Compliments of JOSEPH PILLITTERE MEMBER OF ASSEMBLY

STATE COMMITTEE ON CONSERVATION AND RECREATION

ASSEMBLY COMMITTEE ON ENVIRONMENTAL CONSERVATION

SENATE SUBCOMMITTEE ON TOXIC SUBSTANCES AND CHEMICAL WASTE

PUBLIC HEARING

STATUS OF HAZARDOUS WASTE DUMP SITES AND TOXIC SUBSTANCE RESOLUTION IN NEW YORK STATE

> l West Street Mineola, New York

10:00 A.M. May 11, 1979

EN-DE REPORTING SERVICES, LTD.

Court Reporters - Notaries 132 Nassau Street New York City

> WOvth 2. 2961 2962

COMMITTEE MEMBERS:

Assemblyman Alexander B. Grannis, Chairman

Senator John B. Daly

Assemblyman Maurice Hinchey

Assemblyman John Zagame

Assemblyman Louis J. Yevoli

Assemblyman Armand D'Amato

STAFF MEMBERS:

Weslie Rosen, Coordinator

John Connally,
Aide to Senator Daly

* * *

SENATOR DALY: Good morning, ladies and gentlemen. We thought we would proceed rather than wait any further.

I gather we won't have the use of a mike today, so we'll proceed.

I'm Senator John Daly, chairman of the Senate Subcommittee on Hazardous Waste. To my left is Assemblyman Peter Grannis, who is the chairman of the Assembly Task Force on azardous aste.

To my right is Assemblyman John Zagame and Assemblyman Armand D'Amato, who are joining us today.

This is the fifth in the series of six hearings throughout the State in order to give the citizens of the State the opportunity to have input in what we hope will be a clearly defined and effective State policy in the control of hazardous waste.

It's only been in the last year that this has been brought to our attention to such a great degree via incidents such as the Love Canal, which happens to be in my district in Niagara County.

Some ways, perhaps, the Love Canal will actually be an asset to the State by giving it the awareness that as soon as necessary in the handling of what we find to be a very serious, potentially catastrophic problem.

Hopefully, as a result of these hearings and the studies the Legislature and the Executive Branch working together, can develop a policy for New York State, which, again, will lead
the nation.

I may add that we certainly believe, also, that the Federal Government, unfortunately, has been dragging its feet in this very important effort and we would hapethat through our efforts, we will also perhaps bring to the Federal Government's attention, the need to move ahead much more quickly than we are moving.

CHAIRMAN GRANNIS: I have just one request.

My first request is, if you want to testify today, we ask that you fill out a card. Wes Rosen, the woman in the blue dress, has them, so we know and even if you don't want to testify but would like to be kept up to date on what we have done or are doing in the Joint Task Force Senate Subcommittee work, if you'll !fill out the card, we'll make sure you get the information.

We have picked these hearing sites with some degree of concern. As John just mentioned, this is the fifth hearing we have had.

The first hearings were in Syracuse, which is in Assemblyman's Zagame's district. There is a problem with an abandoned site with thousands of barrels of toxic waste and it highlights a par-

ticular problem in waste storage and waste collection systems.

We had a hearing in Niagara Falls, the home of the Love Canal and several other sites not quite as notorious, but certainly of more concern or possibly more concern in the long run, because they're bigger than the Love Canal. They're now being run by a company that is active and ongoing and if anything happens to that particular company in the future, there will be a site revisted, with thousands and thousands of barrels of some of the most toxic waste on the entire eastern coast of the United States which are being stored there. That could pose a problem.

There are two or three major, secure toxic sites on the east coast. One happens to be a site in Senator Daly's district. There is also a site in New Jersey that was written up in the papers yesterday. It has serious problems. There are chemicals stored on the banks of the water—way. We have problems of what to do on those, and those are the problems we are facing in New York and should be cause of the national concern.

