASSEMBLYWOMAN FORD: On the motion of subpoena power to the Chair, for the record, may we have a roll call vote?

MR. SMITH: On the motion to grant the Chair subpoena power: Mrs. Ford?

ASSEMBLYWOMAN FORD: Yes.

MR. SMITH: Mr. Rod?

ASSEMBLYMAN ROD: Yes.

MR. SMITH: Mrs. Kalik?

ASSEMBLYWOMAN KALIK: Yes.

MR. SMITH: Mr. Hendrickson?

ASSEMBLYMAN HENDRICKSON: I will qualify for the Ninth Legislative District and the hearings on Lakehurst. If DEP was asked for Lakehurst, and Lakehurst only, I would not want to see it. But, as the Chairwoman has said, if the hearing is in reference to questioning other areas of the State on pollution, which I am very, very concerned with-- On that basis, I will agree with the subpoena power.

ASSEMBLYWOMAN FORD: Thank you. The next matter of business, I guess, is Assemblywoman Kalik's request that the letter from the Natural Resources Defense Council be entered into the record, and that will be so noted.

ASSEMBLYWOMAN KALIK: Thank you. I have also received this (Mrs. Kalik holds up another piece of paper), which is from The Asbury Park Press, Sunday, May 26, 1985. It says: "Officials from the State Department of Environmental Protection said they found contaminated wells in the Barnegat Pines section of Lacey Township." I think these are official documents. I didn't make this up. I don't believe

everything that is in the paper, but, you know, when it is handed to me like this, I have to at least question it. I would like this entered into the record.

ASSEMBLYWOMAN FORD: It will be so noted.

ASSEMBLYMAN HENDRICKSON: If we are going along those lines, then I submit to the Chair the problems in Beachwood, the problems in Little Egg, the problems in Stafford along with that because of my concerns. But the hearing here is the Lakehurst area. I'm not sure-- Whatever way you want to go, Madam Chairman.

ASSEMBLYMAN ROD: Madam Chairman, I would just like--

ASSEMBLYMAN HENDRICKSON: We have other pollution in the Ninth Legislative District. I will submit that.

ASSEMBLYMAN ROD: I would like to make a statement for the record, Madam Chairman.

ASSEMBLYWOMAN FORD: Assemblyman Rod.

ASSEMBLYMAN ROD: I will be honest with you. Let me get to the point now. I am really disturbed by the fact that we do not have any representatives here from DEP or EPA, especially when I had the Assistant Commissioner, at the last public hearing, tell me-- This is a quote from him, and you can verify this. "There appears to be a vast amount--" I asked him, "On a scale from one to ten, what is the potential public health threat in this situation?" He gave me a ten. He actually stated for the record, ten. For no one to be here from DEP -- I studied this through -- is really a shame. It is really a crying shame that we don't have a representative here taking notes, okay? I mean, it's a crying shame. As you say, when they want an appropriation from the Assembly, they send 10 or 15 people out. I have seen that many times. I am really disturbed about the fact that we don't have a representative here, at least to listen to the testimony and participating in the process. It is really a crying shame.

To tell you the truth, I don't think this Committee should tolerate it anymore. I think you should make a note in your records for when they come up for additional funding and say they need additional personnel. You should make a note of that.

ASSEMBLYWOMAN KALIK: It is duly noted.

ASSEMBLYWOMAN FORD: I have a feeling it will be a topic of our next budget discussions. Okay, if there is no other housekeeping business for the Committee, I would now like to open up the public hearing portion.

Captain Eaton, let me initially say that you have been very cooperative, and your staff has been very cooperative. It is certainly not the purpose of this hearing to cast blame on anyone, as I indicated earlier. Nationwide and virtually every entity has had problems in disposing of its toxic waste, and I think it is incumbent upon us, as people concerned about the environment and concerned about people, to take a forward look at things. We are just here, really, to allow the public and the Legislature to understand what efforts are being conducted for the cleanup, to share our concerns for this particular issue with you, and to ask that you submit to some questions we may have. I think you have been more than cooperative. It is interesting, I don't think we had to worry about you being at the first hearing up in Trenton. You had an opportunity to go up there. I know that you were present in Trenton, and I would have assumed that other agencies involved in this would be just as interested in this hearing, which is in your back yard.

I certainly appreciate all of your efforts on our behalf. I understand you have a prepared statement, and I would like you to have an opportunity to present that to us.

CAPTAIN DONALD R. EATON: Good morning. I am Captain Donald R. Eaton, U.S. Navy. I am the Commanding Officer of the Naval Air Engineering Center, Lakehurst, New Jersey, easier referred to as Navy Lakehurst, or NAEC.

On my left is Lieutenant Pennie Cannon Leachman, U.S. Navy, Judge Advocate General Corp, my special assistant and counsel at Lakehurst.

What I would like to do this morning is read you a synopsis version of the full statement I presented to all of you, in the interest of time and allowing you maximum opportunity to probe or uncover anything you have any concerns about.

This Base is the largest Naval installation east of the Mississippi, comprising 11.2 square miles, 7400 acres, in the New Jersey Pinelands. Indeed, it is a national treasure. I, personally, welcome this opportunity to place on the record of any fact-finding committee the correct facts about Navy Lakehurst's environmental history, its hazardous waste disposal program, and its successful efforts as the Navy's "environmental pioneers." I applaud the New Jersey State Legislature for having created this Special Committee to investigate hazardous waste disposal at military bases.

I can assure you as a closet environmentalist myself, now that I am in a position to do something about it, I share your concerns and I champion anything we can do together to make things better in this State.

My testimony this morning will be relatively brief, but it is well-supported and accompanied by numerous documents, many of which have already been presented to you. Any other records you may need, I will be happy to provide you with. My testimony will focus on seven issues.

One: Navy Lakehurst's efforts, achievements, plans, and progress to date towards ultimate environmental cleanup;

Two: Our environmental impact on the local ecology and community;

Three: Our disposal practices;

Four: The actual number of sites with which you should be concerned;

Five: Our long-standing, full disclosure history;

Six: A discussion on NACIP itself; and,

Seven: The cooperative effort achieved and in effect between all Federal, State, county, and local environmental agencies.

First, NAEC, environmental pioneers. NAEC has been officially recognized as having one of the most far-reaching and innovative environmental protection programs in the Navy. In 1980, and again in 1982, NAEC received a Secretary of the Navy's Environmental Protection Award. In 1980, NAEC was awarded the Secretary of Defense Environmental Quality Award.

NAEC's comprehensive Environmental Protection Program is managed by the Environmental Branch of the Public Works Department, which is the oldest, established in 1979. I would like to discuss just a few of the more recent noteworthy accomplishments of the Environmental Branch and its personnel. For example, making use of state-of-the-art computer technology, Branch environmental engineers are developing a computer-generated hydraulic flow model of the groundwater at the Center to provide a better understanding of the nature of the groundwater and the mechanisms that control its movements.

The flow model is based on the field data collected by the Groundwater Monitoring Program during the past three years from over 100 monitoring wells and 32 pumping wells, as well as on additional soil and hydraulic data from the extensive surveys performed by the Pinelands Commission. The model will provide a realistic profile of both groundwater and surface water, thereby enabling the Branch to establish realistic groundwater resource allocations, to display graphically the extent of any groundwater contamination, and to predict the effectiveness of various cleanup methods.

As part of its effort to ensure groundwater purity, the Environmental Branch has several other programs under way. One such innovative program will increase the number of groundwater recharge sites at the Center by reducing the amount of balcktop surfaces, or other paved surfaces, many of which were created when Lakehurst was one of the Navy's main sites for the operation of lighter-than-air aircraft. By breaking up the blacktop, crushing it to increase the rate of biodegradation, and then seeding the area with grass, a groundwater recharge site is created. The first recharge site was created this year out of the extensive blacktop area near the Center's Navy Exchange.

The Environmental Branch has also begun a project to remove the fuel tanks long buried in the Center's underground fuel farms. NAEC is currently the only Navy activity undertaking such a project, which is designed to prevent unsuspected ground fuel spills and resulting groundwater contamination.

An important part of the Surface Water Protection Program is the farsighted Storm Waste Control Plan currently being developed by the Environmental Branch. The plan, which will integrate the various successful storm water control projects, such as seeding and constructing swales, that have been implemented at the Center into a coherent Storm Water Management Program, will enunciate the Center's official storm water management policy and will be in accordance with the requirements established by the Pinelands Commission.

The Environmental Branch recognizes that in order to fulfill its mission, it must not only prevent pollution, it must also have the ability to respond immediately to any spill emergency that might occur in order to minimize the possibility of environmental damage. For example, in October, 1981, the Weekly Groundwater Monitoring Program revealed that an underground fuel spill at one of the Center's fuel farms had resulted in the presence of a significant amount of jet fuel in the aquifer. The Branch immediately began operations to identify the magnitude of the spill and to contain it. Large-scale recovery operations, which began in October, 1981 and were completed in July, 1983, recovered 10,223 gallons of jet fuel. The recovery operation was completely successful. As a matter of fact, the success of the Branch's cleanup efforts is attested to by a letter from the New Jersey Department of Environmental Protection, Division of Water Resources, citing as "exemplary" the Center's "attitude, competence, and performance....in assessing and removing the spill into the Cohansey Aquifer," and noting that, "The recovery effort was unusually successful in all respects."

In the hope that the data gathered from the Center's experience in cleaning up this spill would facilitate future groundwater cleanup at other sites, one of the Branch's environmental engineers published a technical paper describing the spill and the cleanup in the Fall, 1982 issue of Navy Civil Engineer. This article recently received an honorable mention from that journal's Awards Committee as one that, "Clearly stands out for its insight, realism, and treatment of the subject matter."

The other major cleanup effort at NAEC began in January, 1982, when the temporary plastic liner of a cooling pond at the Center's propulsion test site broke, releasing over 3000 gallons of ethylene glycol. The cleanup, which was completed in the Fall of 1983, used -- and I must emphasize -- a very innovative biodegradation technique, which I personally feel is probably the most neutral thing we can do in the environment on a national basis in cleaning up any problem. Through an injection system, the underground environment was inoculated with microbes capable of biodegrading the ethylene glycol and providing the nutrients necessary for microbial growth. A recovery system was also used to withdraw contaminated water from the ground for above-ground biological treatment. The cleanup method proved to be exceptionally successful in terms of cost-effectiveness, minimal disturbance to operations of the Center, and on-site destruction of spilled contaminants.

And, by the way, when this particular engineer, who happens to be Lucy Bottomley, went to a national symposium on environmental matters, hers was the only paper offered on a biodegradation type approach to the problem, which was significant. I think we will hear more of this kind of thing in the future.

A technical paper describing this effort and its successful conclusion was co-authored by a Branch environmental engineer and accepted for presentation at the Fourth National Symposium and Exposition of Aquifer Restoration and Groundwater Monitoring held in May, 1984.

An integral part of the Center's Hazardous Material and Waste Management Program is the hazardous material/waste control system. Through this "cradle-to-grave" manifest system, the Branch ensures accountability for all hazardous materials, from the time they arrive at the Center until the time the waste from these materials is removed by a licensed contractor. The system continuously tracks the flow, storage, and use of hazardous substances.

Another aspect of the Center's Hazardous Material Source Reduction Program is the Branch's Hazardous Material Recycling Project. An example of this system at work involved a cleanup

operation in which 4000 gallons of lubricating oil and hydraulic fluids had been classified as waste, yet we recovered about 50% of the material and used it again. This Program has been so successful that in 1983 we recycled, in-house, 67,512 gallons of petroleum products alone.

It is interesting to note that to ensure contractor compliance for removal, this year the Environmental Branch developed a "Quality Assurance Guide for Hazardous Waste Management," which, by the way, is being used throughout the Navy. Also, there is a telephone hazardous material hot line, which was set up to enable all employees at the Center to report spills of oil or other material, or simply to raise questions relating to hazardous materials and waste.

Once the Branch has learned of a spill emergency, the 10-man spill response team, which is capable of responding to notification of a spill anywhere at the Center within 15 minutes, springs into action. The team is also available to assist surrounding communities as part of the Center's "good neighbor" policy. The team is a well-trained and highly experienced group of professionals made up of Navy Lakehurst environmental, safety, fire, shop, and security personnel.

One of the experiments conducted at the Center was a FAA crash test. The FAA crash test cleanup effort caused Branch environmentalists to conclude that using approved landfills to dispose of petroleum-contaminated soil is not the most environmentally sound method of handling the problem. Thus, they recommended an innovative method to reclaim this soil using the trickling filter at the Center's closed sewage treatment plant. The trickling filter, which is an almost perfect facility for the task, confines the contaminated soil, collects all the leachate generated, and, by using the existing pumps, recycles the leachate for further treatment. This decontamination process relies on sunlight, rainwater, and native organisms in the soil to consume and decompose the petroleum products.

The second item is the environmental impact on the community. Navy Lakehurst is confident that its operations do not pose any hazard whatsoever to public health or the local ecology.

To date, we have spent more than \$3.2 million, thousands of man-hours, and considerable Center resources not only to protect the local environment, but to enhance it as well. We have established a comprehensive and exhaustive monitoring program of all former disposal sites and have a cradle-to-grave tracking system for chemicals used at the Base. We have installed 130 monitoring wells, made countless water sampling tests, and even funded the installation of off-base monitoring wells and subsequent water quality tests.

The results have been consistent. There is no migration or intensification of contaminants, if there are any contaminants at all.

It was most gratifying to hear last week from my distinguished colleagues at the New Jersey Department of Environmental Protection that Navy Lakehurst and they are in agreement, that we are not the source of any possible pollution of public waters. Furthermore, I reiterate Mr. George Tyler's testimony when he said: "There is no reliable information available yet that would indicate the source of this material was Lakehurst."

But, I must tell you that I, personally, am so concerned about our environmental role with the local community, that I recently suspended crucial fire fighting training when I learned that my oil-water separators operating there were getting old and were performing marginally. When I learned that there was the potential that they could malfunction, I closed down the fire fighting operations until I could get new oil-water separators. I must tell you that this has had a significant impact on one of our training missions here. However, it will not go into operation until I do get new oil-water separators installed. I will not risk any problems.

Item 3, Disposal Practices: I first want to state emphatically and unequivocally, there are no uncontrolled or illegal disposals of hazardous waste substances at Navy Lakehurst. Also, there has never been any illegal disposal of such materials here, nor will there be in the future. Furthermore, of the 44 sites identified in the NEESA Report as possibly having been contaminated, 33 of those sites are inactive; that is, they are no longer used for any purpose whatsoever. Eight sites have already been cleaned up. The remaining

sites are constantly monitored by environmental technicians using state-of-the-art technology. This will continue until a Navy-contracted, independent environmental firm determines if any contamination has actually occurred, and, if so, what cleanup actions are required. If any cleanup is required, I am committed to complete the necessary action in the shortest time possible.

On Item 4, I want to address the question of, how many sites are there? The Navy developed the Navy Assessment and Control of Installation Pollutant Program, that is, the NACIP Program, to identify, assess, and control environmental contamination from past methods of storage, handling, and disposal of hazardous substances at Naval shore facilities.

In the first phase of the NACIP Program, a team of scientists and engineers conducts an Initial Assessment Study, an IAS. The Initial Assessment Study is designed to provide a worst-case scenario and identify the outside parameters of areas which require further investigation. It is not designed to be used for remedial action. The Initial Assessment Study for Lakehurst was conducted in the Fall of 1981, and identified 44 potentially contaminated sites. The Initial Assessment Survey concluded that: "While none of the sites pose an immediate threat to human health or the environment, 16 warrant further investigation under the NACIP Program to assess potential long-term impacts. A Confirmation Study involving actual sampling and monitoring of the 16 sites is recommended to confirm or deny the existence of the suspected contamination and to quantify the extent of any problems which may exist."

This Confirmation Study is the second phase of the NACIP Program. It is currently ongoing and is being conducted by an independent contractor, Dames and Moore. It is only after this Confirmation Study has been completed that NAEC will understand the nature and effect of any contamination. No intelligent plan of action can be formulated until the Confirmation Study is completed.

A "site" is not a dump. As is evident from a review of the Initial Assessment Study and my August 30, 1985 briefing, a site can range from a landfill to a gas station, from a fuel storage facility to

a fire fighting training area. And a site, as identified by the IAS, is not a contaminated area which requires any remedial action.

Further confusion over the number and definition of sites was added when the Department of Environmental Protection testified that 18 additional spills were reported to them since the IAS was prepared. We have provided to the Committee documentation concerning each of these spills; contamination has been removed to the satisfaction of site authorities. I must emphasize that these spills are not additional sites.

Item 5, Full Disclosure: This talks a little bit about our history. Concerning the disclosure and sharing of Navy environmental data, I will clearly demonstrate today that Navy Lakehurst has been an open book, and maintains a policy of full disclosure. Such a policy is consistent with my desires and strict, longstanding Navy and Defense Department regulations. It is also the cornerstone of Navy Lakehurst's "good neighbor" policy.

We try to avoid hiding behind anything that might be classified, or any of those other kinds of things, in order to maintain an open door policy with EPA, DEP, the Pinelands Commission, and the Ocean County Board of Health. We are seriously motivated to make sure that any problem and every problem is fully articulated and understood by everyone.

This report right here (pointing) represents the first phase of any Navy environmental cleanup program. It is the Initial Assessment Study, or IAS for short. It was authored by the Navy Energy and Environmental Support Activity, which was ordered by the Chief of Naval Operations to conduct a study of Navy Lakehurst. I am required by law to provide copies of the final report to the appropriate State regulatory agency and the EPA Regional Office within 30 days of receiving it. Navy Lakehurst provided a copy of this report, with all its guesses, heresay, and otherwise flawed conclusions, to the EPA and the New Jersey Department of Environmental Protection on October 25, 1983, just about two years ago.

This report, however, which is my own, titled, "Report on the Status of the 44 Potentially Contaminated Sites at Naval Air

Engineering Center, Lakehurst," falls into an entirely different category than does the IAS. This study, called "Interim Report" for short, represents a voluntary, sincere, zealous effort on the part of my environmentalists right here at Lakehurst to expedite the cleanup, and also to expedite the process of contracting a firm such as Dames and Moore to do the Confirmation Study. Indeed, it has accelerated that process.

I must stress strongly, though, the fact that there is no regulatory requirement to do this, or to distribute to anyone. Nonetheless, I gave it to EPA, or it was given to EPA by Lakehurst within one month after its publication. It is correct, however, that DEP did not get it until August, 1985, when they asked for it.

I believe some confusion exists as a result of certain testimony offered by Mr. George Tyler last week. It was the Interim Report to which he referred when he said, "It was not made available." But, as I said before, we gave it to him in August. As a result of this sort of confusion, it is now a policy here that any document whatsoever, as it appears, will be sent to everybody -- the DEP, the EPA, the Ocean County Board of Health, and the Pinelands Commission. For example, I have just received -- dated October 10, 1985 -- the 1985 Water Report for Lakehurst. A letter of transmittal was signed by me yesterday and copies are going to everybody concerned.

I also respectfully invite the Committee's attention to a number of newspaper articles, Congressional testimony, letters of report transmittals, correspondence, memoranda, etc., for your record. Some date back to 1979. Some treat -- at length and repeatedly -- the very same subjects that have been hotly contested these past few months. I believe you will find they all confirm that Navy Lakehurst has, in fact, been an open book. In the jargon, we have put ourselves on report whenever something has occurred.

At this point, I would like to clarify or elucidate the NACIP. I want to take a moment to explain the purpose of an Initial Assessment Study. It is not to provide a precise picture of the current environmental status of the installation being surveyed. Rather, it is to establish the universe of parameters of any potential

hazard to the environment and, also, to determine if further study is required to ascertain the actual environmental condition. One could simply say it is a document of conjecture.

No consideration was given to what the impact would be upon the layman when he read such findings and conclusions as contained in the IAS. It was the layman I had in mind when I said the IAS, as written, is inciteful, inflammatory, alarming, and grossly misleading. The IAS and the subsequent Interim Report were written by environmental engineers to be read by environmental engineers, and we need to keep this in mind.

Because of the lack of complete records going back to 1919, I must take strong exception to anyone accepting hearsay and allegations as firm data upon which to calculate the amount of hazardous substances believed to be at any one site. Even the IAS team recognized this fact when they stated in their Executive Summary: "Based on information from historical records, aerial photographs, field inspections, and personnel interviews, a total of 44 potentially contaminated sites was evaluated with regard to contamination characteristics, migration pathways, and pollutant receptors. The Study concludes that while none of the sites pose an immediate threat to health or the environment, 16 warrant further investigation under the NACIP Program. A Confirmation Study of the 16 sites is recommended to confirm or deny the existence of suspected contamination." I have added the emphasis.

After interviewing former employees, some retired as many as 15 and 25 years, the IAS team guessed that an estimated two million gallons of aviation fuel was disposed of in the parachute drop zone here for a period of 20 years. Inexplicably, this amount was increased to three million gallons by the news media. Navy Lakehurst never had large aircraft, or large numbers of aircraft, based on board at any time throughout its history. Large quantities of fuel simply were not required or stored here. To have disposed of two million gallons of fuel would have required pouring nearly 300 gallons into the ground every day for 20 years. I submit that this is ludicrous.

Similarly, it was calculated that 40,000 gallons of hydraulic fluid found its way into the ground. This is misleading, as well.

Actually, there is the possibility that 40,000 gallons of water containing amounts of hydraulic fluid -- residue carried off the equipment by steam, etc. -- was spilled. Forty thousand gallons of hydraulic fluid is far more than the amount used here throughout its 65-year history.

The real travesty concerns the now widely publicized analysis of drinking water for chemical pollutants taken in 1981. The chemical pollutant levels were astronomical. Literally, the parts per billion found for some chemicals were beyond the test equipment scales. My colleague, Mr. George Tyler, last week indicated that the data was flawed. That is a kind quote. I could not agree more; so do all concerned environmental agencies. The consensus now is that the results were inaccurate, flawed, and totally useless for their purpose. An immediate retesting was done by us. An evaluation and analytical analysis by Princeton Aqua Science: "Indicates the source of sample contamination to be laboratory handling and/or analysis, and not true contamination of the water source."

Princeton Aqua Science further states, referring to the concentration of 3,3-dichlorobenzidine originally reported: "...are not true contaminations of the wells as indicated in the 1981 report. It is apparent that the concentrations reported are a result of sampling handling and analysis." As a matter of fact, the chemicals found in the water and listed in the IAS, Table III, Appendix C, are similar to those used in cleaning laboratory equipment.

I have for presentation to you as well, a copy of the October 10 water report from Chyun Associates. I believe you already have that.

Just to quote the last paragraph from the Executive Summary: "The Naval Air Engineering Center water systems are of good quality and are essentially the same quality as the years 1983 and 1984. Companion analysis of a selected Boro of Lakehurst raw water well reflects the same good water quality supplied to Pinehurst housing." If you notice in there, sample after sample, the limits are non-detectable for our water that we use here. The only way I can characterize the water is, it is typical New Jersey water, high iron, and soft. It is not gourmet water, but it's not bad.

Subsequent annual water test results by various State-certified water analysis laboratories of Lakehurst's drinking water are consistently unanimous in their findings, as I just pointed out. Accordingly, the time has come for EPA and DEP to ensure their own findings and conclusions regarding our water quality are consistent with current laboratory data.

Item 7, complete cooperation with Federal, State, and local agencies has always been NAEC and Navy policy.

One of the most important aspects of our aggressive Environmental Protection Program is our partnership with the Ocean County Board of Health, the Pinelands Commission, the DEP, and the EPA. The shared expertise of these agencies is highly valued by Navy Lakehurst.

Our master plan was developed in conjunction with, and approved by, the Pinelands Commission, and is entirely compatible with the Pinelands Comprehensive Management Plan.

Navy Lakehurst complies fully with New Jersey substantive and procedural environmental laws which have been adopted to implement the Federal Resource Conservation and Recovery Act, the Clean Air Act, and the Clean Water Act.

NAEC is a multi-service command, having both Marine and Army personnel here in tenant commands. Concern about the environment at Navy Lakehurst is paramount for all services. An excellent example of this joint concern is the recent aerial survey of the Base provided to the Ocean County Board of Health by one of my Army helicopters.

A specific example of our cooperative spirit is the modifications which are being made to the Confirmation Study being performed by Dames and Moore. On August 19, 1985, a meeting between NJDEP, EPA, the Ocean County Board of Health, the Pinelands Commission, and the Ocean County Planning Board took place. As a result of comments by these agencies, the contract is being modified to include additional monitoring and changes in analytical procedures. The cost of the contract to the Navy has been increased by \$65,000 as a result of this. You may recall I mentioned it was about a \$400,000 contract prior to that time. This is a clear indication of our intent to use

all resources available to us and to assure that we are doing the best that can be done.

NAEC has always held its gates open to Federal and New Jersey agencies and will continue to answer any questions. We welcome the opportunity to do so because we are proud of our past accomplishments and will aggressively pursue environmental protection as one of our top priorities in the future.

Finally, I would like to read the Summary in full: I reaffirm to the Committee that Navy Lakehurst is a full partner with all Federal, State, and local environmental agencies in their quest to clean up the environment. I hasten to add, however, that any commercial activity in the State of New Jersey will have to take extraordinary measures just to stay even with Navy Lakehurst in its environmental progress.

I have clearly demonstrated here today that Navy Lakehurst has always been forthright in sharing its environmental data with appropriate agencies, that it has always kept them and the public informed, that it is clearly the environmental leader in Ocean County, and that it has never been a health hazard to the local community.

When this latest round of adverse publicity arose, starting August 4, I became very concerned about the long-range environmental cleanup on a national level. Although I was armed with the facts about Navy Lakehurst's environment past and present, it occurred to me that if other agencies, private or government, undertook an honest effort to identify hazardous waste conditions as the Navy did, and were publicly berated or criticized unjustly for their findings as was Navy Lakehurst, might not they become reluctant to undertake an assessment survey and report their findings?

This last round of adverse publicity marks the third time in five years that local communities have unnecessarily been alarmed about environmental conditions at Navy Lakehurst by careless communications absent of even basic fact-finding. The correction of longstanding hazardous waste problems in Ocean County is a regional problem. It can only be corrected by a harmonized effort by Federal, State, and local agencies which must exercise maximum sincerity of purpose, moral

courage, and the commitment to cleanup. Anything less is a disservice to the public.

It is a matter of record that Navy Lakehurst is the preeminent hallmark of the right stuff in cleaning up the environment in the local area, and we want our long-term civilian neighbors to know that.

CAPTAIN EATON: Lt. Leachman would like to cite some documents that we would like to have included in the record.

LIEUTENANT PENNIE CANNON LEACHMAN: Previously, our Public Affairs Officer has forwarded to you, on 7 October and 10 October, several documents. I have a copy of both of those letters. We requested every document that was forwarded with those letters be made a part of the public record in this hearing. We also would be happy to provide any of those documents that have been misplaced, however, they have been provided. In addition to that, we want added the 1985 water quality report, a copy of which appears before each of you individually. We have included a copy here for the record. This is a copy of our hazardous material hotline sticker. We have copies of our SECNAV [Secretary of the Navy] Environmental Protection Award nominations for '84, '83, '82, and '80, that we would like added, a transcript of the Commanding Officer's 30 August brief, which also appears before all of you in addition to the blue covered document, and we have provided a copy for the record. We, also, have included copies of our employee qualifications that work in the Environmental Branch of the Public Works Department, and spill information sheets. When the Department of Environmental Protection was talking about 18 additional spills -- we want you to know what those were, and that they were reported, so we have included copies of those. You already have before you copies of the '81 to '85 water reports, a copy of the Captain's testimony today, a copy of his 30 August briefing, and copies of letters which transmitted the initial assessment study -- the yellow document -- to the DEP and the EPA.

ASSEMBLYWOMAN FORD: Let the record show that all of those documents that were referred to will be made part of our records in these proceedings. Is there anything else?

CAPTAIN EATON: Not at this time, thanks.

ASSEMBLYWOMAN FORD: Thank you, Captain, for your statement.

CAPTAIN EATON: You are welcome.

ASSEMBLYWOMAN FORD: And for, perhaps, clarifying some of the questions I had. You mentioned that you had identified at your public hearing on August 30 -- or I guess it was a closed meeting on August 30 with some of the officials -- that there were 44 sites. Subsequent to that I was confused as to Mr. Tyler's indication that there were an additional 18 sites at Lakehurst. But, your indications are that he is not referring to sites, he is referring to contamination spills.

CAPTAIN EATON: That is correct.

ASSEMBLYWOMAN FORD: When have those additional spills occurred?

CAPTAIN EATON: Those have occurred, I would say, over time in the last few years. And, what they deal with is we have a spill threshold of five gallons. If we spill five gallons or more, we put ourselves on report, we call out the spill response team, we inform the DEP, the Pineland's Commission, and the EPA. We take the action to clean it up in coordination with them, and, of course, seek their approval in doing that. In the 18 spills that were in question here, are really a history of those kinds of things that have happened over the years. The earliest one appears to be 8 October, 1982.

If you would like, I would like to elucidate on the 44 sites one more time. In doing the initial assessment survey, they had identified 44 sites that they had questions about. There was conjecture that it could be identified as a potential. Out of those 44 sites, they recommended only 16 of those 44 be held over for further or confirmation study. In my 30 August presentation, which, by the way, was fully open, I mentioned that of those 44 sites in the report, only -- let's see -- 33 are inactive -- that is they are totally not used for anything any longer, and in some cases that is more than 25 years. And 11 sites that we are talking about are still in operation. That is, they are sites that are used in the normal business of Lakehurst.

We have five jet-cart test tracks. Those five tracks alone generated 15 sites. To clarify a point on that, those jet-cart tracks were propelled by four jet engines. The jet engines burn JP-5 fuel.

What we have is a tank that provides fuel to the engines while they are being run, they are then brought up to full power to launch the test vehicle down the track. At that moment there is a quick disconnect. When the quick disconnect occurs, it spits out some fuel. In this case, we are talking drops or ounces. When it reaches the other end of the track, the jet engines shut down. When they shut down, a pressure and discharge valve opens up, and approximately a pint of fuel drains out of each of the engines. This is consistent with the operation of any jet engine that we operate today, whether it be American or otherwise, and any airliner.

The reason for that is you must vent out all of that fuel, so that on the next start cycle you don't have fuel in the plenum, because if you do you will set the engine on fire. Now, what we have done is we capture the fuel at the quick disconnect end, now, we have installed manifolds on the engines so that that fuel that comes from the pressure and discharge valves is collected and then recycled back to be burned again. And that is an example of the kinds of things that we are doing. So you can say, in effect, that those sites now are really not sites any longer.

ASSEMBLYWOMAN FORD: Okay. How many ongoing sites are there still now left to be cleaned up?

CAPTAIN EATON: I can't answer that because I don't know that I have a problem until I get the confirmation study's results. See, they have to confirm or deny the very existence of chemicals in certain areas. Then, they have to characterize it if they do find something -- what it is -- and then make recommended action to clean it up. Now, one of the things that we have done in conjunction with the various environmental agencies and DEP is that if we come across a problem and characterize it as a problem, we are going to accelerate the process for that site. In other words, not do them all. But, at that point, continue on, define the remedial action, and take it. In other words, we're not going to wait for the five and a half months remaining to do the field work, we are going to do it as soon as we find something, if we do.

ASSEMBLYWOMAN FORD: At your August 30 briefing, I think, in some of the documents it indicated that there were about 12 sites that were still ongoing or--

CAPTAIN EATON: What I discussed on the 30 August meeting was the 16 sites that were recommended for further study.

ASSEMBLYWOMAN FORD: Okay. And of those 16 sites, which are a part of the 44--

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN FORD: --of those 16 sites, what is the nature of them? What I am concerned about is there's a vast difference between whether it is a site where there's dumping going on, or whether there is a site that is a fuel spill that is quickly cleaned up and self-contained.

CAPTAIN EATON: Okay. To characterize and give you the best answer I can, I personally am concerned about one of those 16 sites. As far as I am personally concerned, the other 15 are benign. The one site I am concerned about is the one that I mentioned in my text -- the fire-fighting training area. I have shut that site down. The reason I have shut it down is, because, the oil-water separators were old. As I understand it, they have been installed for more than 20 years, and they were not functioning up to speed. They just weren't operating at optimum. In addition, I have reason to believe that there is trapped residue from the effluents that come off from fighting the fires. What we do is we take expended oils or petroleum products, put it in a concrete pit and ignite it, and then they fight the fire with water. Part of the training that all the sailors and officers get going to ships. And, that site, in my mind, is probably the worst one, and the one that I have the most concern about.

Now that we stopped the operation, obviously we're not generating anything. Dames and Moore is concentrating -- or will be concentrating -- on, defining what the problem is and what we are going to do to clean it up. If you like, I can show you pictures. I think that is-- Why don't you go ahead and throw that up there. I think it would be helpful if you saw what it looked like. Yeah, put the words and the text up there. (referring to gentleman operating slide projector. Captain Eaton moves to screen to explain slides)

The site we are talking about is site number 16. That was used as the fire-fighting training area from 1970 to June of 1985, when I shut it down. Suspected contamination that I have of that site is oily waste water, JP-5 fuel, and Aqueous Fire Fighting Foam. Most of the oil was burned off, though-- A majority of it was burned off. The residue was cycled, then, through all-water separators to an evaporator. The remedial action that I've taken to date is, I closed the site in 1985, installed two observation wells in 1982 used to determine plume shape and assist in quantifying the size of the plume, the area of contamination was previously mapped by the New Jersey Department of Environmental Protection using earth resistivity and conductivity techniques -- so they fully have the thing scoped out. The future actions that we're talking about at this time, which could be subject to change, is we are putting in a monitoring trench to prevent possible migration, to remove the petroleum products, design and acquire new all-water separators -- which is underway -- and then, Dames and Moore will install additional wells, analyze the soil to determine the extent of contamination, and recommend methods of cleanup. This characterizes what, in my mind, is the worst site that we have.

ASSEMBLYWOMAN FORD: Are there other sites within those 16 sites -- or whatever -- that are ongoing at this point in time?

CAPTAIN EATON: By ongoing, do you mean they are in operation?

ASSEMBLYWOMAN FORD: Yes.

CAPTAIN EATON: Let's see.

ASSEMBLYWOMAN FORD: Take, for example, site 33.

CAPTAIN EATON: That's the jump circle? What is site 33? Give me site 33. (referring to aide in audience) Is that the gas station?

CONSTANTINE TSENTAS: That's the garage -- the gas station.

CAPTAIN EATON: Okay, site number 33 is the Navy Exchange Gas Station. Can we put that on? (speaking to projector operator)

Mr. Cantor: Fuel repair shop, Captain.

CAPTAIN EATON: Oh, it was not one of the 16 that we are talking about. That was not recommended for a confirmation study.

ASSEMBLYWOMAN FORD: What is going on, for example, at that site? That was listed in some--

CAPTAIN EATON: Well, all I can tell you is the monitoring well has shown nothing. Another site, I can tell you, that's-- Okay. (speaking with aide in audience) You'll notice in your briefing guide, that all 44 sites are in there. In my presentation on the 30th of August, I chose the 16 worst sites that were held over for a confirmation study. The site number 33 was used from 1960 and is still used. The expected contamination is oily waste. Remedial actions to date is: drains into a dry well -- which was sealed in 1980 -- and, our future action is just to confirm or deny existence of the problems, and make recommendations. By the way, we have taken the NEESA (Navy Environmental Support Activity) study a significant step further. The study recommended only looking at 16 sites; we're looking at all of them. That's the general area, and that's the dry well cap. (referring to points on screen)

ASSEMBLYWOMAN FORD: Just maybe I could just-- In comparing the briefing data, there were sites -- for example, site 33 -- which indicated that it would have -- for example, 33 had that its use was from 1960 to present, as you indicated on your slide - there were something like 12 sites that had that indication there.

CAPTAIN EATON: That were still used?

ASSEMBLYWOMAN FORD: That were still being used.

CAPTAIN EATON: Yes, the Navy Exchange Gas Station is a good example. The Navy Exchange Gas Station operated as a normal gas station operates, and that is they do mechanical repairs, and also sold gas and that sort of thing. The suspected contamination at that site was battery acid, motor oil, and maybe, some fuel spills. The operation of the repair part of the gas station was terminated about three or four years ago. The only thing that operates now is we sell gas. Immediately behind the Exchange Gas Station is a dry well. The dry well has shown nothing. There is nothing in it. So, the chances are, conjecture says, "Well, maybe you spilled battery acid, maybe you spilled oil." But, we haven't found evidence of anything like that. Am I too far away from this, by the way? (Speaker is referring to his distance from the microphone. He receives negative response.)

ASSEMBLYWOMAN FORD: Are any of the 12 sites that were identified in the briefing documents as on-going sites -- in other words, still in use and had been sites with some type of contamination in the past -- are any of them involved in the other assessment -- the confirmation study?

CAPTAIN EATON: They all are.

ASSEMBLYWOMAN FORD: They're all involved?

CAPTAIN EATON: That is, they are all being looked at to confirm or deny the existence of a problem. For example, another one of those sites in question is the PCB site, which also got a lot of play. The PCB site is a site -- a concrete pad is all it is -- which is where we used to store transformers that use PCB type coolants.

ASSEMBLYWOMAN FORD: Okay. Well, like, what numbered site would that be?

CAPTAIN EATON: It's site number 44.

ASSEMBLYWOMAN FORD: That was closed in '81, I believe.

CAPTAIN EATON: There's nothing there. Can you flash that one up, Paul? (referring to projector operator) I'll show you what it is from the slides. Okay, site number 44, PCB transformer storage site, is used from '45 to '81. Suspected contamination is: transformer oil containing PCB, a maximum of 26 gallons of fluid, although the amount is pure conjecture, containing small amounts of PCBs. Remedial action is we have an observation well down-gradient, monitored periodically for oil. So far, we haven't gotten anything. The future action is Dames and Moore is going to confirm or deny the presence or absence of any contamination. And they will analyze some actual-- They are going to take up some concrete samples, and analyze those as well. If you want to flash through the pictures, this is the general location of the site, and this is the concrete pad that I am speaking of, right here, where they used to have transformers (running through slides). This is a close-up of what it looks like-- Since the picture was taken there is nothing there at all. And this is another area, not too far away, near the secondary fire house.

ASSEMBLYWOMAN FORD: When you identify as certain sites that are ongoing -- and I'm concerned about these 12 sites that in your

briefing documents have been identified as ongoing -- you are talking about the use of the site--

CAPTAIN EATON: No, no, the monitoring is ongoing.

ASSEMBLYWOMAN FORD: The monitoring is ongoing. And that is because of past history of pollution, or--

CAPTAIN EATON: Well, there are two parts to the answer. It is ongoing as far as monitoring is concerned, and if it is ongoing it is probably still being used for something. Catapult test site is still being used--

ASSEMBLYWOMAN FORD: Right. Gas station--

CAPTAIN EATON: Gas station-- Still being used.

ASSEMBLYWOMAN FORD: Okay.

CAPTAIN EATON: By the way, any subsequent spills that we are talking about at any of these sites would be reported under RCRA, and some of those were in the 18 that we talked about.

ASSEMBLYWOMAN FORD: Are any of those of the 12 sites that you identified as ongoing -- either in terms of monitoring, and so forth-- Which are the most serious or ones of concern? Or do none of them concern you?

CAPTAIN EATON: I can't think of any that I am concerned about in those that are still being used. I can assure you, as I said in my briefing of 30 August, if I have knowledge of a site that could potentially cause a problem, I have closed it down. The fire-fighting mat, and the fire-fighting school have been closed down since June for that reason. The catapult test track was closed down, pending a verification of operation to ensure that nothing was getting out. That assurance was made, and it's back in operation. The jet-car tracks that I spoke to you about earlier were shut down until those manifolds were installed so that they weren't spilling any fuel. That is the kind of thing we are talking about. So any thing that is in operation right now is not generating or spilling waste, or it wouldn't be operating.

ASSEMBLYWOMAN FORD: So, there's no dumping or no spilling going on right now at Lakehurst?

CAPTAIN EATON: Absolutely not.

ASSEMBLYWOMAN FORD: Okay.

ASSEMBLYMAN HENDRICKSON: One thing, Madam Chair.

ASSEMBLYWOMAN FORD: Mr. Hendrickson.

ASSEMBLYMAN HENDRICKSON: How long has that been going on, Captain?

CAPTAIN EATON: How long has what been going on?

ASSEMBLYMAN HENDRICKSON: When you stopped spilling of the waste?

CAPTAIN EATON: I would have to say that that is probably before RCRA.

ASSEMBLYMAN HENDRICKSON: It was initiated here at Lakehurst by themselves for the problems?

CAPTAIN EATON: Oh, yes, in '79.

ASSEMBLYMAN HENDRICKSON: And are we not now going over-- Are there any new pictures here that you are showing that were not shown in your August briefing?

CAPTAIN EATON: No, sir. The only pictures that were not shown in August were the additional sites besides those 16. Those pictures are all in these projectors. Any one of the 44 sites we can talk to.

ASSEMBLYMAN HENDRICKSON: Just one more question, if I may? Would you not have disclosed all this information to any legislator that might have come to you that perhaps could not have attended the August 30th hearing without--

CAPTAIN EATON: Yes, sir, as a matter of fact, I had Congressman Saxton to my quarters where we held about an hour briefing.

ASSEMBLYMAN HENDRICKSON: Did Congressman Saxton come on his own volition and discuss this whole thing with you?

CAPTAIN EATON: Yes, sir.

ASSEMBLYMAN HENDRICKSON: Without a public hearing?

CAPTAIN EATON: Yes, sir.

ASSEMBLYMAN HENDRICKSON: Thank you.

CAPTAIN EATON: Also, by the way, which I think is significant to point out, I had a letter from a private citizen on the Freedom of Information Act, requesting a copy of the NEESA report and our interim study. And, if you recall the presentation on the 30th of August, that is what I gave that individual. The whole thing. And

then we took them out to the sites, and visited all the sites in question. That's our approach, and, you know, big or small we're going to take care of it.

ASSEMBLYMAN HENDRICKSON: I know that's what I had asked you publicly, and that's what you had said. Thank you.

ASSEMBLYWOMAN FORD: Just tell me about site 43.

CAPTAIN EATON: Site 43 is the advanced underwater weapons compound, is that what we're talking about?

FROM AUDIENCE: Yes, sir.

CAPTAIN EATON: Okay, site 43-- I'm going to have to tell you right out that, well-- I can tell you that the site's operation necessitated a radiological sweep. That was conducted and the area was found to be clean. They took smears, they took readings, and, as far as we're concerned, the Navy has done that with themselves, that is off the list.

ASSEMBLYMAN HENDRICKSON: Captain, is that a training site of some type, or personnel--

CAPTAIN EATON: It is no longer used-- We'll show you pictures of it.

ASSEMBLYMAN HENDRICKSON: Fine.

CAPTAIN EATON: But, what it is used for now is it is a fuels laboratory for training Aviation Boatswain's Mates, who are fuel specialists, and, it is also a trans-shipment point for commercial removal of hazardous materials.

ASSEMBLYMAN HENDRICKSON: Would you explain to us why we're training them along those lines?