We have received testimony at three EN-DE REPORTING SERVICES, LTD.

24

25

other hearings we have had saying we ought to wait for the national government to act and we could follow their lead. It's our feeling in New York, that because of the problems, because of hundreds of toxic sites, because of the the peculiar problems of Long Island with contamination of its groundwater, New York State cannot afford to wait. We have to take the lead if the Federal Government chooses not to act. We have to move ahead, set an example and, hopefully, it is our hope the Federal Government will come in with matching money and take over its responsibility to recognize that the wastes that are generated by our industries here are wastes we have accepted from states all over the eastern part of the United States and from as far away as Puerto Rico which come from generating products that have benefited the national economy.

We are not setting out to impose a burden on our industries where we will make them noncompetitive with those in other parts of the
country. We have an obligation to the State to
protect the health and welfare of New Yorkers and
that is what we intend to do through the legisla-

tion that will come out of these hearings and the work we have done with the Joint-Senate groups that are interested in toxic wastes.

ASSEMBLYMAN YEVOLI: Distinguished fellow legislators and concerned residents of the Empire State.

My name is Lewis J. Yevoli, I reside at 29 Serpentine Lane, Old Bethpage and I represent the 10th Assembly District in the State Legislature. I welcome you to Long Island and wish you well in this most important public hearing. Your findings and the resulting legislative efforts that you develop to solve the problem will have a significant impact not only on the health and welfare of the people who reside on Long Island but also the State.

Several years ago on December 14, 1976, in this very room, a public hearing was conducted by the Subcommittee on Health Care of the New York State Assembly and as a result we were able to elicit the truth and to ferret out the facts as they related to the purity of the local water supply. Thanks to the support of my colleagues in the State Legislature and the cooperation of the

executive branch we were able to obtain the funds and purchased vital laboratory equipment.

During the intervening years, every public well has been tested at least once and many wells have been closed down.

A legislative report on carcinogenic agents in public drinking water was issued on May 7, 1977, and was the basis for very important legislation.

Unfortunately, the very source of contamination that precipitated the hearing in 1976, namely the Hooker Chemical facility closed down in the early '50s, continues to endanger the lives of those who live on Long Island.

Long Island, land of landfills and Mt.

Trashmores is ever a leaching specter that casts
a menacing shadow over all who live in the bicounty area. Unfortunately, the Sword of Damocles
is ever present to haunt us and each day brings
with it new and grave threats to mankind.

Only this very week we were advised that the former site of the Sylvania plant on Cantiague Rock Road in Hicksville where nuclear fuel rods were processed might be the source of ex-

sessive degrees of radiation and we are awaiting the results of laboratory tests.

One need only read the daily newspapers to learn of an ever increasing number of instances wherein toxic substances and chemical waste sources are indentified.

On Long Long Island, landfills present a clear and apparent danger to one and all. It is not enough to just ban future landfill operations or to close down existing facilities, cover them up with dirt or vinyl sheeting and walk away from a responsibility.

This joint Legislative Committee Hearing has an awesome responsibility! It must bring all of the power and expertise of the State of New York to the task of identifying each and every source of hazardous waste and toxic substances that may have existed in the past, it must register on a current basis present sources of contamination as well as put in place proper safeguards to prevent their doing violence to our way of life.

Last and of equal importance, the State must develop facilities to render harmless hazardous existing waste dump sites as well as process toxic

substances to make them impotent.

Without alarming the public, we have
the responsibility of making them aware of our
findings and identifying the sources of contamination. While it may be true that industry as well
as the individual will continue to generate
hazardous waste and toxic substances as a byproduct, we must be certain that industry not be
permitted to export its problem or to turn the
waste over to some unknown third party and cleanse
their hands of the matter.

The law must be very clear and hold them responsible for making certain that the byproducts do not pose a threat to society. If necessary, government may well have to make sure that regional facilities are available to achieve this objective.