CAPTAIN EATON: Yes.

ASSEMBLYMAN HENDRICKSON: The necessity of it.

CAPTAIN EATON: Navy Lakehurst, among its many missions, trains all the aviation flight deck personnel for the Navy's Aircraft Carriers. Three categories: Catapult Specialist, Arresting Gear Specialist, and Fuel Specialist, and they are all trained here. The fuels guys are the guys that fuel the airplane, and make sure that the fuels are not contaminated for operation of the airplanes. In this particular area, suspected contamination of site number 43 was

radiological. Remedial action to date: We did a survey that was completed; the results: No contamination -- the certificate has now been issued and you have a copy; further actions: None, we're done. This is a picture of the site. The site in question, really, focuses along this area over here, and this is the area I'm speaking of over here, which is where we keep hazardous materials for removal. You'll notice, by the way, these are the underground tanks you will see all over the Base that have come up out of the ground, and, as I said before, we are the only guys doing it. The reasons are obvious-- We don't have any leakage, and if we do see a problem on top it is easy to fix. (Captain was referring to projected slide on screen while speaking.)

ASSEMBLYMAN HENDRICKSON: Captain, are we training these men -- and women, now --

CAPTAIN EATON: Men and women, that is correct.

ASSEMBLYMAN HENDRICKSON: (continuing) --for the worst case scenarios that they could possibly see on ships or -- approximately?

CAPTAIN EATON: Yes. One of the things I want to reemphasize, though, is the training is somewhat compromised because I am not training fire-fighting. Every Navy person that goes onboard a ship must be a trained firefighter. I am a trained fire-fighter. I've gotten hosed-down and wet with the rest of them. And breathed smoke and all that stuff. What we're doing-- And here, I'll think out loud with you. What we plan to do is, when the all-water separators get in place -- and, we've already replaced some piping now-- We had some leakage, which those are fixed -- we're going to increment our way back into the training. We're not going to use Aqueous Fire Fighting Foam. We're going to just go through the motions and fight with water. At such a time that we can prove that Aqueous Fire Fighting Foam will not breakdown any petroleum to where I can't separate them, then we'll start using that. But in the meantime, they will get the benefit of going through the motions, feeling the heat as it were, and actually fighting a fire with water.

ASSEMBLYWOMAN FORD: Let me just ask you--

CAPTAIN EATON: We're not quite there, yet.

ASSEMBLYWOMAN FORD: Let me ask you just a generalized question. Some of the briefing documents indicated -- and I'm back to those questions about the sites and the dates on the sites and the ones that you have in the slides -- some of them go back to the '20's-- Would it be wrong to assume that that is how far back the hazardous waste dumping, or spill activities, could have gone on?

CAPTAIN EATON: I would have to assume that any spill activities, or anything you want to characterize that as, probably went back to 1915 when this thing was the Eddystone Artillery Testing Company -- or whatever it was -- Eddystone Chemical Company. And, I am sure, throughout its history, like every other activity in the United States, there probably was something along that line.

ASSEMBLYWOMAN FORD: This Base was a chemical company before--

CAPTAIN EATON: No. That was what it was called.

ASSEMBLYWOMAN FORD: Oh.

CAPTAIN EATON: What it was was they were manufacturing artillery shells for Czarist Russia and the French.

ASSEMBLYWOMAN FORD: Okay.

CAPTAIN EATON: That's why we have those Russian Churches down the street here. It is a holdover.

FROM AUDIENCE: It wasn't a military base.

CAPTAIN EATON: Yeah, it was not. Then in-- Just prior to World War I, or about World War I, it became Camp Hendrick, and then, when the war ended in 1919 they wanted to do away with it, and the Navy said, "Hey, this would be a great place to operate air ships. Let's buy it." And they bought a few acres, commissioned it in 1921 as a Naval Air Station, which it was until 1977.

ASSEMBLYWOMAN FORD: Do you have records covering these activities going back?

CAPTAIN EATON: I wish I did. The reason I do--

ASSEMBLYWOMAN FORD: When does your record keeping on hazardous waste activities start?

CAPTAIN EATON: The best answer I can give you is 1979 when this place formed its own organization. Part of the problem, which, by

the way is almost a crime, but all of this Station's histories on airships and all of that sort of thing are lost-- Which was lost in 1977 when we transitioned from a Naval Air Station to a Naval Air Engineering Center. I find it, personally, very regrettable because I happen to be a fan of Naval History, as well. But, Mr. Althoff, who was here last week, is kind of an expert in that area.

ASSEMBLYWOMAN FORD: You say that your records on these waste activities start in '79, but you really-- It is a guesstimate--

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN FORD: And that is probably how we got involved in that because that what--

CAPTAIN EATON: That's the reason--

ASSEMBLYWOMAN FORD: --what the initial report did. They guessed on the amount of dumping, and so forth, prior to that.

CAPTAIN EATON: Exactly.

ASSEMBLYWOMAN FORD: But we really have no concrete knowledge as to the extent or the nature of the dumping prior to '79.

CAPTAIN EATON: That's right, and the only way we can-- That's one of the reasons the confirmation study is so absolutely essential. Because, if they take a core sample, or take a water sample, then they can make a judgment on what they see in that thing on whether or not there was something there. Because, truly, we have interviewed some guys who are in their 80s, and they say, "Oh, yeah, I remember back and--" Conjecture is hell. And, one of the things that was interesting was about fuel, for example. My guess is, if there was any fuel that was going any place, it was probably going into the tanks of a 1932 Chevy. (laughter)

ASSEMBLYWOMAN FORD: Is it possible then, that there are some sites that are yet to be discovered on this Base?

CAPTAIN EATON: I, honestly, doubt that. And the reason I say that is, I, personally, have been around all 11.2 square miles of this place time and time again. The NEESA was totally-- I missed that.

ASSEMBLYWOMAN WALKER: I said, so was I before I got here. (laughter)

ASSEMBLYWOMAN FORD: Maybe I should introduce Assemblywoman Walker, who took a tour of the Base before coming to the meeting this morning.

CAPTAIN EATON: Sorry about that.

ASSEMBLYMAN HENDRICKSON: Jackie, you got your own personal tour of what a fine Station we have here, right.

CAPTAIN EATON: Sorry about that. But, anyway, they were so expansive in defining that universe, I can't believe that they missed anything.

ASSEMBLYWOMAN FORD: Back in 1981, you identified 29 sites, I believe, to the DEP that were either possible sites of contamination or cleanup activities or whatever was going on there.

CAPTAIN EATON: Right.

ASSEMBLYWOMAN FORD: Yet, you are conducting an analysis now of the extent of contamination at 16, I guess, left of those sites-- the Dames and Moore study. Why is that being undertaken at this time?

CAPTAIN EATON: The reason for that is the 29 sites that were mentioned then were based on the findings of our own environmental people, who were just starting to come into operation. They took those 29 sites and gave those to the NEESA team that came here, and said, "Hey, while you are looking let us lead you with these things. Give you a leg up on looking at the problem. And here they are." In doing the process of the '81 study -- which we finally got the report in October of '83 -- those things were included and are part of those 44 sites. That thing is you can see a continuant now of those sites. And now we're to the point of identification, characterization, and corrective action, if any.

ASSEMBLYWOMAN FORD: But it has taken four years to get to that point?

CAPTAIN EATON: Yes it has. I would say that it would have taken a good deal longer had not the environmental people led them in the first place by saying, "As you walk in the door, here's 29 sites to start with." Because, I can assure you, at other activities in the Navy they don't have any such team or wherewithal to do that, so those guys are starting from scratch.

ASSEMBLYMAN HENDRICKSON: Madam Chair?

ASSEMBLYWOMAN FORD: Well, just one-- Do you recall the DEP indicating that they heard about these sites for the last time in '83? The first time?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN FORD: But, they were actually advised in '81?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN FORD: Okay.

ASSEMBLYMAN HENDRICKSON: Captain, we know, and I brought up at the last hearing, hindsight is kind of a little better than foresight from our experiences. And all over this country, and all over the State of New Jersey, and, in fact, in the back yards of some of our homes, we were mentally conditioned -- terribly so -- of dumping things on the ground. If we painted our houses, a lot of people would take their lead paint and dump it in the back. We just didn't know any better. Isn't that really what has happened, and didn't we find our mistakes, tragically, when our water supply down here started to become contaminated and the interested parties started to look for sources, and wouldn't that be some time in the late seventies?

CAPTAIN EATON: I would have to-- In my opinion, that is correct.

ASSEMBLYMAN HENDRICKSON: We were just so mentally conditioned and not properly trained that we were using open dumps for our garbage, and just about everything in the Pinelands was always used for everything they could possibly dump in.

CAPTAIN EATON: Yes, sir, and that is still a problem, by the way.

ASSEMBLYMAN HENDRICKSON: There's no question about it.

CAPTAIN EATON: I have personally surveyed, not only Lakehurst, but adjacent areas, in a helicopter flying around here and there are some things going on a little further on out that I am concerned about.

ASSEMBLYMAN HENDRICKSON: We're going to be able to walk across our streams on beer cans shortly, until the litter tax gets set up.

CAPTAIN EATON: One of the things, also, I would add to that is the Navy is really responsive to this sort of thing, and the reason is obvious. Everybody out there pays our salaries, buys our equipment, and we have an obligation back and forth. You may recall, in my 30 August brief, I outlined a little bit of the background, but, in 1970, in December, we had the EPA established. Immediately, in January of '81 OPNAV Code 45, who works for the Chief of Naval Operations, established the Navy's Environmental Protection Agency, if you would, so in that regard I report to Vice Admiral Hughes at OP45 with full operations or anything to do with the environment. One of the things I would also like to assure everyone here is that environmental cleanup is a Chief of Naval Operations directed program. What that means, simply, is we are going to take care of that before we take care of some of these other things, like acquisition of some hardware, in certain cases. If it is a CNO directed program that means the money is fenced, and dedicated solely for environmental matters. Congressman Saxton said at the first meeting on the 8th of August, "Oh, you have unlimited money." Well, not quite, but I assure you that the money is there if it is needed. Another thing that needs to be underscored is I am a non-profit organization.

ASSEMBLYWOMAN FORD: That's not what we hear from--
(laughter)

ASSEMBLYMAN HENDRICKSON: Captain, if I may, to differentiate between non-profit and employing--

CAPTAIN EATON: Yes, sir.

ASSEMBLYMAN HENDRICKSON: These people spend a lot of money -- the employees of this base. Not that that has anything to do with the contamination.

CAPTAIN EATON: What I mean by that is, if I am confronted with an environmental problem, I'm not going to ring my hands and say, "My God, my profit margin is going to be shaved by two percent and I'm going to lose market entry, and so on. I don't have that problem. My problem is I have impacted mission, perhaps, like in the fire map.

ASSEMBLYWOMAN FORD: Assemblyman Rod?

ASSEMBLYMAN ROD: Yes, can you do me a favor, and put up the aquifer map -- the one you have in the back?

CAPTAIN EATON: I couldn't hear that.

ASSEMBLYWOMAN FORD: He wants the aquifer map that was brought out.

ASSEMBLYMAN ROD: Yes. Can you give me the name of the aquifer that lays right under the base, Captain?

CAPTAIN EATON: Well, you have the Cohansey. Do you have a question about the Cohansey?

ASSEMBLYMAN ROD: Is this where the Base gets the drinking water and the water they are using right now?

CAPTAIN EATON: It depends. We have some wells that go down 1300 feet, and that is not the Cohansey Aquifer.

ASSEMBLYMAN ROD: For the benefit of the public, can you point out the Cohansey Aquifer on that map, Captain, please? (Captain Eaton indicates location on map) Just bring the key over here, will you please?

CAPTAIN EATON: You can simply say in Ocean County you have the Base about at this location, but this thing is lacking in some details to totally give you the definition of it. But you could say, essentially, that we are over the Cohansey Aquifer.

ASSEMBLYMAN ROD: Can I ask a question, Captain? Could you tell me if you have any alternative as far as drinking water and water that you use for the homes and--

CAPTAIN EATON: The alternatives are that you can go deeper.

ASSEMBLYMAN ROD: You can go deeper?

CAPTAIN EATON: Yes.

ASSEMBLYMAN ROD: What aquifer would that be, Captain?

CAPTAIN EATON: Probably Kirkwood.

ASSEMBLYMAN ROD: Kirkwood?

CAPTAIN EATON: You've got the Cohansey going downward, you've got Kirkwood and the Raritan. You can go to any of those.

ASSEMBLYMAN ROD: Is there any possibility that you can, by any way or shape, connect the Cohansey with the Kirkwood?

CAPTAIN EATON: Why would I want to do that?

ASSEMBLYMAN ROD: Is there any way that you can-- In other words, by drilling a deeper well, is there any possibility that you can connect and then draw some contamination from one aquifer to another?

CAPTAIN EATON: The first thing I want to say -- I want to get back to your first question -- alternate water sources. Our water quality is some of the best in the State of New Jersey, so I'm not looking for alternatives. The second place is I don't know why I would want to drill and connect two aquifers. I don't understand that question.

ASSEMBLYMAN ROD: Is this all one aquifer system?

CAPTAIN EATON: Is all what one aquifer system? No, they are in strays and are stratified. There are different things. You can literally punch going through one to another to another.

ASSEMBLYMAN ROD: Yes, can I ask--

CAPTAIN EATON: Yes, sir.

ASSEMBLYMAN ROD: Do you, at the present time, have any well water contamination on the Lakehurst Base?

CAPTAIN EATON: I have no knowledge of any groundwater contamination at Lakehurst.

ASSEMBLYMAN ROD: How do you know this?

CAPTAIN EATON: Because my water report says it is all good.

ASSEMBLYMAN ROD: Is that tested-- When was this water report? When were these results?

CAPTAIN EATON: October 10, 1985.

ASSEMBLYMAN ROD: '85? With respect to the various groundwater studies conducted on the contract to the Navy since 1981, will you please tell us how sensitive the methods employed in these studies have been with respect to the detectability of cancer-causing substances?

CAPTAIN EATON: Yes, they can read to less than one part per billion.

ASSEMBLYMAN ROD: Okay, I have a report analysis in here which says 25 parts per billion--

CAPTAIN EATON: Which report are you referring to?

ASSEMBLYMAN ROD: 1985.

CAPTAIN EATON: Which report? Is that Chyun Associates?

ASSEMBLYMAN ROD: Yes.

CAPTAIN EATON: Okay, what page are you on?

ASSEMBLYWOMAN FORD: I think he's referring to attachment A, page one of two pages.

ASSEMBLYMAN ROD: Well, it doesn't have a page number.

ASSEMBLYWOMAN FORD: Well, it's identified as attachment--

ASSEMBLYMAN ROD: It is sample water 12. It is practically in all the pages, really-- No, two of the pages. Can you explain that to me, Captain?

CAPTAIN EATON: Now, what was the compound you were talking about?

ASSEMBLYMAN ROD: Dichlorobenzidine -- 3,3-dichlorobenzidine.

CAPTAIN EATON: Now, what was the question?

ASSEMBLYMAN ROD: What is the detection limit?

CAPTAIN EATON: According to--

ASSEMBLYMAN ROD: According to this report, yes.

CAPTAIN EATON: Twenty five.

ASSEMBLYMAN ROD: And, what is the EPA limits?

CAPTAIN EATON: Can you tell me, I don't have it handy?

ASSEMBLYMAN ROD: According to our research, it is .01.

CAPTAIN EATON: Okay.

ASSEMBLYMAN ROD: That would be 25 times greater?

CAPTAIN EATON: That's not what was found. It was non-detected.

ASSEMBLYMAN ROD: What was found?

CAPTAIN EATON: Nothing.

ASSEMBLYMAN HENDRICKSON: Doesn't that say that on that page?

CAPTAIN EATON: Yes.

ASSEMBLYMAN HENDRICKSON: That's what I thought.

ASSEMBLYMAN ROD: Is that 25 parts per billion?

ASSEMBLYMAN HENDRICKSON: Detection limits.

CAPTAIN EATON: That's the detection limit of that particular compound.

ASSEMBLYMAN ROD: If it could have been 24 could they have found it with a detection limit of 25?

CAPTAIN EATON: I don't know. Could they? (speaking to gentlemen in audience)

MR. TSENTAS: Yes, they could.

ASSEMBLYMAN ROD: Can you tell me how?

CAPTAIN EATON: Tell him how. (deferring to Mr. Tsentas)

MR. TSENTAS: This is the subject of a protection limit.

ASSEMBLYMAN ROD: Can you enter your name into the record, sir?

MR. TSENTAS: Yes, my name is Constantine Tsentas, and I am with Dames and Moore.

ASSEMBLYMAN ROD: Okay. Could you use a microphone, please? If it would have been 24, could they have found the--

MR. TSENTAS: Yes, it would have shown on the gas chromatogram.

ASSEMBLYMAN ROD: If it would have been one, could they have found it?

MR. TSENTAS: Possibly.

ASSEMBLYMAN ROD: Possibly?

MR. TSENTAS: Yes.

ASSEMBLYMAN ROD: How about five?

MR. TSENTAS: Yes.

ASSEMBLYMAN ROD: Can I ask a question? What was the detection limits in the 1981 Princeton Aqua Science report?

MR. TSENTAS: I don't have that information right now.

ASSEMBLYMAN ROD: Does anybody else have that information?

MR. TSENTAS: We-- Princeton Aqua Science, at that time, did not do an actual test. They evaluated tests performed by others, so we can't respond to your question.

ASSEMBLYMAN ROD: Whose test are you talking about?

LT. LEACHMAN: Princeton Aqua Science, basically, responded to the tests found in Appendix C of the Initial Assessment Study. Princeton Aqua Science looked at the tests from two other companies that were done and reported in Appendix C of the yellow book -- the Initial Assessment Study. They evaluated those tests, and said they could not possibly have been correct. They did some testing of their own, but not enough that we can provide that data. We can provide the data for you for the year 1982 because we have the data from independent tests done by Princeton Aqua Science in 1982. We could tell you what the parts--

CAPTAIN EATON: Furthermore, looking at the Chyun Associates results for the last three years, I see no reason to even be concerned about the '81 data, because it has been consistent and universal that the stuff is good, with nothing detected.

ASSEMBLYMAN ROD: Can you tell me what lab Princeton Aqua Science relied on in 1981?

CAPTAIN EATON: Assemblyman Rod, can I accelerate this process and get to what it is you are looking for?

ASSEMBLYMAN ROD: I'm just asking if-- I just want to interpret some of these readings and reports that I received. Which lab do you actually rely on as far as--

CAPTAIN EATON: Chyun Associates, as far as the last three years.

ASSEMBLYMAN ROD: How about in 1981?

CAPTAIN EATON: For the last three years it has been Chyun Associates. The lab in question -- in the NEESA report, if I am not mistaken -- was EDT.

ASSEMBLYMAN ROD: What was the detection limits on the Princeton Aquifer report?

MR. TSENTAS: For which?

ASSEMBLYMAN ROD: In 1981?

MR. TSENTAS: For which compound?

ASSEMBLYMAN ROD: Dichlorobenzidene 3,3.

MR. TSENTAS: In 1981, again, they did not do a test. Princeton Aqua Science did not do a test.

ASSEMBLYMAN ROD: Okay. With respect to the various groundwater studies taken on the contract to the Navy, is it often the case of the primary contractor to subcontract actual well sampling data collection, or the phases of the analysis, to private subcontractors?

CAPTAIN EATON: They could or could not, I don't know the answer to that. That wouldn't be unusual.

ASSEMBLYMAN ROD: How about Chyun in 1984/85?

MR. TSENTAS: Princeton Testing Lab did the tests in 1985, as you can see by looking at that report.

ASSEMBLYMAN ROD: How about who did it in 1984?

CAPTAIN EATON: Same people.

MR. TSENTAS: '84?

CAPTAIN EATON: If my memory serves me correctly, we probably contracted out the same as that.

MR. TSENTAS: The Atlantic Ecology Lab did the testing in 1984.

ASSEMBLYWOMAN FORD: Yes, it was AEL.

ASSEMBLYMAN ROD: Who did it in 1984? Could you be very specific?

MR. TSENTAS: Yes. The contractor was Chyun, the testing lab was the Atlantic Ecology Lab.

ASSEMBLYMAN ROD: With respect to the 1984 groundwater study by Chyun Associates, who was subcontracted to perform the organic analytical reports, upon which much of the Chyun reports are based?

MR. TSENTAS: The Atlantic Ecology Lab.

ASSEMBLYMAN ROD: Was this lab subcontractor certified by the State of New Jersey?

CAPTAIN EATON: Yes.

ASSEMBLYMAN ROD: To conduct organic analytical procedures?

FROM AUDIENCE: Yes.

ASSEMBLYMAN ROD: Can you provide us with documents that they were certified licensed--

MR. TSENTAS: Yes. 15186 -- One-five-one-eight-six.

ASSEMBLYMAN ROD: Has anyone other than the Navy conducted any groundwater tests of the Lakehurst Base?

CAPTAIN EATON: Assemblyman Rod, how do you mean that, because the Navy, in its traditional way of doing this, hires a contractor to do it? One could say, by virtue of the contract, that the Navy did; however, the physical aspects were done by the contractors.

ASSEMBLYMAN ROD: Is there anybody else besides the Navy contractors?

CAPTAIN EATON: DEP.

ASSEMBLYMAN ROD: DEP has done it?

CAPTAIN EATON: Yes.

ASSEMBLYMAN HENDRICKSON: Captain? Also, the Ocean County Health-- I have letters from them. They have taken the perimeter samples. Some of the testing is not back yet. That is outside the Base, on the perimeter. All anybody said was, "Ask the Health Department to get it."

Captain, if I may read: "Ocean County Health Department, September 10. Dear Assemblyman Hendrickson: As per your request, enclosed are copies of water samples taken around the perimeter of the Lakehurst Naval Air Engineering Center.

"These samples have a site designation as a number. Of the municipal wells in the Boro of Lakehurst, all others are identified by their commonly known name."

So, we have documentation from the Ocean County Health Department.

ASSEMBLYWOMAN WALKER: Let's get back into some kind of order in the absence of the Chair. Let's continue asking some questions.

ASSEMBLYMAN HENDRICKSON: Are you Vice Chair?

ASSEMBLYWOMAN WALKER: Yes. Is that okay, Assemblyman Hendrickson?

ASSEMBLYMAN HENDRICKSON: I salute it. You know, I had to find out what was going on.

ASSEMBLYWOMAN WALKER: That's all right; I'm a civilian, you don't have to salute me.

ASSEMBLYMAN HENDRICKSON: I'm not sure.

ASSEMBLYWOMAN WALKER: Let me just ask a couple of questions. What does the Navy consider a cleanup of these various sites?

CAPTAIN EATON: Clean them. Removal. It means that, for example in one case, we physically removed the dirt that had stuff in it. It is no longer there. There is nothing detectable.

ASSEMBLYWOMAN WALKER: And every one of the sites--

CAPTAIN EATON: That is the ultimate quest of the Base; that is, nothing detectable within the limits of background. In other words, if you have some other ingredient that is common to the State's topography, well, we want to be consistent with that.

ASSEMBLYWOMAN WALKER: So, your cleanup by your testing-- You have tested after these cleanups? You have tested the area?

CAPTAIN EATON: Okay. In the cases of the 18 spills that were referred to, the cleanup was mutually agreed and defined by the DEP, the EPA, and the Navy. You know, we don't do that without their concurrence.

ASSEMBLYWOMAN WALKER: And of the 18 sites, again, how many are cleaned up?

CAPTAIN EATON: Of the 18 spills. I am talking about spills, not sites.

ASSEMBLYWOMAN WALKER: Okay. How many of those are cleaned?

CAPTAIN EATON: The spills are all cleaned up.

ASSEMBLYWOMAN WALKER: Have you-- You alluded to this, and I am a little perplexed; that is why I am going to ask this. Has the Navy recently requested that DEP confirm the cleanup of the sites?

CAPTAIN EATON: We have requested that they confirm the cleanup of various spills; and of the 44 sites, which is another category, we have asked for verification of the cleanup of seven, and that was granted. That was before--

ASSEMBLYWOMAN WALKER: Verbal?

CAPTAIN EATON: Verbal.

ASSEMBLYWOMAN WALKER: Anything in writing?

CAPTAIN EATON: I have no knowledge of anything in writing.

ASSEMBLYWOMAN WALKER: Has the DEP confirmed these cleanups?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN WALKER: They came in here and--

CAPTAIN EATON: Yes, they did.

ASSEMBLYWOMAN WALKER: Is this official -- that the DEP has confirmed these cleanups?

CAPTAIN EATON: It is as official as the DEP has made it. They came in and said, "Yes, indeed, that's clean."

ASSEMBLYWOMAN WALKER: Is there anything in writing?

CAPTAIN EATON: No.

ASSEMBLYWOMAN WALKER: Does the Navy believe groundwater quality at the Base may deteriorate over a period of time as a result of past or present dumping practices?

CAPTAIN EATON: I personally do not.

ASSEMBLYWOMAN WALKER: What do you base that on?

CAPTAIN EATON: Pardon?

ASSEMBLYWOMAN WALKER: What do you base that on?

CAPTAIN EATON: What I base that on is my own personal observations of the data, of the sites, and of our efforts.

ASSEMBLYWOMAN WALKER: Data being your testing?

CAPTAIN EATON: All we have gotten from our 130 monitoring wells thus far.

ASSEMBLYWOMAN KALIK: Okay.

CAPTAIN EATON: Did you say something about present dumping? No, we don't dump. There is no site at this time generating any waste.

ASSEMBLYWOMAN WALKER: Yes, but when I first came in, you said there were no records from 1915 to 1977.

CAPTAIN EATON: That is correct.

ASSEMBLYWOMAN WALKER: Okay, so how can you say you are sure there is no groundwater deterioration?

CAPTAIN EATON: By 130 monitoring well samples, or samples from 130 monitoring wells. I don't know how many samples we're talking about, but they are enumerable.

ASSEMBLYWOMAN WALKER: Is it possible that there are sites that have not been detected?

CAPTAIN EATON: I doubt it.

ASSEMBLYWOMAN WALKER: Are these sites you detected and that you are monitoring -- is it possible that any of them may leach into the ground?

CAPTAIN EATON: That they may what?

ASSEMBLYWOMAN WALKER: Leach into the ground. Is there any possibility--

CAPTAIN EATON: We have no indication that that has occurred. We are talking about reality in this case. We have no indications of that occurring.

ASSEMBLYWOMAN WALKER: Where do you dump now?

CAPTAIN EATON: We don't dump.

ASSEMBLYWOMAN WALKER: What do you do then with any waste you might generate here at the Base?

CAPTAIN EATON: Jim, grab a seat and tell them. Tell them who you are.

JAMES A. GARDNER: James Gardner, Supervisory Environmental Engineer at the Base. We have a contract with an EPA-licensed contractor who takes all hazardous waste generated at the Base away and disposes of it legally.

ASSEMBLYWOMAN WALKER: Okay, so it is nowhere to be found on this Base. A contractor from EPA comes and gets the waste, and takes it someplace where it is legal to dump. Okay.

MR. GARDNER: That's correct.

CAPTAIN EATON: As I mentioned in my statement, we have cradle-to-grave tracking. We do this by assigning a docket and a serial number to each container of any of those materials we are talking about.

ASSEMBLYWOMAN WALKER: Okay. I am just a little confused about one point. Excuse me a minute. Let Jorge ask a follow-up question so we can--

ASSEMBLYMAN ROD: Can you define the water detection limit?

CAPTAIN EATON: Pardon?

ASSEMBLYMAN ROD: Define the water detection limit. The--

CAPTAIN EATON: That is the capability of whatever equipment you have at hand to read down to the lowest possible denominator. That varies, by the way; as technology advances, we get even better at it.

Not too long ago we used to talk about parts per million; now we talk about parts per billion, or fractions of parts per billion. Clearly, we are refining our detection limits.

ASSEMBLYWOMAN WALKER: Okay. Just let me ask this again. The DEP has not confirmed to you, in writing, officially, any cleanups.

CAPTAIN EATON: I have no knowledge that they have done that with regard to the sites we are talking about within the bounds of the 44. And I have a letter, that I signed, out to the DEP with that question in mind. The subject is--

ASSEMBLYWOMAN WALKER: That is September 7 -- September 10?

CAPTAIN EATON: Yes. And what I did was, I enumerated the sites that we have verbally agreed were cleaned up, and I asked them to please let me know in writing, or give me the confirmation in writing.

ASSEMBLYWOMAN WALKER: What period of time elapsed between the cleanup and this whole wait for DEP to do something about confirmation?

CAPTAIN EATON: Well, as indicated in the letter, we are talking about four years or so.

ASSEMBLYWOMAN WALKER: That answered my question. Thank you.

CAPTAIN EATON: I'm not sure what I answered.

ASSEMBLYWOMAN WALKER: Assemblywoman Kalik? I'm comparing testimony and--

CAPTAIN EATON: Okay.

ASSEMBLYWOMAN WALKER: Okay. Assemblywoman Kalik?

ASSEMBLYWOMAN KALIK: First, I do want to reiterate how grateful I am for the cooperation, and the documents, and the papers. I am also trying very hard to follow along here with the several different reports. A couple of them, of course, have just come in, and I really have not had a chance to look at them. But, I did promise you, if you recall, that I would ask you -- if you wish -- the very same questions that I asked the DEP. I have the questions here. I think the report answers those questions. But if you would like it for the record, I would be more than happy to go down each one of those questions.

CAPTAIN EATON: Well, since we--

ASSEMBLYWOMAN KALIK: That's at your option.

CAPTAIN EATON: Well, since we have provided the report for the record--

ASSEMBLYWOMAN KALIK: Okay, fine. I just promised you--

CAPTAIN EATON: Thank you very much.

ASSEMBLYWOMAN KALIK: --that I would give you that opportunity--

CAPTAIN EATON: And I appreciate it.

ASSEMBLYWOMAN KALIK: --and you did give me the report.

A couple of things came to my mind while you were giving your statement. You did some very significant cleanups in 1981 -- October of 1981 and January of '82. At least I think they were significant--

CAPTAIN EATON: You're right.

ASSEMBLYWOMAN KALIK: --not only in that you did them, but that there were some innovative procedures used. Was not the DEP informed of those processes, if not via you by direct report, certainly, as an environmental agency? I would imagine in some trade journals or some books they had to know what you were doing.

CAPTAIN EATON: The answer to your question is yes, all of the above. It was in trade journals. The DEP knew about it; the EPA knew about it; and, the Ocean County Board of Health and the Pinelands Commission.

ASSEMBLYWOMAN KALIK: Which I guess makes me wonder -- and I am sorry Mr. Tyler isn't here--

ASSEMBLYWOMAN WALKER: So am I.

ASSEMBLYWOMAN KALIK: --to, in fact, give me the answer. He claims that the DEP did not know of any contamination until 1983.

CAPTAIN EATON: That is clearly not the case from our records.

ASSEMBLYWOMAN KALIK: I'm going to ask that question again, but in my own mind I would certainly have assumed that they would have known what was happening.

Now, I guess I would have to ask you, is this incorrect, fallacious garbage report, okay, that everybody keeps referring to as a "garbage report," which came out in '81-- You didn't get copies of it until '83, and DEP didn't get copies until '84. Why did you--

CAPTAIN EATON: October 25 the DEP got a letter of transmittal with the NACIP report.

ASSEMBLYWOMAN KALIK: Why did you wait until 1985 to begin confirmation studies of what you knew were garbage numbers?

CAPTAIN EATON: You may have asked the question in two parts: Confirmation of the water question, and confirmation of the findings of the NACIP study in the first place.

As I recall, confirmation of the water question was done immediately, although not published in the initial NACIP Report.

ASSEMBLYWOMAN KALIK: Is that the Princeton Aqua--

CAPTAIN EATON: Yes, the Princeton Aqua Science, and the rest.

ASSEMBLYWOMAN KALIK: And that confirmed that those figures were fallacious?

CAPTAIN EATON: That's correct.

ASSEMBLYWOMAN KALIK: Okay.

CAPTAIN EATON: Then, the second part to answer, the Confirmation Study. You could say the preliminaries were started upon completion of that report, and I would say early '84. What was involved in there, as you are aware, was the contracting process with the Northern Division of the Navy's Facilities Engineering Command, located in Philadelphia. They were the primary contracting office for a Confirmation Study to be performed, as was the intent of the NACIP.

During that, there was the negotiating process, and all of that kind of stuff; getting bids, and so on. And, that brings us up to Dames and Moore. The Navy signed a contract, I guess it was sometime in '85, towards the spring. Actual field work -- some of it started; that is, scoping out the planning and all of that sort of thing, which there was a considerable amount done.

We find ourselves now, in the month of October, where the field work will actually begin the last week in October, and in about five and one-half months from now we should have a pretty good picture of the confirmation.

ASSEMBLYWOMAN KALIK: I am just distressed at the terrible time lapses when that report was first issued -- and it was, in fact, wrong, as everybody seemed to feel it was -- that there was not an immediate restudy done to--

CAPTAIN EATON: I find that curious because the restudy was done. It was documented. The documents are available. As I said in my statement, "Hey fellows over there at the EPA and the DEP, it is time to stand up and say, 'Wait a minute, this stuff is wrong; here is what we really have,'" but they haven't done that yet.

ASSEMBLYWOMAN KALIK: Again, I am not laying the blame on you. I just-- I feel that somehow the ball was missed, and certainly not by you, but by those agencies that are responsible. I think that those agencies that are responsible certainly are the EPA and certainly our own DEP.

I also saw on the screen, I believe, what you said was Site 16, that the DEP mapped in 1981. Well, if the DEP mapped it in 1981, then they had to know a problem existed. I just have grave problems with people telling me that they didn't know problems existed. However, you know--

CAPTAIN EATON: That's an example of what I was talking about, where there is a continuum of documentation of various things since my office was founded in '79. And now, you can see numerous reports leave here, and they are incidental things, but we are talking about hundreds of documents that are communications between the various agencies.

ASSEMBLYWOMAN KALIK: But that slide did say that the DEP mapped Site Number 16 in 1981. So, they knew, in fact, that that contamination, or potential hazard, did exist.

CAPTAIN EATON: That is correct. An astute observation, and you are correct.

ASSEMBLYWOMAN KALIK: I am going to get to what I call the formal questions. That was just an observation that I made this morning. I would like to ask when did you first inform the New Jersey Department of Environmental Protection of the full extent of hazardous waste activities at Lakehurst?

CAPTAIN EATON: I am going to need help on that one, Jim.

MR. GARDNER: The full extent?

CAPTAIN EATON: I have to presume when you mean full extent, you have to be addressing the 44 sites.

ASSEMBLYWOMAN KALIK: I am not asking for your documentation necessarily.

CAPTAIN EATON: Oh, okay.

ASSEMBLYWOMAN KALIK: What I am asking is, to the best of your knowledge, when did you first inform the DEP of the extent -- the full extent -- of hazardous waste activities?

CAPTAIN EATON: Okay. What we did, Assemblywoman Kalik, was, we did that incrementally. In other words, we got 20 sites, or we identified 20 sites, and then we identified nine more.

ASSEMBLYWOMAN KALIK: Do you know when that was?

CAPTAIN EATON: Yes. On May 1, 1981, we sent a letter to the Environmental Protection Agency, addressed to Mr. Lester Nagle, and we pointed out to him the 20 existing sites. At the same time, we sent copies to the DEP, to the attention of Mr. Carl Delaney. In the report, we actually documented and characterized those particular sites.

Some of those, by the way, were the subject of the NACIP study.

ASSEMBLYWOMAN KALIK: Prior to the October, 1983, date that Mr. Tyler--

CAPTAIN EATON: About two and a half years prior.

ASSEMBLYWOMAN WALKER: That was 20 sites?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN KALIK: Twenty-nine sites.

ASSEMBLYWOMAN WALKER: Twenty-nine?

CAPTAIN EATON: No, 20 sites, and then later, nine. The initial letter of May 1, 1981 to the EPA and copy to the DEP addresses 20 sites. There is correspondence subsequent to that that identified another nine.

ASSEMBLYWOMAN KALIK: Captain, could I just -- if you don't mind -- finish my questions so that you can give me the answer I am looking for? I just want to know if, in fact, the October, 1983, date that we were given by Mr. Tyler of DEP was, in fact, the date you are saying was 1981, that he was informed of those-- Between May and August of 1981 he was informed of those 20 sites, and then those nine sites.

CAPTAIN EATON: That's correct.

ASSEMBLYWOMAN KALIK: That is a direct contradiction, and I want to make sure that I understand that that is a direct contradiction.

CAPTAIN EATON: In October of '83, though, Mr. Tyler received a letter of transmittal and the NACIP Report. Prior to that time, the office of the DEP received the information on 20 sites, and that was dated May 1, 1981.

ASSEMBLYWOMAN KALIK: I don't think I asked him whether it was a report he received; I asked him when he was informed.

CAPTAIN EATON: I recall.

ASSEMBLYWOMAN KALIK: And the answer I got was in 1983, and that is a direct contradiction. I want to make sure I have that information.

ASSEMBLYWOMAN WALKER: Could I just ask something?

ASSEMBLYWOMAN FORD: Assemblywoman Walker?

ASSEMBLYWOMAN WALKER: That letter went from you to--

CAPTAIN EATON: It went from my predecessors, yes.

ASSEMBLYWOMAN WALKER: Could it have gotten lost in the bureaucracy? Was there any confirmation that that letter was received? Did they ever acknowledge receipt of that letter?

CAPTAIN EATON: I can only presume that they got it.

ASSEMBLYWOMAN WALKER: The EPA was sent the exact letter. Did they ever acknowledge?

CAPTAIN EATON: Again, the EPA did acknowledge.

ASSEMBLYWOMAN WALKER: The EPA acknowledged, but the DEP didn't on either one of the letters, the letters for the 20 sites and then the nine sites?

CAPTAIN EATON: Not only that, apparently there were reports prior to May of '81, and it appears that on March 9, '81, we also informed the DEP and the EPA of similar findings.

ASSEMBLYMAN ROD: Did DEP get back to you by some type of conversation or--

CAPTAIN EATON: I can't answer that; I wasn't here. Lucy, can you address that?

ASSEMBLYMAN ROD: Did anybody from the DEP contact the Base, do you know?

LUCY S. BOTTOMLEY: Yes.

ASSEMBLYMAN ROD: They did?

MS. BOTTOMLEY: Yes.

ASSEMBLYWOMAN WALKER: As a result of the letter?

MS. BOTTOMLEY: The letter you are talking about is, I believe, the sixth in a series of reports where we were talking about these sites. They went out every month, and the letter you are talking about was the, I believe, sixth one, when we started reporting

quarterly. They were sent to Carl Delaney, who was here. We did discuss all these things on the phone continuously, all through this--

ASSEMBLYWOMAN WALKER: In 1981?

MS. BOTTOMLEY: Yes.

CAPTAIN EATON: That sounds like confirmation that they got the letter to me.

ASSEMBLYWOMAN WALKER: That's what I was getting at. Thank you.

ASSEMBLYWOMAN KALIK: Did the Navy provide the DEP with annual or other periodic groundwater reports reflecting its groundwater monitoring program here at Lakehurst?

CAPTAIN EATON: I don't think so. Prior to my arrival-- As I mentioned earlier, my policy will be that all of those kinds of reports will be passed on.

ASSEMBLYWOMAN KALIK: During 1981, was DEP provided with the results of the groundwater tests, later attached as Appendix C to your IAS report?

CAPTAIN EATON: They were provided with that in 1983, in October.

ASSEMBLYWOMAN KALIK: But, not in 1981?

CAPTAIN EATON: I don't believe they were, and that's a conclusion on my part. I don't know that for a fact, but I doubt it.

ASSEMBLYWOMAN KALIK: During 1981, do you know if the DEP was provided with the results of any other groundwater tests?

MS. BOTTOMLEY: The annual potable water testing was reported to the DEP.

CAPTAIN EATON: Oh, it was. Oh, the annual potable water testing was reported to the--

MS. BOTTOMLEY: As required.

CAPTAIN EATON: As required, and they got that.

ASSEMBLYWOMAN KALIK: In 1981?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN KALIK: Which report was that?

CAPTAIN EATON: Which one? Who did that one, do you happen to know?

MS. BOTTOMLEY: The Environmental Testing Lab was under contract with us to do potable water testing, as required. All public drinking water systems must report annually to the State, and we did.

ASSEMBLYWOMAN FORD: Is that picking up on the microphone?

HEARING REPORTER: No.

ASSEMBLYWOMAN FORD: Can you come forward, identify yourself, and repeat that answer?

MS. BOTTOMLEY: My name is Lucy Bottomley. I am an environmental engineer at the Naval Air Engineering Center. All public drinking water systems in the State of New Jersey must report, annually, to the State the quality of their drinking water, and we did report in 1981. We reported every one. We have three public drinking water systems at NAEC. All those reports were submitted.

The big drinking water reports that you have been seeing all along are in addition to what is required by the State.

ASSEMBLYWOMAN KALIK: What about the Princeton Aqua Science report? Was that provided to the DEP in 1981?

MS. BOTTOMLEY: No, not in that form. What we provided to the State were the normal drinking water parameters that are required by all public drinking water systems.

ASSEMBLYWOMAN WALKER: Based on the Princeton report?

MS. BOTTOMLEY: Yes. The data in the Princeton report was also included-- A portion of that data was submitted to the State.

ASSEMBLYWOMAN KALIK: But, was that Princeton Aqua Science report given to the DEP in 1983 -- provided to the DEP in 1983?

MS. BOTTOMLEY: I don't believe the entire report, as you are saying it, was provided to the State.

CAPTAIN EATON: Parts were.

MS. BOTTOMLEY: Parts were.

ASSEMBLYWOMAN KALIK: Okay, let me ask you this: To the best of your knowledge, when did the DEP receive the Princeton Aqua Science report, indicating that the other report was garbage?

MS. BOTTOMLEY: In 1984. We sent the report you are talking about, with the clarifications of all those numbers, on the 21st of November, 1984, to the EPA. We did not send it to the State, and I don't know why.

ASSEMBLYWOMAN FORD: When did they get that report if they had it at the hearing last week?

MS. BOTTOMLEY: They would have--

CAPTAIN EATON: Well, I know they were given a copy in August of '85.

MS. BOTTOMLEY: Yes.

ASSEMBLYWOMAN KALIK: Did you give them their copy?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN KALIK: In August of '85?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN KALIK: Okay. I believe they testified that they had that report in '83.

CAPTAIN EATON: The report they had in '83 was the NACIP Report that I--

ASSEMBLYWOMAN KALIK: Yes, but they said it was garbage, based on the Princeton Aqua Science report, which is why I want to know when DEP received the Princeton Aqua Science report.

CAPTAIN EATON: Oh, okay. The Princeton Aqua Science report was given to the DEP on August 19, 1985.

ASSEMBLYWOMAN KALIK: So, as far as you know, they did not have it prior to that?

CAPTAIN EATON: I have no knowledge that they did.

ASSEMBLYWOMAN KALIK: Okay. Subsequent to the first 1981 Navy groundwater study -- and that would be the "erroneous report" -- and prior to the 1981 Princeton Aqua Science study, was an internal Navy memo circulated concerning the original groundwater study?