The findings of this legislative hearing must also underscore the importance of all
municipalities being subjected to the same responsibility for cleaning up sources of contamination
and existing waste dump sites.

The longer we wait in the implementation of this program -- the greater the danger to ourselves

our families and future generations.

I can assure you of the fact that such steps will have my support as an individual and as a member of the State Assembly and that I will work with you for the passage of the necessary legislation.

SENATOR DALY: Mr. Donald Middleton,
Regional Director for the Department of Environmental Conservation, will be our first witness.

MR. MIDDLETON: Thank you very much for the opportunity to let me come here today to discuss, in a general way, the problems of toxic wastes, first setting the State prospective in trying to bring it along a little closer to home and focus on Nassau and Suffolk.

People throughout our State have, in recent years, learned firsthand of the impacts of toxic substances on their lives. Mirex in Lake Ontario, acid rain in the Adirondacks, sludge in the New York bight and PCB's in the Hudson River, have severly damaged profitable commercial and recreational fisheries.

The impacts of toxic substances at Love Canal have become a nationwide symbol of EN-DE REPORTING SERVICES, LTD.

the public health and environmental implications of hazardous waste dumps and discharges, and have shown us in the most tragic ways, how people's lives can be affected by these wastes.

Closer to home, where virtually all of our Nassau and Suffolk County water supplies come from our sole source aquifer, some communities and individuals have been forced to stop using wells contaminated by toxic substances. Of the State's population potentially effected by the problem of toxic waste contamination, the major portion reside in Nassau County and Suffolk County.

Here on Long Island, although our problems are not as well publicized as those of Love Canal, we are dealing with perhaps as insidious a problem.

It addition to pre-existing hazardous waste disposal sites, many direct discharges of toxic material occurred tens of years ago, well before we realized their potential impact. We are now witnessing contamination of our groundwater reservior, which is caused in great measure by those prior sins.

Now, as our knowledge of potential con-

į.

taminant hazards increases and safe contaminant threshold limits decrease as a result, the magnitude of the problem grows in severity.

In recognition of the scope of the problem, our department, in cooperation with the State Department of Health, initiated a State-Wide Study of Toxics in the Environment. The State-Wide study report, which is scheduled for completion later this month, will cover a number of important issues. Many require decisions effecting public policy and commitment of resources to solve problems of past and future disposal of toxic substances.

There will be a number of recommendations in addition to the systematic investigation of the in-place toxic problems identified in the study.

Commissioner Robert F. Flacke has already testified before your committees in some detail about State-wide efforts being made to deal with these problems.

Therefore, I would like to concentrate on Long Island problems.

First, in December 1976, this depart-EN-DE REPORTING SERVICES, LTD.

Ö

ment initiated a state-wide industrial chemical survey to determine the extent of losses to the environment of an extensive list of chemicals of concern. The survey was completed in March 1978 and was used as a basis for setting priorities for initial in-plant inspections and permit is-suance on Long Island.

Secondly, in 1976, several chlorinated hydrocarbons--including vinyl chloride, which was utilized at the neighboring Hooker Chemical Corporation plant--were discovered in Grumman Corporation wells in Bethpage.

Grumman switched to public supplies

for its potable water, and proceeded to survey its

own activities for current sources of contamina
tion.

It was generally found that water was being returned to the ground with about the same amounts of chlorinated hydrocarbons as were already being pumped from the Grumman wells.

I might add, here, that Grumman has continued to use their deep wells for various industrial processes and for their air-conditioning needs and this continued use has, in effect, served

to localize and constrain the contamination and keep it from migrating on downstream along with the regular groundwater flow.

Number three, the Grumman experience triggered an intensive well-testing program by both Nassau and Suffolk Counties, and over a period of about two years, all public wells in both counties were sampled at least once. Several public wells in both counties, fifteen in Nassau County and thirteen in Suffolk County, are currently restricted for use, based on toxic organic guidelines set up by the State Department of Health.