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN KALIK: Could you tell me which one, and what date? And do we have it?

CAPTAIN EATON: Jim or Nick? (Captain consults with his associates.) Okay. In the NAEC report, Page C2, dated July 23, 1981-- This is an analysis of the NAEC drinking water for contamination by chemical pollutants. It says: "All of the test data has been turned over to our A&E firm, drinking water consultants, who are studying the results, particularly as they relate to the latest potability criteria

established by EPA and DEP." The A&E firm report is dated August, 1981.

ASSEMBLYWOMAN KALIK: Excuse me. I was just given a copy of it. What I would ask, I guess, is-- If you could verify the date of the report and who the memo was from, and if you would read me five, six, and seven for the record and, in fact, tell me what the purpose of this memorandum was, I would appreciate it.

CAPTAIN EATON: Okay. The subject of the memorandum is: "The Analysis of the NAEC Drinking Water for Contamination by Chemical Pollutants." An enclosure to the report is, "An Analysis of Drinking Water for Chemical Pollutants," dated July, 1981. Paragraph 5 says:

"The Environmental Utilities Branch had suspected that the testing would show traces of chemical pollutants in the drinking water. The test results, however, indicate extensive pollution both in the number of chemicals involved and their concentration. All of the test data has been turned over to the A&E firm, drinking water consultants who are studying the results, particularly as they relate to the latest potability criteria established by the EPA and the New Jersey Department of Environmental Protection for chemical pollutants. The A&E firm report is due 5 August 81. Until we have the benefit of the consultant's report, the test data will not be disclosed to Northern Division and/or NACIP, nor to EPA or DEP." And it is signed by Jim Gardner. That is an internal memo within the Environmental Branch.

ASSEMBLYWOMAN KALIK: And the purpose of this?

CAPTAIN EATON: Jim, you are going to have to tell me why you wrote it. If it was from 1981, I was in Washington.

MR. GARDNER: This was an internal memo that I wrote to the Public Works Officer, apprising him of where we stood with the drinking water analysis. We had had three distinct analyses made, which are in the report which follows. I was not satisfied that the analyses were valid, so we contracted with a consultant and we turned everything over to him for an opinion.

The Public Works Officer wanted the report as soon as he could get it. I gave him the data, but I said I didn't think it should

go beyond our department until we had the study from the A&E. We were not withholding it from EPA or DEP. As you can see, I didn't even want it given out within the Navy itself until we were sure that the results were back.

CAPTAIN EATON: This is referring back to the questions we had last time with regard to that water.

ASSEMBLYWOMAN KALIK: That is why I am asking again, okay? I just want to make sure that I understand, you know, why you thought the findings were erroneous, why the DEP was not informed of them, or claims they were not informed of them, and why subsequent findings were not done immediately? Certainly, that report was alarming in itself. The purpose of this memo, if I understand you, was because you felt it was invalid and you did not want to get anyone alarmed.

MR. GARDNER: Correct.

ASSEMBLYWOMAN KALIK: Therefore, you were looking for valid figures.

MR. GARDNER: Correct.

ASSEMBLYWOMAN KALIK: Okay; thank you. Concerning the 1983 IAS report which contained some extremely alarming groundwater data, what were the central conclusions of that overall report?

CAPTAIN EATON: I can only talk to my conclusions personally after June 28, 1985, when I took command. But based on my discussions with Jim Gardner and that those reports showed, I asked to see all of the data concerning our potable water since that time. What was revealed to me was a consistent trend of non-detectable findings in all of our water systems. Whether they were done by Princeton Labs, EAL, Aqua Science, or Chyun Associates, they have been consistent.

So, I was satisfied that the data was erroneous. The indications were from experts, and as I said in my statement, the chemicals they found in the data were consistent with those used in cleaning lab equipment.

ASSEMBLYWOMAN KALIK: But if I could go back-- What were the conclusions of the 1983 IAS report? I could never be in the Navy; I am not good with initials.

CAPTAIN EATON: And there's more of them. The study concludes: "While none of the sites pose an immediate threat to human health or the environment, 16 warrant further investigation under the NACIP program to assess potential long-term impacts. A Confirmation Study involving actual sampling and monitoring of the 16 sites is recommended to confirm or deny the existence of suspected contamination and quantify the extent of any problems which may exist."

That is basically what their conclusion was. I also think it is interesting -- a "Johnny-come-lately," so to speak, picking this thing up in June when I got here -- that there is no real mention of the alarming data that is back here in the first place, which I found curious.

ASSEMBLYWOMAN KALIK: How come?

CAPTAIN EATON: Maybe they themselves believed the data to be invalid.

ASSEMBLYWOMAN KALIK: Did they, at that point, have the Princeton Aqua Science report?

CAPTAIN EATON: No, but I think-- I don't know if they did or did not, but I think--

ASSEMBLYWOMAN KALIK: But they did have this memo from Mr. Gardner--

CAPTAIN EATON: Oh, yes.

ASSEMBLYWOMAN KALIK: --indicating that there was some question as to the--

CAPTAIN EATON: Yes, and I think the most casual review by anyone remotely familiar with environmental matters would say, "Gee, for such a widely dispersed geographical set of activities, how could they be reading identical numbers?" It just didn't make sense.

ASSEMBLYWOMAN KALIK: And, of course, here we are in 1985, first questioning that data, those numbers, that information, that conclusion.

CAPTAIN EATON: I guarantee that if I was in charge of them we wouldn't be talking about this now.

ASSEMBLYWOMAN KALIK: Because it would have been gone.

CAPTAIN EATON: That's right.

ASSEMBLYWOMAN KALIK: Okay. I appreciate that, and that is what we are trying to determine now. Why are we sitting here in 1985 first questioning figures that supposedly were incorrect in 1981. I wonder-- In Appendix C, there is also a conclusion drawn. I would like to have you tell me what that conclusion was.

CAPTAIN EATON: I presume you are referring to the two sets of pages that start off "Introduction," and conclude down at the bottom with Appendix A. Again, this is verbalizing what was in the charts. I am satisfied that this has been consistently, time and again, refuted.

ASSEMBLYWOMAN KALIK: I guess I would have to ask you then, how do you explain the conclusion in light of the data presented in Appendix C? If their conclusion was--

CAPTAIN EATON: I have problems explaining the conclusion--

ASSEMBLYWOMAN KALIK: Okay, that is really what--

CAPTAIN EATON: --because I haven't really had a firsthand opportunity to talk with the folks on the NACIP team to question that. I think the most simple thing would have been to question the data, which they failed to do.

I also think probably that the overwhelming compilation of data they had, which was horrendous with all these people feeding in information-- I think there was a bit of an effort to get on with it. As a result, this, I think, was just a serious lapse, because the data is invalid.

ASSEMBLYWOMAN KALIK: Thank you very much.

CAPTAIN EATON: Thank you.

ASSEMBLYMAN ROD: I just have a-- Out of curiosity, on Environmental Testing Labs, who signed off on those documents? Who was the chemist?

CAPTAIN EATON: I have no idea.

ASSEMBLYMAN ROD: Do you have a signature or something, or a confirmation?

CAPTAIN EATON: Do you mean who the ETL scientist was, or engineer?

ASSEMBLYMAN ROD: No, no, the person who did the testing. You have to have the name of that individual.

CAPTAIN EATON: Brian Silorski.

ASSEMBLYMAN ROD: Is that the same Environmental Testing Lab that is located in Ocean County?

MS. BOTTOMLEY: Lanoka Harbor.

ASSEMBLYMAN ROD: Lanoka Harbor. He is the only person who signed off on those documents -- on those tests?

CAPTAIN EATON: We haven't used ETL in what, five years, four years.

ASSEMBLYMAN ROD: Because we did have a problem in Lacey Township with the same firm.

CAPTAIN EATON: Yes. Lucy, do you agree?

MS. BOTTOMLEY: We used ETL-- (Balance of statement lost to reporter because Ms. Bottomley not near microphone.)

CAPTAIN EATON: Did we?

MS. BOTTOMLEY: Yes.

ASSEMBLYMAN ROD: Just one more question. We have this report on Site 34, which seems to be-- That is the parachute jump.

CAPTAIN EATON: Oh, okay.

ASSEMBLYMAN ROD: In your estimation -- your own and by talking to other people on the Base, and everything else -- how much do you think was dumped at that site?

CAPTAIN EATON: My guess is some--

ASSEMBLYMAN ROD: Your own guess.

CAPTAIN EATON: My guess is somewhere in the vicinity of what I read in the papers about five years ago -- about 20,000 gallons of aviation gasoline. The reason that stuff was dumped there was to keep the jump circle -- Carl, do you want to throw pictures of that thing up on the board? (Captain addresses associate standing near slide projector.) -- clear of vegetation. What they did in those days was use-- Actually, they burned off the brush, so that the sailors would not parachute into tree stumps, or things like that. That is my guess.

And, by the way, I have a study done by Rossnagle & Associates of that particular site, and it is interesting to see what they found when they went out there and took some samples. Basically--

ASSEMBLYMAN ROD: Excuse me. Will you name that firm again?

CAPTAIN EATON: Rossnagle & Associates. They are in Medford, on Route 70.

ASSEMBLYMAN ROD: Okay, let me ask you a question. When you were in Trenton last week when the Commissioner testified, was that one of the results he called "garbage data," by any chance?

CAPTAIN EATON: No, sir. These folks are good.

ASSEMBLYMAN ROD: Okay; all right.

CAPTAIN EATON: (Captain Eaton walks to slide projector and turns his back to microphone. This section may be missing words here and there.) Okay, Site Number 34, Aviation Gasoline Explosive Site, Parachute Jump Circle. By the way, it is significant to note that in three square miles of real estate, the suspected contamination is aviation gasoline. That has been verified by Rossnagle & Associates.

Remedial actions to date: We dug observation wells; we did a study with Rossnagle & Associates; we sampled the groundwater. What they found was: "Slight contamination is localized" -- which goes back to the question you asked -- "and there is no indication of migration."

The future action is, Dames and Moore is going to go in there and verify with additional observation. We are going to do some more soil sampling. We are going to confirm the extent of contamination and make recommendations on what to do.

This is what it looks like. You will notice the stain; that's it. What they did was, they spread out aviation gasoline in those days and actually burned it off, so that they would keep that circle. And if you were to drive out there, you would see that it is fairly benign in character. You do pheasant hunting there and that sort of thing, when there is nobody jumping.

ASSEMBLYMAN HENDRICKSON: I'm glad to hear that.

CAPTAIN EATON: Now, Rossnagle & Associates-- What they said was, "Slight contamination localized; migration has been minimal." That is the essence of what they said. Now, furthermore, I also understand that what Rossnagle said was that the background levels of lead you would expect to find in aviation gasoline were consistent with the background levels you would find just about anyplace in the State of New Jersey, which, by the way, gets a lot of lead from overflying airplanes.

ASSEMBLYMAN ROD: Was this good fuel that was used?

CAPTAIN EATON: I can't answer that, but my guess is it was probably in the category of what we call "contaminated fuel." By contaminated fuel I mean it was in tanks at one time and had to be removed for some reason.

ASSEMBLYMAN ROD: This was done between 1950 and 1970?

CAPTAIN EATON: That is correct. That is what the best estimates are. And that is conjecture, by the way.

ASSEMBLYMAN ROD: How do you obtain your own conclusions on data? Do you talk to all the employees on the Base? How did this 1981 report-- I think you explained that already once or twice, or three times. They came up with about a two million gallon figure.

CAPTAIN EATON: The report says two million; the newspaper said three.

ASSEMBLYMAN ROD: Did they do the same thing you did, talk to the employees?

CAPTAIN EATON: Sure, sure. What they did-- That's right; they talked to employees. Now, I, for the life of me, don't know how they came up with that number because simple logic says, "Hey, I had to hire a guy for 20 years whose job was to dump gas," and that just doesn't make sense.

ASSEMBLYWOMAN FORD: Jorge, are you finished?

ASSEMBLYMAN ROD: Yes.

ASSEMBLYWOMAN FORD: Let me just ask you a question as to availability of reports and so forth.

CAPTAIN EATON: Sure.

ASSEMBLYWOMAN FORD: You indicated that all of your reports on this are public information, subject to what might be considered a matter of national security, or confidential, which--

CAPTAIN EATON: We haven't really run into any constraints there so far.

ASSEMBLYWOMAN FORD: The May, 1984, report on the contaminated sites mentions 44 potentially contaminated sites. I guess this document--

CAPTAIN EATON: That is the internal report that was done by the Environmental Branch.

ASSEMBLYWOMAN FORD: Was that available to the public?

CAPTAIN EATON: Oh, yes, and that was given to the EPA -- I'm not sure what the exact date was, but I think it was July, 1984, or something along that line. DEP got it later than that, however.

ASSEMBLYWOMAN FORD: Okay. This is the report DEP got during 1985?

CAPTAIN EATON: That is correct. July, 1985, I think, is the correct date on that.

ASSEMBLYWOMAN FORD: Now, you just recently did a preface, dated October 7, 1985, to that report.

CAPTAIN EATON: That is correct.

ASSEMBLYWOMAN FORD: An addition to that report.

CAPTAIN EATON: That is correct.

ASSEMBLYWOMAN FORD: In your preface, you used the word-- You said the report was purloined or leaked to the news media.

CAPTAIN EATON: That is correct.

ASSEMBLYWOMAN FORD: By that you are not suggesting it is not public information?

CAPTAIN EATON: No. Let me talk to that. I found it very interesting that the information had been in the public domain for two years at least, and on August 2, a Friday, a disgruntled employee, on his way to somewhere, stopped by The Asbury Park Press, and said, "Here." He gave them a copy of the NACIP report and the follow-up internal report, which you have.

The following Thursday, this same employee called from Nova Scotia and said, "I quit."

ASSEMBLYMAN HENDRICKSON: I wonder why.

CAPTAIN EATON: Now, the interesting thing is, Dan Clay, who is the guy who wrote the initial report, wrote from the report and quoted it at length in many areas, with charts and things that were extracted from the report. Subsequent to that, Dan Clay and Carol Napolitano, both from The Asbury Park Press, my wife and I, and Nick Grand-- We had them in the quarters and, for about two and a half to three hours, we went through all of that. My conclusion was that perhaps they felt their report was precipitous. The reason was, you know, time and again, as I said to Dan, "Hey, you overlooked the caveat

in there that this is a **document** of conjecture." Nonetheless, it was printed as gospel. For that reason, I think it unduly caused a lot of the problems we have been dealing with.

On the other hand, there is some positive fallout. Everybody is more conscious about the problem, both within the confines of the Base and outside, and in other areas as well. I think that is a healthy thing to do, particularly, you know, you look at the current issue of Time Magazine, and there is New Jersey right up in there, folks. We want to do something about that.

ASSEMBLYWOMAN FORD: But this was essentially a public document?

CAPTAIN EATON: Oh, absolutely.

ASSEMBLYWOMAN FORD: It was just-- You object to the manner in which it fell into the hands of the news media.

CAPTAIN EATON: Yes, that is why I was so surprised. I said, "Wait a minute, they already have this."

ASSEMBLYWOMAN FORD: Jorge, do you have more questions?

ASSEMBLYMAN ROD: Yes. How do they clear the jump site now? How do they keep that area clear?

CAPTAIN EATON: They don't use aviation gasoline; they haven't done it in over 15 years. Actually, it is not a problem because its level of activity tends to keep it down and, also, it is cut. If you go out to the site, you'll see that it almost looks like wheat fields from ground level.

ASSEMBLYMAN ROD: The area was 3.5 square miles, is that--

CAPTAIN EATON: Well, it's one mile in diameter.

ASSEMBLYMAN ROD: In your estimation, how much fuel would it take to--

CAPTAIN EATON: I can't answer that. I don't have that; I would have to sit down and calculate it. I think about 20,000 gallons would cover it pretty well.

ASSEMBLYWOMAN FORD: Captain-- Jack, did you have--

ASSEMBLYMAN HENDRICKSON: Before you close, yes.

ASSEMBLYWOMAN FORD: Captain, some of the questions that came up at the hearing last week dealt with jurisdiction--

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN FORD: --and I asked Mr. Tyler some questions about jurisdiction with an eye toward determining whether there were areas of gap or overlap in terms of the Federal and State legislation we have. Perhaps this may be a better question for your legal counsel--

CAPTAIN EATON: No, that's all right.

ASSEMBLYWOMAN FORD: --but, do you feel you are subject or not subject to the jurisdiction of the New Jersey laws governing environmental issues; for example, the Spill Fund Act, and so forth?

CAPTAIN EATON: Let me answer your question this way. I am responsible for the activities of the Base. Okay? And I consider myself and my Base, with the 4,000 and some odd people who work here, responsible members of this community at large, the County, and the State. I understand the potential conflicts, or jurisdictional conflicts, or right of eminent domain, or whatever area that we want to expose ourselves to with regard to the EPA, the DEP, and so on. However, I assure you that I am personally blind to those problems. As a result, we want to take everyone's ideas and center those into whatever it is we do in the control and correction of any problems.

So, as far as I am concerned, we should have, by now, in the last few months, at least since my tenure of command, established categorically and clearly that we have no problem with jurisdiction.

ASSEMBLYWOMAN FORD: So, there has never been information conveyed to the State, or otherwise, that you feel you are subject to Federal laws and not State laws, or anything? There have never been those types of discussions?

CAPTAIN EATON: No. I think--

ASSEMBLYWOMAN FORD: From your testimony, I take it you feel it would be counterproductive to the total objective that we are all in favor of--

CAPTAIN EATON: Oh, yes.

ASSEMBLYWOMAN FORD: --which is environmental protection.

CAPTAIN EATON: We would not be getting on with the problem; rather, we would be talking about jurisdictional things. I, personally, am trying to mitigate that as much as possible, set it aside, and get on with the real issue.

ASSEMBLYWOMAN FORD: Thank you.

ASSEMBLYMAN HENDRICKSON: If I may, Marlene.

ASSEMBLYWOMAN FORD: Jack.

ASSEMBLYMAN HENDRICKSON: In your August 30 briefing, did you not go over the jump site quite extensively?

CAPTAIN EATON: Yes, sir.

ASSEMBLYMAN HENDRICKSON: And have you not had, in the past, and ongoing in the future, constant monitoring of that area--

CAPTAIN EATON: Yes, sir, that is correct.

ASSEMBLYMAN HENDRICKSON: --to protect our water supply?

CAPTAIN EATON: Yes, sir.

ASSEMBLYMAN HENDRICKSON: I would like to bring that out very emphatically because of all the people in the area, particularly in Ocean County, and the problems we're having with our groundwater pollution, so that we leave here today with confidence in the people around here, confidence that you and the Navy -- NAEC -- are doing everything you possibly can do to see to it that there is no future contamination or anything that perhaps has happened here, for whatever reason.

CAPTAIN EATON: Yes, sir. As I have said before, and will continue to say, the environmental considerations are paramount in the operations here. Clearly when I shut down significant things like catapult testing, jet car testing, and fire training, obviously, the environment is paramount.

ASSEMBLYMAN HENDRICKSON: If I may ask just one more question perhaps of your environmentalist. I know as a mayor I had problems with DEP charging my sanitary landfill with contamination of three streams south of where it was. It cost my municipality a tremendous amount of money to see to it that we didn't have to pay those fines. There is some anxiety here with some people I have talked to that perhaps 5, 10, 20 miles south of here, their wells are being contaminated perhaps because of something up north happening to them. In other words, in Ocean County, specifically here.

In your expert opinion, would any contamination jump sites? Will it not flow gradually down and contaminate in a flow pattern?

CAPTAIN EATON: Jack, tell them who you are.

JACK KOCZAN: I'm Jack Koczan. I am a professional geologist; I am directing the work here with respect to the Confirmation Studies for Dames and Moore.

I would like to comment on that with respect to the migration potential for contaminants that may exist, for instance, at a landfill site. Their behavior will be related to the relative density of the material with respect to the groundwater itself and the specific gravity of the compounds. Some will be categorized as floaters, some will be categorized as sinkers, and others in the middle. Depending upon that material and its characterization, it will then behave within a porous medium, like an aquifer we have in Ocean County, and it will migrate. It will disperse with the energy in the system, which will be related to the density differential between the two substances. That flow will be somehow impacted by the soil grains -- their shape, their density, and the space between them.

Essentially what will develop is what we call a plume. This plume has some predictable behavior, provided the subsurface is somewhat uniform. Given that situation, the ratio of the length to width of the plume generally is one to seven, and that can give you an idea of the dimensions you might expect.

In your question, you projected potential impacts miles away within Ocean County, suggesting it might be impacts to the south. As it turns out, the layers in Ocean County dip to the southeast. We have three aquifers in the immediate subsurface here, the Cohansey, the Kirkwood, and then underlying that, the Englishtown, and so forth. With that dip to the southeast, and with the sinkers, for instance, or other contaminants that would move within one of those layers, if anyplace, they would be moving with expected groundwater flows to the discharge point within those layers. From my experience, I would doubt very much if there would be any direct southerly flow. It would be more controlled with the localized flow patterns from the site to a discharge point. Typically, that is a stream, or typically it is an underlying unit, if the pressure is less there.

ASSEMBLYMAN HENDRICKSON: Thank you. My--

MR. KOCZAN: I would like to point out as a point of clarification regarding the earlier projections, the questions from Assemblyman Rod with respect to the layers and which ones we have at the Base-- I would like to refer you to the IAS and the figures on Pages 53 and 55, which clearly illustrate the distribution of the aquifer outcrop areas at the Base. They are different. There is Cohansey, and then there is Kirkwood in some places in the low-lying areas. Within those two, there is a clay member or an aquifer, which precludes migration of materials down into the next layer.

That is a generally present condition in the subsurface in Ocean County that, for instance, in Lacey Township, is being relied upon as a barrier to contamination, which would allow for the development of supporting water supplies in Lacey Township below the clay layer. So, I wanted to clarify that this zone is not, in fact, a homogeneous sand zone, as you would expect in the Cohansey. They are quite different units. They are expressed differently vertically and horizontally.

ASSEMBLYMAN HENDRICKSON: My only point was that when we leave here we know that we have done everything we can do to project to the people that Lakehurst has not in the past, and because of your actions now, will not, in the future, to the best of your ability, be a pollutant of our water supply and our groundwater level. I think it is very, very important-- Nothing is a greater tragedy -- and I have been through it -- than when our people lose their private well supply and no longer have water because it is contaminated. The fears go through them to the children, to the elderly, to everyone. I would not want that portrayed in any way.

I am just trying to underline what this Base has done to see to it that that is not happening.

ASSEMBLYWOMAN FORD: Assemblyman Rod.

ASSEMBLYMAN ROD: We have some contamination in Lacey Township, Beachwood, Berkeley, and all over Ocean County. Is there a slight possibility that some of this contamination -- just answer me yes or no -- can come from as far up as Lakehurst? Could there be any relationship between Lacey and Lakehurst? Can the contamination travel that far?

MR. KOCZAN: In my experience, no. The migration rates for contaminants are on the order of one-third to one foot per year in a maximum hydraulic conductivity situation in a horizontal dimension. So, you can see what it would take. It would take a considerable amount of time, probably before man occupied this part of New Jersey, for the material to travel that far, given our general experience about how fast contaminants move in these kinds of layers.

My understanding of the situation in Lacey Township, for instance, is that there is probably a benzene, toluene, and xylene problem associated with a gasoline spill that may be impacting the upper zone in the sand. At the present time, there are six wells being drilled there, one of which will go through the clay, to look for an alternative supply.

In other cases -- you mentioned Berkeley -- those relate to metal problems that have been related to surface disposal of waste near the A&P, I believe. There was one other case you mentioned.

ASSEMBLYMAN ROD: Beachwood, where they had to put in--

MR. KOCZAN: Beachwood I am not familiar with.

ASSEMBLYMAN HENDRICKSON: That was lead contaminated.

MR. KOCZAN: That was the lead contamination? So, in summary, I don't think the migration distance is possible. Furthermore, I think there are alternative sources that are being considered for those problems.

ASSEMBLYWOMAN FORD: I am going to-- I know that Assemblywoman Walker had a few questions, but I am going to have to leave at this point. I would like to ask Assemblyman Rod to Chair the hearing from this point forward. I don't anticipate it going on for much more than an hour, if that. Is that correct? (no response) I just want to thank Captain Eaton and his staff--

CAPTAIN EATON: Thank you very much for coming down.

ASSEMBLYWOMAN FORD: --on my behalf for their assistance in unraveling this whole thing. Thank you.

ASSEMBLYMAN ROD: Do you have any questions, Jacqueline?

ASSEMBLYWOMAN WALKER: I have two, and then I have to leave also. Last week, Assistant Commissioner Tyler testified to this

Special Committee that the United States Environmental Protection Agency is the lead agency charged with monitoring and coordinating the remediation of Lakehurst hazardous waste activities. Particularly in view of EPA's recent nomination of Lakehurst to be a priority Superfund site, what is the Navy's view of EPA's record of performance to date with respect to Lakehurst, aside from the chuckles behind me and in front of me?

CAPTAIN EATON: My feeling is that the primary activity involved in the remediation of any circumstances at Lakehurst is Lakehurst. Secondly, I believe you mentioned something with regard to the National Priority List, and I would like to address that specifically. The Federal Register dated September 18, 1985 indicates that NAEC Lakehurst has been nominated for inclusion in the National Priority List. I am strongly convinced that this is an over-reaction due to the lack of understanding of the Initial Assessment Study which is a document of conjecture. But, more than that, I feel that basing such a nomination on a document such as the Initial Assessment Study, which is only intended to identify areas which need further study, is grossly inconsistent with the practice of putting a commercial activity on the National Priority List only upon actual documentation of real, identifiable toxic waste problems that you can see, smell, measure, and touch. Clearly, here at Lakehurst, we have not even confirmed the existence of any hazardous conditions.

Okay, the third part to your question, what is their track record? I would say that their track record has been real good in picking up and assisting us, but I feel that we have been leading the charge.

ASSEMBLYWOMAN WALKER: That is about as clear as could be. Thank you. The New Jersey Department of Environmental Protection has told us that it has had problems staying informed by the Navy as to hazardous waste activities at Lakehurst, which DEP described as a consistent pattern of indiscriminate dumping. Now, this is from their testimony last week.

CAPTAIN EATON: I remember that vividly, and I am glad you brought it up.

ASSEMBLYWOMAN WALKER: You know, we have good memories, too. DEP says you first informed it of the scope of these activities in late 1983. In light of these statements, as well as recently quoted statements by high level DEP officials to the effect that Lakehurst comprises a "monster dump" containing the equivalent of 16 New Jersey Superfund sites, what is your view of DEP's record of performance to date with respect to Lakehurst? More chuckles.

CAPTAIN EATON: Okay. As I have said before, we feel that DEP has a pretty good handle on the technology and the State laws in New Jersey. We look forward to their assistance in making sure that we are consistent in what we do as far as any remedial action is concerned. We feel that every now and then when we throw them a real well-aimed pass, sometimes they are not absolutely the best in receiving it.

I am very interested in enforcing and reenforcing the spirit of cooperation and teamwork between us, DEP, EPA, the Ocean County Board of Health, and the Pinelands Commission. I think we have a lot to offer each other. I also believe that some of the items we mentioned in earlier testimony indicate that perhaps there could be a transfer of technology from one side to another which could go beyond the boundaries of the Base.

ASSEMBLYWOMAN WALKER: That's not there now?

CAPTAIN EATON: Pardon?

ASSEMBLYWOMAN WALKER: That's not there now?

CAPTAIN EATON: It could be.

ASSEMBLYWOMAN WALKER: But it's not.

CAPTAIN EATON: For example, Lucy Bottomley's pioneering efforts in biodegradation, I think, are very promising. I feel that while there may be some lapses of accuracy in the testimony presented by Mr. Tyler, I still feel that we can get on with a coherent solution. I must, however, specifically and categorically take exception to indiscrimination of any type at this Base. That is just not a well-founded comment, and has no remote connection with the truth and the facts.

ASSEMBLYWOMAN WALKER: You should be a politician; you did that very well. (laughter) That's it for me.

ASSEMBLYMAN ROD: There are some members of the public present. Some of them come from Lacey Township where they are faced with some contamination. Some of the wells are going dry, and some of the wells are contaminated. I know they came a distance up to Lakehurst, and I would like to ask if they have any questions they would like to address to the Department of the Navy, if you don't mind, Captain?

CAPTAIN EATON: Not at all; I would be very happy to answer.

ASSEMBLYMAN ROD: Yes, ma'am.

IRENE KNOTT: There are several facets to this. First of all, Captain, I would like to know how deep the wells out here at Lakehurst are.

CAPTAIN EATON: The Lakehurst wells are generally in the range of 48 to 55 feet, except one well, which is 1348 feet deep.

ASSEMBLYMAN ROD: Excuse me. In order to put this on the record--

CAPTAIN EATON: Oh, I'm sorry.

ASSEMBLYMAN ROD: Can you come--

CAPTAIN EATON: I think what I will do is-- How about if I turn and face the music?

ASSEMBLYMAN KALIK: Actually, the lady should come up and sit in Jackie's chair.

ASSEMBLYMAN ROD: I think she needs to be near a microphone.

CAPTAIN EATON: Oh, okay. Would you like to have a seat up there?

HEARING REPORTER: Or even if she just sat at the witness table.

ASSEMBLYMAN ROD: Right next to you, Captain.

MS. KNOTT: My name is Irene Knott, and I am from Lacey Township. My home is one of the homes being affected by contamination.

What I was curious about-- I want to ask a few questions of the Captain; one is about the wells, the drinking wells. You say potable water. The testing that is done on potable water, is that just the testing that is required by the Board of Health?

CAPTAIN EATON: No. We do the annual testing that is required by the New Jersey laws. But, in addition, we also do a comprehensive water testing, which the Navy contracts on an annual basis. And one of those was the one that was entered into the record today.

I would also like to go back to your original question about how deep the wells are at Navy Lakehurst. The answer to your question in that regard is, all of the wells are between 48 and 55 feet deep, with one exception. We have a well that is 1348 feet deep.

MS. KNOTT: What well would that be?

CAPTAIN EATON: It's Well No. 32, which is-- What category is that? (Captain addresses his question to Mr. Gardner)

MR. GARDNER: Most of the water from that well is used in--

CAPTAIN EATON: Where is it located? (Captain receives answer from Mr. Gardner, who is sitting in the audience.) That is located by the Catapult Test Site.

MS. KNOTT: This is not the drinking supply?

CAPTAIN EATON: It is part of the drinking supply, yes.

MS. KNOTT: Part of the drinking supply. One thing I find very difficult to believe is that if 20,000 gallons of gas has been dumped in the parachute area, and possibly more, I mean, that is--

CAPTAIN EATON: And possibly less.

MS. KNOTT: We have been told by DEP that we could have contaminated our well supplies. When we have wells at 75 feet and up to 117 or 120 feet, we have been told that a couple of gallons of gasoline could have contaminated our water supply. Of course, we do not believe this. But when you hear that 20,000 gallons of gasoline has been dumped on the ground without any backlash, I find it hard to believe when DEP tells us that we could have caused such damage with a couple of gallons of gasoline.

CAPTAIN EATON: I would have to render a non-expert opinion, by first saying that any gasoline that was put on that site was burned. So, most of the products probably went off into the atmosphere rather than into the ground. I think that accounts for the fact that Rossnagle & Associates, engineering and testing consultants, found that

there was slight contamination, that it was localized, and that there was no migration. I think the other part of it has to be geological consideration on what kind of circumstances you had, depending on the spill. I can't answer for DEP.

MS. KNOTT: What they are talking about is, if you put gasoline in your lawn mower, you know how you can spill a few drops of gasoline on the ground, or gasoline droppage from cars which are parked in the yard. This is what they are talking about.

Another thing, my opinion of DEP is not what it should be, I guess. I had to deal with them on a firsthand basis. Mine was the first home to be contaminated -- that was known to be contaminated in Lacey Township. My water was tested three different times by the Board of Health. At that time, I was found to have four contaminants -- benzene, ethylbenzene, zylene, and tiolene. It came in at levels of 164 parts per billion in combination. That was after three different testings.

We insisted, as homeowners, on having Princeton Labs come in to test our water. The testing came back, and I was not the highest at that time. However, mine came up to 1556 parts per billion. I not only had these four chemicals, but I had other chemicals, like chloroform and different things like that. The very following day after Princeton Labs tested our water, DEP came in and tested our water for the same volatile carbons. They held our sampling. We were supposed to have the results back from these samplings within a two-week period. I think it turned out to be -- two to three months was it, Judy? (Ms. Knott addresses a friend in the audience and receives an affirmative answer.) When we got the results back from DEP, they admitted they had held the samplings too long. Two of the samples were of no use whatsoever, and my sampling was the only one that they came through on -- that they said was supposed to be legitimate.

My levels read-- Well, it was as if I hardly had a problem whatsoever. This was the day following when Princeton Labs had reported my high levels. My feeling for DEP is-- I feel they are not only understaffed, but I also feel they are incompetent and

non-caring. There is no rapport between DEP and the people who are affected with contaminated well supplies, nor, I am sure, with other conditions of this sort around the State of New Jersey.

I really think that this government agency needs desperately to be, not only overhauled, but upgraded. I do not have much faith in their reports. I am speaking as a taxpayer. Thank you very much.

ASSEMBLYMAN ROD: Thank you. Is there anyone else who would like to ask questions or testify?

JUDY SANTUCCI: I have several.

ASSEMBLYMAN ROD: Okay. You don't have any objections, do you, Captain?

CAPTAIN EATON: Not at all.

MS. SANTUCCI: I am Judy Santucci; I am also from Lacey Township, and I also have a contaminated well. I am living with five children, and that is why I am very concerned to know the amount of dumping that took place in Lakehurst. I really cannot believe that eventually it will not affect the water supply in the surrounding area, and maybe eventually our own.

I have a question. First of all, did your people not understand the seriousness of dumping gasoline?

CAPTAIN EATON: In 1950, when the practice was started, nobody even had any concept of any considerations to the environment. In 1970, when the practice was terminated, that was consistent with the emergence of the EPA and the Navy's EPA office, OPNAV Code 45.

I would also remind everybody that it is common practice still in many parts of the country to drive around with trucks loaded with petrochemicals, and to pour them on roads in order to keep them from blowing dust, and so on. So, I don't know that there is any inconsistency with what they did in the past with what was normally done throughout the country.

I must emphasize, however, that that area, in my judgment, and in the judgment of Rossnagle & Associates is benign. There is healthy vegetation out there; there is healthy wildlife. The actual readings they found there were slight; they were localized, and there was no migration. So I don't consider that to be a problem.

MS. SANTUCCI: What were the readings of Rossnagle?

CAPTAIN EATON: We can give you those in writing if you wish.

MS. SANTUCCI: Yes, I would like to have a copy of that report.

MS. SANTUCCI: I agree with what Mrs. Knott told you about DEP. Their claim that dropping gasoline on just the top of the soil and how many gallons of water it can contaminate really, you know, makes this report hard to believe, and the fact that it might not migrate. We have been told it is light.

CAPTAIN EATON: I might turn that around and find that just spilling gasoline on the ground and causing serious damage that way in small amounts from a lawnmower -- that is hard for me to believe.

MS. SANTUCCI: Well, that's--

CAPTAIN EATON: As far as Rossnagle & Associates is concerned, they went out there and did comprehensive testing, and I put more credence on what they have to say.

MS. SANTUCCI: Than what DEP has to say?

CAPTAIN EATON: Well, whatever you were told.

MS. SANTUCCI: Okay.

ASSEMBLYMAN ROD: You know, Captain, let me make a comment on this. This is why the people in this area are so alarmed and we had a hearing in Lacey Township. These people were told by officials from DEP that one gallon of oil, used oil, can contaminate the aquifer. That was a statement on the record, on tape. When they read the report that The Asbury Park Press came out with, I mean, this triggered a lot of people's minds and they were wondering how serious the problem was.

CAPTAIN EATON: I would have to say that that answer would have to have a lot of qualification. Simply stated that it would, you know, that is misleading. If you somehow pumped a gallon, or whatever, of oil directly into the aquifer, not passing anything, but right directly in, maybe you could do that.

MS. SANTUCCI: That is not the statement.

CAPTAIN EATON: Yes, I know.

ASSEMBLYMAN ROD: Yes, very unfortunate.

MS. SANTUCCI: How deep are the monitored wells? You say there are 138 on the Base?

CAPTAIN EATON: There are 130 monitored wells. They are at various depths. Jim, can you give me some regions? (Captain addresses Mr. Gardner, and receives a response.) Twenty to forty feet, and thereabouts.

MS. SANTUCCI: And, the drinking wells you have here, you say are 48 to 58 feet?

CAPTAIN EATON: Yes, they are about 44 to 58 feet, with one exception, which is 1348 feet.

MS. SANTUCCI: All right. Now, will the DEP continue to be involved in the cleanup of these sites that they consider to be a problem?

CAPTAIN EATON: The DEP, the EPA, the Ocean County Board of Health, and the Pinelands Commission will all be involved. Thus far, I have had input from all of those agencies on recommendations to locations of wells, corrective actions thus far, soil sampling, quality control procedures, and so on.

MS. SANTUCCI: So, they will be sinking more monitoring wells?

CAPTAIN EATON: We will; they won't. I'm paying for those, not them.

MS. SANTUCCI: The Navy will be sinking more monitoring wells?

CAPTAIN EATON: Oh, yes.

MS. SANTUCCI: Do you know approximately how many?

CAPTAIN EATON: We can't tell yet until we have the data from Dames and Moore. They may recommend-- You know, it depends on the circumstances and their findings, but they may recommend three here or two there, or whatever. It depends.

MS. SANTUCCI: And all these reports will not be forwarded to DEP?

CAPTAIN EATON: All reports on findings will be reported to the Navy itself, the Ocean County Board of Health, the Pinelands Commission, the EPA, and the DEP.

MS. SANTUCCI: I only have one other statement as a private citizen having to deal with DEP as an agency. I agree with Mrs.

Knott. I am glad they are going to be involved and reports will be given to them, but I do not have any confidence in their ability to take care of the problem or to monitor properly.

I would like to ask this Assembly Committee to bring back to the full Assembly, not only at appropriation time when they ask, but that maybe a study be done of the full DEP agency, about its effectiveness, and how the operations are being handled. There is never anyone there you can get in touch with. Nobody ever seems to be at their desk. Phone calls that are returned are infrequent. Several times I have left messages for information, and when they do call me back they don't have the information I need.

The problem with Lakehurst, and their claiming they did not know about it until 1983, only points out the ineffectiveness of the agency. I would like the Assembly, and maybe this is the opportunity, to look into the operation of the agency and exactly what it is doing, where it is falling down and where it is not serving the public, the citizens of Ocean County in particular.

That is all I have to say. Thank you.

CAPTAIN EATON: Thank you.

ASSEMBLYMAN HENDRICKSON: Your testimony is very well taken. Thank you.

ASSEMBLYMAN ROD: Yes, Mr. Cervasio.

THOMAS CERVASIO: My name is Tom Cervasio; I am from Lacey Township. I live two houses removed from one of the worst polluted wells in Lacey. Consequently, we are living on bottled water, and we find it to be horrendous.

I would like to take this opportunity to thank the Base Commander for an excellent, forthright report. I certainly feel a lot better about the Lakehurst Naval establishment. I would also like to compliment the Committee for holding these hearings. In no way, shape, or form do I feel they are political. I think they are needed, and we feel very, very good about it, we who are affected with polluted water.

Thank you very much.

CAPTAIN EATON: Thank you, Mr. Cervasio.

ASSEMBLYMAN ROD: Yes, Mr. Lewis.

JOHN LEWIS: John Lewis. I live nearly contiguous with the Naval Air Station off of Beckerville Road. We have quite a large tract of property that would be affected by anything that occurred at this site.

I think -- and I would like to concur with the gentleman who just spoke -- that the session has been conducted apolitical. I think the Captain and the Naval Air Station has responded promptly, and I think we are going in the right direction.

As to myself, I am concerned about -- and I would address this to the Department of Environmental Protection -- why they seem to have double standards. We are at throes now. We have been struggling for a decade -- nearly a decade -- to get a project to recycle sewage sludge. Yet, what I am finding is strenuous resistance from the Department of Environmental Protection. Why do they have a standard that seems to be quite different from the standard they are charging me with?

Now, the State DEP, and its Water Resource Management Plan, drew a line, a so-called delineation between the critical site. That line went straight through -- according to their document -- the Lewis farm. They stated there are dire environmental threats, and asked to expedite the litigation against me. What I can't understand is, I would daresay that based on the Ciba-Geigy experience, the Ocean County Landfill, Mile Marker 20, I think, on 539, American Cyanamid, I think, and other toxic sites located in the County, it seems as if I seem to be the worst site, the worst threat to the people of Ocean County, according to the record. My question, directed to the Department of Environmental Protection, Mr. George Tyler particularly, is, why do they have a standard that seems to differ for large institutions, as opposed to a small individual?

I feel that if there is a threat, then I would be more subject to be a recipient of that threat since the waters flow south-southeasterly. I live and reside and have property south-southeasterly nearly contiguous with this Naval Air Engineering Center. So, if anyone should cry wolf and alarm, I should be one of those crying alarm.

Furthermore, I feel that in light of the long history that seems to be involved in this matter, why has it suddenly just come to the attention of DEP? Why have they just suddenly seemed to get involved? The records seem to show that they knew back in the '80s. I would like to know why the alarm is placed on me, and no alarm is placed on Tom River Chemical, Ciba-Geigy, the Ocean County Landfill, or the Naval Air Engineering Center. With no negative reflection on the Captain, I want to say that I feel again the question I would like to have answered-- I have asked Mr. Rod to direct that question to Mr. Hughey, the Commissioner of DEP. I would like to have it relayed to Mr. Tyler, who made a statement -- I think the observer this morning quoted him -- more or less relieving this Station of any threat to the surrounding populace as far as potable water is concerned. I would like that question to be made part of the record. It is directed to Commissioner Hughey, and I would like to get a response.

Thank you very much.

ASSEMBLYMAN ROD: Thank you, Mr. Lewis. Let me point something out to you, Mr. Lewis and members of the Base. You know, we read that report in The Asbury Park Press. We got the information and we got the documents. You have to understand when you are talking about all those gallons of fuel, especially in Ocean County where we have all the sites being contaminated -- Jackson Township, Lakewood Township, Dover Township, Manchester Township, Beachwood Township, Stafford Township, Little Egg Harbor Township, Lacey Township -- you know, it makes these people wonder, especially in the case of Lacey Township, when you have people from DEP telling you: "Gee, one gallon of oil can contaminate the aquifer." They read the fact that all those thousands of gallons are being put in the ground, and they relate one with the other. I can imagine what is going through their minds, especially when it is fresh in everyone's mind.

This is a big concern. It is a big question in people's minds. They drink this water; they bathe in this water. We do have a problem, and we hope we can solve it at the Base and in Ocean County.

Do you have any questions, Barbara?

ASSEMBLYWOMAN KALIK: Yes. First I would like to say to Mr. Lewis -- is he still in the room?

MR. LEWIS: Yes, I am.

ASSEMBLYWOMAN KALIK: Oh, good. I wish the DEP were here to answer the questions you just raised. That is why we took the action we took at the beginning of this hearing, so that those questions can and should be answered. I think it is important that they be answered.

MR. LEWIS: I don't understand why they're not here. I can't understand--

ASSEMBLYWOMAN KALIK: I can't answer that for you. I don't understand either, but we will make sure that for the next hearing they will be here so we can get direct answers.

MR. LEWIS: I would appreciate it if you would direct that question to Commissioner Hughey and Mr. Tyler. I would like to get a response.

ASSEMBLYWOMAN KALIK: It will be done, through the Chairman, by letter, and hopefully we will have an answer at the next hearing.

MR. LEWIS: Thank you.

ASSEMBLYWOMAN KALIK: I have a couple of other questions that have come up during the testimony. The testimony of the Navy consultant that five PPBs of a substance can be detected in a groundwater study-- Is that true, when the detection limit is 25 PPBs?

ASSEMBLYMAN ROD: Please state your name and title for the record.

MR. TSENTAS: My name is Constantine Tsentas. I am a geologist with Dames and Moore. The method detection limit is a reasonable value that can be detected using the methodology. In the case of the 10 PPBs, or whatever was the method detection limit, the instrument cannot detect concentrations lower than the detection limit. However, based on EPA guidelines, they don't necessarily have to be reported. There are methodologies that can detect concentrations down to .1 PPB.

ASSEMBLYWOMAN KALIK: How would that detection-- Just as a personal aside, my son is a geologist, so I go home with all this stuff and I throw it at him. Then he throws it back at me, and we play back and forth. He is with the USGS, by the way, so I have been having a good time with it. That is probably why the questions.

When you have less than 25-- When 25 PPBs is the limit, and you detect five, how would that be reported?

MR. TSENTAS: It would be reported--

ASSEMBLYWOMAN KALIK: You said it is not required to be reported.

MR. TSENTAS: That's correct.

ASSEMBLYWOMAN KALIK: But if it were reported, how would it be reported?

MR. TSENTAS: It would be reported if you requested it. Normally what they would say is that it is less than the detection limit. If the detection limit is 10, they would give you either a below method detection limit or less than. Now the trend is to say, "less than 10," if 10 is the detection limit.

Now, that may mean that it is there, but it is less than 10, or it is not there. You don't know that unless you go back to them and say, "Is it there and is it less than 10, or is it not there?" In a case where they say, "Not detected," that means--

ASSEMBLYWOMAN KALIK: That was my next question. In the case of non-detected, is that less than the 25, less than the 10, less than a trace, five PPBs, I mean--

MR. TSENTAS: That means they did not see it.

ASSEMBLYWOMAN KALIK: At all, or is it less than 25?

MR. TSENTAS: In some cases, depending on the method of analysis, they will not look for it if it is below the method detection limit. They will only report it if it is above the detection limit.

ASSEMBLYWOMAN KALIK: In order to uniform it, to get uniformity here, in the reports prepared where the limit was 25--

MR. TSENTAS: Yes.

ASSEMBLYWOMAN KALIK: --if a trace were found that was under the 25 limit, would it have been written as non-detectable, or as less than 25?

MR. TSENTAS: It depends on when the study was done and which lab they used. Some labs will say, "It is below the method detection limit."

ASSEMBLYWOMAN KALIK: Okay. Then let me ask this question. In the 1985 Chyun report, what method of reporting was used? Was it less than 25, non-detectable, or some other method?

MR. TSENTAS: I have to check the report. I think they say, "Non-detected."

ASSEMBLYWOMAN KALIK: Does that mean under 25? Does that mean 10? Does that mean five? Or, does that mean that it wasn't--

MR. TSENTAS: My interpretation is that it was not there.

ASSEMBLYWOMAN KALIK: That it was not there at all?

MR. TSENTAS: That is my interpretation looking at the report.

ASSEMBLYWOMAN KALIK: Were they specifically requested to report it that way?

MR. TSENTAS: I would not think so. I don't know, but I don't think they were requested to report it that way.

ASSEMBLYWOMAN KALIK: I assume certain specifications are given on a contract of this sort. Are all those specs for all those reports given in the same language so that we are getting the same answers? Does non-detectable mean non-detectable, or does non-detectable mean something under the detectable limit?

MR. TSENTAS: Okay. What it means, and this is given on the report, is, ND, element is less than the value given and not detected by the technique employed. That is their interpretation of the ND.

ASSEMBLYWOMAN KALIK: I'm still not 100% sure that non-detectable doesn't mean that there was something there under the detectable limit.

MR. TSENTAS: In this case, that is not the case.

ASSEMBLYWOMAN KALIK: Rossnagle & Associates has been used as a reporting consultant. Are they under contract to the Navy? Is this on a contract basis, or a subcontract basis?

CAPTAIN EATON: Not at this time.

ASSEMBLYWOMAN KALIK: Have they been?

CAPTAIN EATON: They have been.

ASSEMBLYWOMAN KALIK: Which one of the groundwater studies was done by Rossnagle & Associates?

CAPTAIN EATON: They did a study, Test Report No. 9723 ALPHA, February 19, 1981. There was a lab report, revised February 26, 1981.

ASSEMBLYWOMAN KALIK: Was that specifically a groundwater study?

CAPTAIN EATON: No, that was a study done. It was a volatile organic scan testing done at the site in question, Site 34.

ASSEMBLYWOMAN KALIK: Did the 1985 Chyun report test for acrylonitrile?

CAPTAIN EATON: I don't know. They tested for whatever the State requires with regard to the 129 elements. If that is one of them, yes, they did.

ASSEMBLYWOMAN KALIK: Did they specifically test for acrylonitrile?

CAPTAIN EATON: Yes. If that is one of the 129 elements they are required to test for, they did.

ASSEMBLYWOMAN KALIK: Could I get verification of that? I believe--

CAPTAIN EATON: What was the element?

ASSEMBLYWOMAN KALIK: Acrylonitrile. If you recall, this is the very element I asked about last week that was -- and I had great difficulty getting these figures out -- five times, or a hundred thousand times greater than the acceptable limit. I would really like to know whether this was tested for.

CAPTAIN EATON: Do you know if that is required to be tested for?

ASSEMBLYWOMAN KALIK: I know it had been found in the wells in Lakehurst, not only at the Naval Station, but in the Boro of Lakehurst, and that it was found in the garbage report -- you know, the so-called garbage -- I keep referring to it as the garbage report. I really should put another name to it. It was found to be extremely excessive to the limits that are acceptable. I wondered why it would not have been reported in the Chyun report. I did not see it there, so--

CAPTAIN EATON: You don't see it in the report? Then it is not a requirement.

ASSEMBLYWOMAN KALIK: Then I guess I would have to ask you if you know where it has been tested subsequent to the garbage report.

CAPTAIN EATON: I have no idea, and why would I test for it?

ASSEMBLYWOMAN KALIK: Even though we have thrown that report out as erroneous--

CAPTAIN EATON: One of the things said in the Princeton Aqua Science report was that those ingredients weren't even associated with the well. So we really have no reason to test for that. But we do have a reason to test for the 129 ingredients which are required by State law.

ASSEMBLYWOMAN KALIK: The detection limits in the Princeton Aqua Science report -- were they at the same 25 PPB limit, or was there another--

CAPTAIN EATON: I have no idea. The reports I think are germane are the last three series of Chyun Associates' reports.

ASSEMBLYWOMAN KALIK: Except that they did not test for this specific chemical.

CAPTAIN EATON: No, and as far as I am concerned, I am confident that there is no need to do that.

ASSEMBLYWOMAN KALIK: Let me ask you again on the Princeton Aqua Science report, and I don't know that you are going to be able to give me the answer--

CAPTAIN EATON: I can't; I don't--

ASSEMBLYWOMAN KALIK: On the detectable and non-detectable, and you know, under the limit, whatever that limit may have been, do you have any idea what specifications that report was, in fact, produced on?

CAPTAIN EATON: No, I don't. I would have to go back to the original contracting documents and see that the specifications were. However, your questioning brings up an interesting point, which I think is one for you all to address with the DEP; that is, if there are certain parameters and certain things we think we are interested in, then I think we should probably legislate consistency from the data that is provided by any of these labs in the State, because this lab is doing this, and that one is doing that. Well, that may not provide the answers you want. So I think perhaps we should be consistent.

ASSEMBLYWOMAN KALIK: I agree with you, but I'm not so sure that those need to be legislated.

CAPTAIN EATON: Well, whatever.

ASSEMBLYWOMAN KALIK: In fact, it would certainly be under the jurisdiction of the Department to come up with uniform specifications--

CAPTAIN EATON: Yes. They can simply say--

ASSEMBLYWOMAN KALIK: --so that we know, in fact, not only what we are talking about and how much we are talking about, but that the same substances be tested for, because, although I am willing to accept the fact that you accept the fact that that report was erroneous, nonetheless, one of the very frightening elements in that report has subsequently not been tested for, and we have no idea at this point whether it is there or in what quantity it is there. There is no record of that.

CAPTAIN EATON: I have no reason to believe that there is any of that there. I don't know if it is a by-product or anything, but it is certainly not anything we use.

ASSEMBLYWOMAN KALIK: But you would not be able to state to me with any surety that it is not there because there is no--

CAPTAIN EATON: Want to bet money on it?

ASSEMBLYWOMAN KALIK: I'm not a bettor, sir. I am the world's worst gambler. I make my deposit in Atlantic City regularly.

CAPTAIN EATON: You know, one of the things Princeton Aqua Science said was that that chemical, among others, is not associated with any wells at Lakehurst. I consider that to be an important statement. Furthermore, when we do the testing in accordance with the expert requirements based on legislated requirements in the State of New Jersey, which calls for 129 elements -- and we have tested for all of those -- and come up absent a problem, I have to regard your tax money as well, and there do I draw the line?

ASSEMBLYWOMAN KALIK: Well, having, you know, had that report and having had the questions here at the table, would you, in fact, not now include that chemical as one of the test chemicals, even though it is not required?

CAPTAIN EATON: Maybe I misunderstood the chemical. Were you saying acrolein?

ASSEMBLYWOMAN KALIK: No, I said acrylonitrile.

CAPTAIN EATON: Oh, acrylonitrile. You know, we tested for that too, and there was none detected.

ASSEMBLYWOMAN KALIK: When?

CAPTAIN EATON: In 19-- Let's see -- all the tests, '84 and '85.

(One of Captain Eaton's associates, Mr. Koczan, says something, but it was not audible to the reporter.)

ASSEMBLYWOMAN KALIK: Okay, but that is not part of the Chyun report.

CAPTAIN EATON: Yes.

ASSEMBLYWOMAN KALIK: It is? Okay. Then the previous discussion was-- Could you tell me what the limit was?

CAPTAIN EATON: In the '84 report, the limit was 20 and 20; in the '85 report, it was 10 and 10.

ASSEMBLYWOMAN KALIK: And both cases--

CAPTAIN EATON: In both cases, non-detected.

ASSEMBLYWOMAN KALIK: Do you know what the EPA limit was in that original 1981 article?

CAPTAIN EATON: No, I don't. If it's published, I don't know what it is. By the way, one of the points of confusion you might have is that, in the '84 report, it called it acrolein and acrylonitrile. Then in the '85 report -- recognizing that your assistant is not a chemist -- it calls it acenaphthene or naphthene, and acenanaphthylene, which are both chemical names for the same ingredients.

ASSEMBLYWOMAN KALIK: I still have problems that we are talking about, first of all, the same chemical, and second of all, the same limits.

CAPTAIN EATON: I don't have any problems.

ASSEMBLYWOMAN KALIK: Well, I do, because I am not a chemist and I don't know that those names are really the same thing. So, you know, I have problems. I share your concern, and I think when the specs go out for these reports, they ought to be very specific as to

what we want, how much we want, and what it says, so that we can, in fact, draw some conclusions.

Just three more questions, if I may. DEP obviously shares your viewpoint on the original 1981 groundwater study, but it still considers Lakehurst a major threat to the public health of New Jersey residents. What is your--

CAPTAIN EATON: That is inconsistent with some of the testimony I quoted here that Mr. Tyler said. He said it isn't. As recently as this morning he said it isn't.

ASSEMBLYWOMAN KALIK: However, when Assemblyman Rod asked him what the potential--

CAPTAIN EATON: He said, "One to ten, depending on which way," and he gave two answers. One of them was ten and one of them was one.

ASSEMBLYWOMAN KALIK: He said, "As of today, what is the potential health hazard of Lakehurst?" And he said, "On a scale of one to ten, I would rate it one." Assemblyman Rod then asked him, "What is the future potential health hazard on a scale of one to ten?" and he said, "Ten." Am I correct, Assemblyman Rod?

ASSEMBLYMAN ROD: Yes, but I want to find it to verify the fact.

CAPTAIN EATON: That is fairly correct. I recall him saying it that way.

ASSEMBLYWOMAN KALIK: Okay. So, he obviously still considers it a potential health hazard.

CAPTAIN EATON: Actually I think his assistant, Dr. Berkowitz, does. I think Mr. Tyler perhaps does not.

ASSEMBLYWOMAN KALIK: But we have the testimony that he does on a scale of one to ten.

CAPTAIN EATON: Oh, that is exactly what he said, and I don't think there is any reason to buy that. There is absolutely no reason whatsoever, particularly when he has bracketed that statement in his testimony, both before and afterward, and as recently as this morning on the radio, saying it is not a problem. You know--

ASSEMBLYWOMAN KALIK: Again, you can understand the inconsistencies and what they are causing in this particular area. People don't know from one day to the next whether they are living in a potential life-threatening situation or they are not. I think that is a difficult situation to be in, and that is why we are having these hearings so we can, in fact, assure people.

The two other questions I have are basically on that question.

CAPTAIN EATON: One of the things I would like to interject, also, is that we have been consistent with invitations to members of DEP to come to the sites and visit. I went to my headquarters to get permission for Dr. Berkowitz to fly in one of my helicopters, and I got the permission granted. I have an open invitation to Jorge to fly to any site he chooses, or to look at the Base in general, or anything he wants to see.

In addition, I have invited him and others to actually physically tour the sites and look at them. The only member of DEP that I personally have assisted, together with Lucy Bottomley, was Dr. Mary Morris, who is now working on other things, as I understand it. Her conclusion after the tour with me and Lucy the day we did that, along with other members -- I think it was August 19 -- was, "Gee, things don't look so bad."

Now, the "monster dump site" originated from Dr. Berkowitz, but yet, ably qualified is Dr. Mary Morris, who physically has seen the sites now. Dr. Berkowitz has not. She said, "Gee, it is not such a problem."

ASSEMBLYWOMAN KALIK: Captain, that is what we are trying to determine. We really think it is important that we get to a conclusion.

CAPTAIN EATON: I am very concerned. We have some concerned citizens here from Lacey, and I share their concern. We are just dedicated to getting the facts out. I am very concerned that anybody is unduly alarmed, because this can be very, very distracting to the well-being of any family which has to live under these circumstances.

ASSEMBLYWOMAN KALIK: Assemblyman Hendrickson, last week, took me to task because he said I was unduly alarming the citizens. I don't want to be unduly taken to task. I want to be able to say with surety from the DEP, the EPA, the Navy, and everybody else. The question I am going to ask next is, can you, as the Commander of this Base, or can the Navy, warrant or guarantee the people of this State who rely upon the Cohansey Aquifer for their only source of drinking water, that this critical sole water source is, and will remain, potable, in spite of the history of hazardous waste activities at this facility?

CAPTAIN EATON: I have to tell you that based on what I have available now, yes, I can do that.

ASSEMBLYWOMAN KALIK: Okay. My further question is, will the Lakehurst Naval Air Engineering Center, today, warrant or guarantee to the people of this State that it will pay for the cleansing of drinking water found to be contaminated on the basis of past or ongoing hazardous waste activities at this facility?

CAPTAIN EATON: I would suggest that if it can be established beyond any doubt whatsoever that this place is indeed the source of the problem, I have every confidence that the United States Navy -- and I am not speaking for Lakehurst now; I have to speak to the higher authority which has the money--

ASSEMBLYWOMAN KALIK: I understand that.

CAPTAIN EATON: --would probably take a serious look at that. But, obviously, that kind of thing is fraught with all sorts of problems. For example, let's go back to the fact that the Town of Lakehurst, back in the third week of August, said, "Gee, we got benzene in one of our wells. That is coming from Lakehurst." Not so. We have an Exxon Station on top of the well. There are other indications, and part of the Confirmation Study is to make sure that nothing is leaving this place. We have every reason to believe--

ASSEMBLYWOMAN KALIK: I specifically said, on the basis--

CAPTAIN EATON: --that that is not happening.

ASSEMBLYWOMAN KALIK: Just one last question. Will the United States Navy provide impacted New Jerseyans with alternative

water supplies for as long as the natural supply of potable water remains dangerous to drink and is, in fact, concluded to be the responsibility of Lakehurst -- the Lakehurst Naval Station?

CAPTAIN EATON: I can't answer that.

ASSEMBLYWOMAN KALIK: Jorge, I'm finished, and I thank you, Captain Eaton.

ASSEMBLYMAN ROD: Assemblyman Hendrickson.

ASSEMBLYMAN HENDRICKSON: Thank you very much.

CAPTAIN EATON: My consultant has one thing he wants to enter back for the record to correct part of a response he made to you, Assemblyman Hendrickson.

MR. KOCZAN: Thank you, Captain. This is Jack Koczan again. I wanted to just clarify one comment I made about migration rates. My colleague pointed out that in my comments I mentioned one-half to one foot as the unit, and the time period in which a plume might move as being one year. That is one day. So, we are talking about 150, maybe 300 feet a year. I just want to correct that and clarify it in the record, please.

ASSEMBLYMAN HENDRICKSON: I'm glad you came back. Please stay for just a second.

Barb, I would never take a fellow Assembly person to task. My concern here at Lakehurst seems more of a -- and I say it broadly -- target. There are many, many other sites. We have gasoline up and down the coast. When you say, what potential hazard do we have that is life threatening, we are living every day on our highways with that very same thing. We know this is a military installation that has "X" amount of people and high usage, and we hope for our military probably more. But, they are doing everything. We sat through the hearings that the Captain was good enough to call himself, which he initiated on his own to clear up questions with the people who were around.

So, if I am coming on a little heavy, I apologize for that, but we have spent many, many hours in the County of Ocean placating the fears of the very people who are here today. My question -- I'm sorry, from Dames and Moore, if I may again-- When I first came in, one of the persons from Lacey asked me, "Is it possible Lakehurst, because of

the trying situation with our wells?"-- Believe me, nobody feels sadder than I do about the situation in Lacey, and in our other towns, where private wells are contaminated. The question I was asked was, "Would it be possible for Lakehurst to pollute the wells in Lacey?" Now, that is already getting out to the people. Having the experience as a mayor of going through a similar situation, where we had a sanitary landfill -- and being taken to task -- five miles south of that, three streams, if you will-- We said, "Eagleswood Township's landfill is polluting Parkertown Creek," which is a little difficult without polluting the two streams in between. I don't know how it would jump that far. It took a substantial amount of money to relieve the fines through DEP.

Hence I ask the question, "How is it possible," -- okay? -- "to jump the wide spans from the perimeter of Lakehurst to possibly pollute anything in another municipality?" And, not only Lakehurst, because it was a good question. We have Beachwood, we have Berkeley -- and I'll name them for you. We now have Lacey, we have Stafford, just being hooked up to water, and we have Little Egg Harbor Township hooked up to water now. They all went through the trying times, and I sat with everybody. I was never asked to come to Lacey, and that is why you haven't seen me.

So, with that long dissertation, how is it possible to skip the pollution process? I asked you, and you said, "The plume will travel and contaminate itself on down." Is there any way possible for pollution to jump that far, in your expert opinion?

MR. KOCZAN: I think the question really is, can a contaminant get under a stream? The answer to that is, possibly. There are under-flows. There are two kinds of flows. There is a discharge from the surface formations into the adjacent stream, and there are under-flows. Depending upon the geologic conditions at a location, and depending upon the nature of the contaminants, if they exist -- and we don't know that they exist right now here -- they could move in the under-flow underneath that stream and then migrate, at the rates I mentioned earlier, over some limited distance.

ASSEMBLYMAN HENDRICKSON: Would they not be picked up in more than five or six homes in a thing like that? Would you estimate how large a contamination could cause that to happen?

MR. KOCZAN: I could not estimate because I don't know what the source is.

ASSEMBLYMAN HENDRICKSON: You wouldn't know what the source was.

MR. KOCZAN: It is the function of the source size. It is a function of the source volume. I mentioned the density relationship. It is a function of the underlying layers and how fast the water is moving. It is a function of the discontinuities in there between sand, clay, and other units. So, there are so many variables it would be impossible to project.

ASSEMBLYMAN HENDRICKSON: Thank you. I have just two more questions. Next week's hearing -- has it been decided where yet? Jorge, do you know? The 24th -- that is what we are talking about. Do we know where it is going to be?

ASSEMBLYMAN ROD: We only have a defined place, Jack.

MR. CERVASIO: It was advertised in the paper last night, Assemblyman.

ASSEMBLYMAN HENDRICKSON: What was advertised?

MR. CERVASIO: It was advertised in the paper last night.

ASSEMBLYMAN HENDRICKSON: The location of the hearing of this Committee?

MR. CERVASIO: Yes. I cut it out, but I didn't bring it with me.

ASSEMBLYMAN HENDRICKSON: Jorge, can you tell me where it is now? The Vice Chairman is here. I appreciate your answer, but I am asking the Vice Chairman. I didn't see it in the paper and I haven't got it in front of me.

MR. CERVASIO: Yes. It is supposed to be at Manchester High School, 4:00 p.m. -- Thursday night.

ASSEMBLYMAN HENDRICKSON: That's the Pinelands Commission hearing. This is the Assembly Hazardous Waste Committee. That is the Pinelands hearing.

CAPTAIN EATON: That is correct, and I will be there.

ASSEMBLYMAN HENDRICKSON: Yes, and so will I. I am a former Commissioner. That is the Pinelands hearing; it is not the hearing I am referring to. I'm sorry to be talking to the audience, Chairman.

ASSEMBLYMAN ROD: It has been arranged at Earle. Do we have confirmation of that?

MR. SMITH: Yes.

ASSEMBLYMAN HENDRICKSON: Earle?

ASSEMBLYMAN ROD: Yes.

ASSEMBLYMAN HENDRICKSON: Will we have an agenda, which we have not had for the last two hearings, so we can prepare, see who is coming before us to testify, and perhaps see what questions we might want to ask?

ASSEMBLYMAN ROD: Jack, we will do our best to do that, yes.

ASSEMBLYMAN HENDRICKSON: Okay. It is not an affirmative answer that we will be able to get that?

ASSEMBLYMAN ROD: We will do our best. Are there any other questions, Jack?

ASSEMBLYMAN HENDRICKSON: Yes, one fast one. Captain, to your knowledge, has the testing that has been done, been done with all known proper practices to the state of the art at this time to see to it that whatever possibly could be contaminating is not contaminating?

CAPTAIN EATON: Yes, sir. If anyone is interested, we have vehicles available and personnel to take you on a tour of the sites.

ASSEMBLYMAN ROD: Captain, if we have any additional questions, may we give them to you in writing at a later date?

CAPTAIN EATON: Yes, sir, any time.

ASSEMBLYMAN ROD: And you will supply us with the answers?

CAPTAIN EATON: Any time.

ASSEMBLYWOMAN KALIK: Captain, I just want to say I would love to take you up on it, and maybe I will at some future date, but I have another commitment and I cannot do that.

CAPTAIN EATON: I understand. The doors are open and we can provide.

ASSEMBLYMAN ROD: Captain, do you have any closing statements you would like to make?

CAPTAIN EATON: Yes. What I would like to say is, I sincerely appreciate the opportunity you have given me, and the latitude you have given me, to state the situation as I know it, to present you with the facts, and for your taking the trouble to come down here, rather than holding the hearing at your usual site. It has been a bit of a hardship, and I sincerely appreciate it.

I want, once again, to affirm our commitment to helping out as much as we can by doing our part as good citizens of Ocean County to make this County preeminent, and to helping the State to reduce its problems on a national level.

Thank you very much.

ASSEMBLYMAN ROD: A closing statement from the Chair. You have to understand, Captain, officials present, and the public, the amount of contamination we have throughout our entire County. We are practically talking about town after town -- Beachwood, Berkeley, all the way down the line. You have to understand the public's concern as far as this contamination we have all over the County is concerned, as well as all over the State, and the pressure we are faced with as legislators. People come to us to voice their problems and their concerns. This is one of the reasons we are holding these public hearings. The fact is, we want to be up front with people. We want to get as much out as possible. We want to get as much testimony as possible.

Secondly, I would like to say thank you. I think you were very frank with this Committee. I know you gave us good, honest answers. We appreciate your being so up-front with us. The way I see it, you are doing a good job. Thank you very much.

FROM AUDIENCE: Hear, hear.

CAPTAIN EATON: Thank you.

(HEARING CONCLUDED)

APPENDIX

New Jersey State Library

Natural Resources Defense Council, Inc.

122 EAST 42ND STREET
NEW YORK, N.Y. 10168
212 949-0049

Western Office
25 KEARNY STREET
SAN FRANCISCO, CALIF. 94108
415 421-6561

Washington Office
1350 NEW YORK AVENUE, N.W.
SUITE 300
WASHINGTON, D.C. 20005
202 783-7800

CONFIDENTIAL

1 October 1985

Mr. David Cantor
State House, Suite 330
Trenton, NJ 08625

Dear David:

As promised, I have examined the information you provided about contamination of groundwater arising from military hazardous waste disposal at the Lakehurst Naval Air Engineering Center. As you know, many of the substances detected at the facility may pose unacceptable long-term health risks to humans if ingested over a lifetime at reported concentrations. A presumption of unacceptable health risk is, therefore, appropriate in the absence of reasonably complete information describing the nature and degree of potential exposure risks. This letter sets forth issues which must be addressed to adequately characterize risks that may be associated with concentration levels of substances reported in the groundwater underlying the Naval facility and its environs.

--1. Some substances appear to be of toxicological concern at levels actually detected; do these levels occur in water actually used for drinking purposes?

--2. Some substances, though detected at relatively low levels, appear to have been disposed of in enormous quantities (e.g., "in excess of 2500 cubic yards of benzene" within 0 to 1 mile of a population of 3000 to 10,000 people); low levels may be the harbingers of high levels;

--3. Groundwater may move at a rapid rate of 5-6 feet per day, enhancing concerns about

New England Office: 850 BOSTON POST ROAD • SUDBURY, MA. 01776 • 617 237-0472

Public Lands Institute: 1720 RACE STREET • DENVER, CO. 80206 • 303 377-9740

OCT 15 1985

the dynamics of groundwater movement
and aquifer contamination;

- 4. Although groundwater is known to move rapidly in the vicinity of the Lakehurst facility, there appears to be inadequate information about the variability and directionality of groundwater movement and soil permeability to substances of concern;
- 5. Aquifer maps delineating lateral and vertical boundaries of aquifers relative to population centers and sampling sites are needed to conceptualize the extent and degree of known contamination and infer its source(s);
- 6. An inventory of substances having a history of disposal at the facility, and amounts disposed, is needed to define appropriate target substances for sampling and laboratory analysis;
- 7. There is a need to develop a grid for placement of monitoring wells drilled to appropriate depths;
- 8. There is a need to develop a program of regular sample collection and analysis to determine and model the dynamics of contaminant movement from source(s) to receptors;
- 9. A program of sampling biota and other environmental media, such as air in household basements, is needed; and
- 10. There is a need to make existing data more accessible by placing it in a single document and summarizing findings to date.

The issues set forth above briefly outline an integrated environmental assessment program. In another situation -- Love Canal, New York -- such a program was conducted under a presidential declaration of an emergency, complete with evacuation of residents, under the Federal Disaster Assistance Act (later, the Federal Emergency Management Act) at a multi-million dollar cost. Ironically, the results were less definitive than would be expected given the resources devoted to the project; the findings, had they been available earlier, would not have justified the emergency evacuation. It is important to learn from this past experience; its lesson is, I think, that we presume to have a basis of concern in the long run, but not a basis for panic in the short run.

If I can be of further assistance in this matter, please do not hesitate to contact me. We in the Toxic Substances Project are interested in maintaining our involvement and supporting your efforts as appropriate.

Very truly yours,

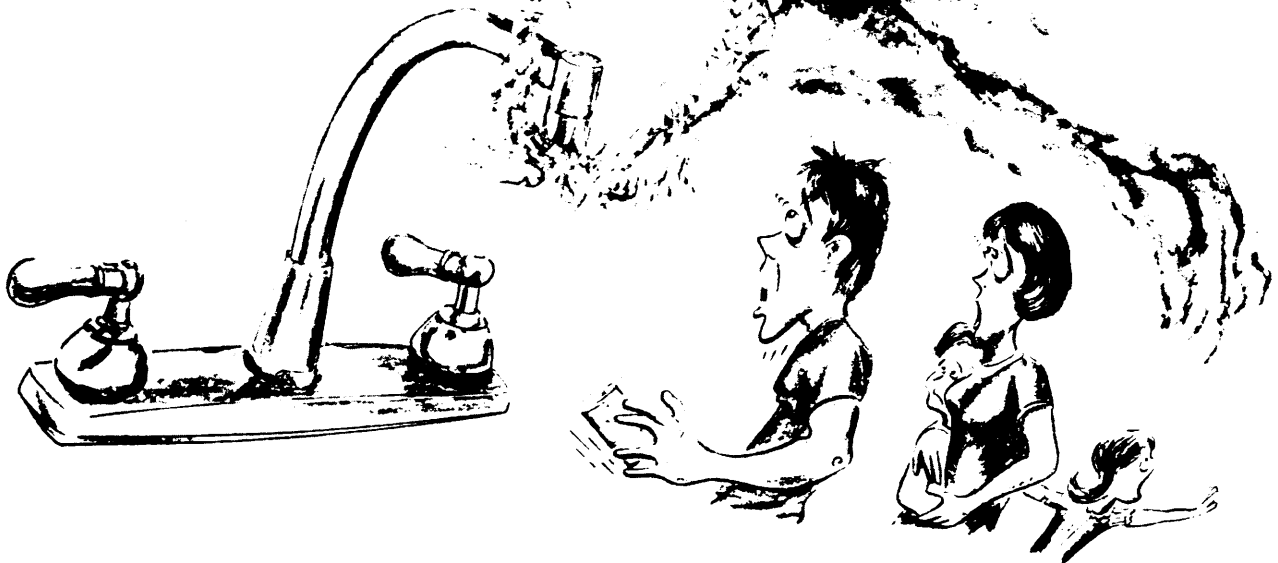


Robert A. Michaels, Ph.D.
Senior Project Scientist
Toxic Substances Project

RAM/gr

Asbury Park Press/Sun., May 26, 1985

Officials from the state Department of Environmental Protection said they found contaminated wells in the Barnegat Pines section of Lacey Township and suspect as many as 70 wells in the area are polluted. About 200 residents were told they lived on top of a possible "time bomb" because of the contaminants in their wells. Officials said the problem is so widespread that the only long-term solution is a public water system.



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WE CAN'T DRINK, COOK, WASH
OR BATHE IN LACEY'S POLLU-
TED WELL WATER. WHEN
WILL THE STATE OF NEW
JERSEY-OR OUR ELECTED
OFFICIALS HELP US? AND
WHAT HEALTH PROBLEMS
DO WE FACE NOW AND IN
THE FUTURE?

4X

NEWS

FOR RELEASE:

IMMEDIATE RELEASE - Thursday,
October 17,
1985

ASSISTANT MINORITY LEADER
JOHN T. HENDRICKSON, JR.
ASSEMBLYMAN, DISTRICT 9 (OCEAN-BURLINGTON)
157 NORTH MAIN STREET
MANAHAWKEN, N. J. 08050

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WEST CREEK, N. J. 08092
BUS (609) 296-2048

CONTACT: John T. Hendrickson, Jr.
Assemblyman, District 9
(609) 597-4151

page 1 of 2

HENDRICKSON HITS FORD FOR "GRANDSTANDING" AT LAKEHURST HEARING

Assemblyman Jack Hendrickson (R-9, Ocean-Burlington) today charged Assemblywoman Marlene Ford (D-10, Ocean) with "grandstanding" and "political self-promotion on the backs of our nation's military" at an Assembly hearing on waste cleanup at the Lakehurst Naval Base.

"The Navy held a briefing for legislators on August 30, which Mrs. Ford did not attend," said Hendrickson. "In addition, there was a briefing on August 8, a site tour on August 26, and a hearing scheduled at Lakehurst by the Pinelands Commission for October 24. This committee's work is already being done. Mrs. Ford's sudden interest seems to be directly related to the approach of election day.

"As the Assemblyman representing Lakehurst, McGuire, and Fort Dix, I have been keeping abreast of the military waste disposal issue, and attended the August 30 briefing," continued Hendrickson. "The Navy recognized potential toxic waste dangers as far back as ten years ago, has spent several million dollars cleaning up, and has an ongoing well testing program to monitor possible seepage into the water supply.

"Mrs. Ford's hastily formed, ill prepared committee is accomplishing little except scaring the many senior citizens

and other residents of the Lakehurst area. The Lakehurst Naval Air Engineering Center has been a good neighbor and a major employer in Ocean County for sixty years. Every veteran in Ocean County should be insulted at Marlene Ford's abuse of the military for her own electioneering purposes."

Hendrickson pointed out the purely political motivation behind the special committee's creation. "After delaying for months, Democratic Assembly Speaker Alan Karcher finally decided to jump on the toxic waste bandwagon when it became an election issue. I received notice of my membership on the committee just two days before its first hearing on October 10, and a written notice of today's hearing two days ago. No one knows where the third hearing is going to be held. The committee has not prepared an agenda or a list of witnesses.

"Furthermore, three of the four Democrats on the committee are targeted for defeat - Jacqueline Walker (D-13, Monmouth-Middlesex), Jorge Rod (D-9, Ocean-Burlington), and Mrs. Ford. Media coverage from these hearings will go where it is most needed for the Democrats.

"The 'Special Committee to Investigate Hazardous Waste Disposal at Military Institutions' is a political three ring circus. In rings one and two are Jackie Walker and Jorge Rod. Occupying the center ring is Chairwoman Marlene Ford. She is using these hearings as a springboard for her political ambitions at the expense of dedicated military officials," concluded Hendrickson.

NEWS

FOR RELEASE:

ASSISTANT MINORITY LEADER
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IMMEDIATE RELEASE

October 17, 1985 - Thursday

CONTACT: Assemblyman
Jack Hendrickson
(609) 597-4151

HENDRICKSON ANNOUNCES FORMATION OF SPECIAL COMMITTEE ON ELECTION PRACTICES

Assemblyman Jack Hendrickson (R-9, Ocean-Burlington), today announced the formation of the "Special Committee to Investigate the Re-election Practices of Assembly Democrats."

"This special committee is being created to determine how much New Jersey taxpayer money is being spent for the re-election of Assemblywomen Marlene Ford (D-10, Ocean), Jacqueline Walker (D-13, Monmouth-Middlesex), and Assemblyman Jorge Rod (D-9, Ocean). It is necessary to do this because of the ill prepared, wasteful hearings held by the so-called "Special Committee to Investigate Hazardous Waste Disposal at Military Institutions."

"Committee membership is open to all concerned taxpayers in Ocean County who would rather see their tax money go to senior citizens, environmental and other programs than watch it be spent for useless committee hearings held for the purpose of re-electing politicians," concluded Hendrickson.

* * * 30 * * *

LIST OF NAVAIRENGCEN, NAVY, AND OTHER ENVIRONMENTAL RELATED DOCUMENTS SUBMITTED
TO THE NEW JERSEY GENERAL ASSEMBLY SPECIAL COMMITTEE ON HAZARDOUS WASTE DISPOSAL
AT MILITARY BASES

1. Navy Assessment and Control of Installation Pollutants: Initial Assessment Study of Naval Air Engineering Center, Lakehurst, New Jersey (NEESA report).
2. Report on the Status of the 44 Potentially Contaminated Sites Identified by the Navy Assessment and Control of Installation Pollutants Survey of the Naval Air Engineering Center, Lakehurst, New Jersey (NAEC report of May 1984).
3. NAEC Environmental Program Briefing by Captain Donald R. Eaton of 30 AUG 1985.
4. Identification and Clean-Up of Hazardous Waste Disposal Sites at the Naval Air Engineering Center, Lakehurst, NJ (NAEC letter of 1 MAY 1981).
5. Identification and Clean-Up of Hazardous Waste Disposal Sites at the Naval Air Engineering Center, Lakehurst, NJ (NAEC letter of 17 AUG 1981).
6. Suspected Dumping of Hazardous Waste, Borough of Lakehurst, Ocean County (NAEC letter of 14 MAR 1983).
7. Suspected Sites of Previous Contamination at the Naval Air Engineering Center, Lakehurst, NJ (NAEC letter of 25 OCT 1983).
8. Request for meeting with NJDEP to discuss Initial Assessment Studies of Naval Air Engineering Center, Lakehurst, and Naval Weapons Station, Earle, NJ (NORDIV letter of 26 OCT 1983).
9. Copy of signature of attendees to 13 JAN 1984 meeting between NJDEP, NAEC, NWSE and NORDIV
10. Environmental Protection Agency comments on Initial Assessment Studies for Naval Weapons Station Earle, NJ and Naval Air Engineering Center, Lakehurst, NJ (NEESA letter of 16 FEB 1984).
11. Suspected Sites of Previous Contamination at the Naval Air Engineering Center, Lakehurst, NJ (NAEC letter of 21 NOV 1984).
12. Evaluation of Analytical Results Reported from Groundwater Samples Collected on 20 FEB and 8 and 20 APRIL 1981 at Lakehurst Naval Air Station, Lakehurst, NJ (Report by Princeton Aqua Science of 13 AUG 1981).
13. Evaluation of Analytical Results Reported from Groundwater Samples Collected in 1982 at Naval Air Engineering Center, Lakehurst, NJ (Report by Princeton Aqua Science of MAR 1983).
14. Annual Water Quality Report for Lakehurst Naval Air Engineering Center for 1983 (Report by Environmental Testing Laboratories, Inc. of 30 APR 1984).

15. 1984 Annual Water Quality Report for Naval Air Engineering Center, Lakehurst, NJ (Report by Chyun Associates, undated).
16. Initial Report on the Groundwater Monitoring Program at the Closed Solid Waste Facilities (NAEC report of MAR 1983).
17. Initial Report on the Groundwater Monitoring Program at the Closed Solid Waste Facilities (NAEC report of MAR 1984).
18. Initial Report on the Groundwater Monitoring Program at the Closed Solid Waste Facilities (NAEC report of APR 1985).
19. Statement of George Marienthal, Deputy Assistant Secretary of Defense (Energy, Environment and Safety), before the Subcommittee on Transportation and Commerce of the House Committee on Interstate and Foreign Commerce on November 29, 1980.
20. 1981: Princeton Aqua Science (responds to Appendix C of IAS, concludes that concentrations reported in IAS were a result of improper sample handling and analysis)
21. 1982: Princeton Aqua Science (water quality of Lakehurst is quite good and should initiate no concern with regard to the health and safety of the water users)
22. 1983: Environmental Testing Laboratories, Inc. (there is no evidence of specific or widespread organic or inorganic contamination of the potable water supply samples tested in this water quality survey)
23. 1984: Chyun Associates (the Naval Air Engineering Center has a good quality potable water supply; there is no basis of concern upon the presence of any compound which may have any adverse health effects on the public within the developed data of the SDWA)
24. 1985: Chyun Associates (the Naval Air Engineering Center has a good quality potable water supply; there is no basis of concern upon the presence of any compound which may have any adverse health effects on the public within the regulated parameters of the SDWA)
25. IAS to EPA and DEP (Letter)
26. IAS to DEP (Letter)
27. Partial Transcript of Briefing by Captain Donald R. Eaton Commanding Officer, Naval Air Engineering Center 8/30/85
28. NAEC Environmental Program Briefing by Captain Eaton, 8/30/85

29. Preface to the "Report on the Status of the 44 Potentially Contaminated Sites Identified by the Navy Assessment and Control of Installation Pollutants Survey of the Naval Air Engineering Center (NAEC, Lakehurst, New Jersey)"
30. Report on the Status of the 44 Potentially Contaminated Sites Identified by the Navy Assessment and Control of Installation Pollutants Survey of the Naval Air Engineering Center, Lakehurst, New Jersey.
31. Navy Assessment and Control of Installation Pollutants: Initial Assessment Study of Naval Air Engineering Center, Lakehurst, New Jersey.
32. Letter from Captain Donald R. Eaton, U.S. Navy Commanding Officer, Lakehurst, N.J. to Robert Hargrove, EPA, Region II re report prepared by Center's Drinking Water Consultants, Chyun Associates, Princeton.
33. 1985 Annual Water Quality Report, Naval Air Engineering Center, Lakehurst, N.J. by Chyun Associates, Princeton, New Jersey, Final Report, October 10, 1985.
34. Letter from Commander, Naval Air Systems Command to Commanding Officer, Naval Air Engineering Center re SECNAV 1980 Environmental Protection Awards.
35. Letter from Chief of Naval Operations, Washington, D.C. to Chief of Naval Material re 1980 Secretary of the Navy Environmental Protection Award.
36. Letter from Commander, Naval Air Systems Command, Washington, D.C., to Commanding Officer, Naval Air Engineering Center re 1982 Secretary of the Navy Environmental Protection Award.
37. Letter from Chief of Naval Material, Washington, D.C. to Commanding Officer, Naval Air Engineering Center via Commander, Naval Air Systems Command re 1982 Secretary of the Navy Environmental Protection Award.
38. Letter from Chief of Naval Operations, Washington, D.C., to Chief of Naval Material re 1982 Secretary of the Navy Environmental Protection Award.
39. Copy of the Secretary of Defense Environmental Quality Award given to NAEC Lakehurst, N.J. 1980.
40. NAEC Environmental Branch Employee Qualifications
41. Memo from Public Affairs Officer N. G. Grand to Commanding Officer re Additional NAVAIRENGCEN Environmental Data Supplied N.J. Special Committee on Hazardous Waste Disposal at Military Bases dated October 10, 1985.

42. Spill Information Sheets on 18 Spill Sites.
43. Naval Air Engineering Center, Nomination for the Secretary of the Navy Environmental Protection Annual Award 1984.
44. 1980 Naval Air Engineering Center Nomination for the Secretary of the Navy Environmental Protection Annual Award.
45. 1983 Naval Air Engineering Center Nomination for Secretary of the Navy Environmental Protection Annual Award.
46. 1982 Naval Air Engineering Center Nomination for the Secretary of the Navy Environmental Protection Annual Award.
47. Initial Report on the Groundwater Monitoring Program at the Closed Solid Waste Facilities NAEC, March 1983.
48. Interim Report on the Groundwater Monitoring Program at the Closed Solid Waste Facilities NAEC, March 1984.
49. Annual Report on the Groundwater Monitoring Program at the Closed Solid Waste Facilities, NAEC, April 1985.