I might mention here that this was the first such program of its kind in the nation. Unfortunately, again, based upon the development of the experience at the Grumman Bethpage plant.

With a special legislative appropriation, an organics laboratory was set up by the department of health at our Stony Brook office to facilitate the well-testing program.

New county laboratory facilities later enabled even further acceleration of the well-testing program. Approximately three thousand samples have been taken since November 1976 and

again, of the nine hundred and ninety-two public wells in both counties, all have been sampled at least once and many in areas of industrial concentration have been sampled several times.

Number four, concurrent with the welltesting program, the counties initiated door-todoor surveys of industries and commercial establishments to determine possible current discharges
of toxic-organic contaminants. This effort was
supported in part by this department's local assistance program.

The Nassau County survey has essentially been completed, while the Suffolk County survey is still underway.

Where toxic-organic discharges were discovered, permits were issued to initiate control over such discharges and discharges encouraged to store and remove such wastes to authorize disposal locations.

Number five. County and State agencies through the Nassau-Suffolk 208 study, were unable to include development of a groundwater quality model in the scope of the study. Later attempts to revise the scope of the study by the addition of

various sub-studies directed at the toxic organic contamination were also rejected.

The agencies have not given up and many of these original proposals will be embodied in a new proposal being prepared for EPA approval as part of continuing 208 studies.

Number six, one of the most serious public water supply situations occurred in July 1979, when about half of the Glen Cove well capacity--

CHAIRMAN GRANNIS: Not yet. We have not gotten to July 1979 yet.

MR. MIDDLETON: I'm sorry.

--July 1977, when about half of the Glen Cove well capacity was restricted for use because of toxic organic levels.

Glen Cove was forced to buy water at a premium from neighboring water districts until new wells, which replaced a portion of the lost capacity, were brought on-line last year.

An EPA grant is now being used to demonostrate alternate well-head treatment methods on a small scale at one of the restricted wells.

Intensive Nassau County Department of

EN-DE REPORTING SERVICES, LTD.

Health investigation could not identify the source or sources of contamination.

Seven. In mid 1977, because of concern for the potential impact of leachate on the groundwater, the department reopened consideration of a previous approval of the first phase of the Town of Oyster Bay landfill at Plainview

Since the town could not assure the department of groundwater protection at this sensitive location, since resource recovery alternatives were not adequately investigated, and in view of the temporary alternatives available to the town, previous approval was rescinded after a lengthy public hearing.

This decision has set the tone for future regional landfill policy, which stresses phasing out of existing landfills with replacement by resource recovery facilities with the exception of sites which may be required for residue disposal.

New landfills are considered to be temporary, with maximized groundwater protection, until the resource recovery facilities are on-

fills are to be phased out.

To the extent possible, closed landfills will be capped to minimize leachate formation.

Number eight. In 1978, several areas with private water supplies were found to be contaminated by toxic organics. While various possible contaminate sources existed, the actual sources generally could not be determined because of the passage of time and limited investigative resources.

Through efforts of this department and other State agencies, temporary water supplies were provided until the towns could provide assistance in bringing in public water supplies.

Number nine. Even though hazardous chemicals are prohibited from all landfills, these chemicals continued to find their way into them.

As recently as last year, sixty or more fifty-five gallon drums of oil and perchlore-thylene mixtures were known to have been dumped in Islip's Blydenburgh landfill.

Action is being taken against the responsible parties and the landfill is to be par-

tially capped to reduce the hazard.

There is no telling how much more material surreptitiously enters Nassau and Suffolk County landfills daily.

It should be noted that the drums were placed in Blydenburgh landfill by an unregistered industrial waste collector, and appropriate legal action has been taken.

However, you should be aware that this is not an isolated problem. We are currently considering denial of one such collector's registration reapplication because of the flagrant violations alleged.

Although we have not been able to verify the allegations, the speed runs--speed runs being these midnight runs down the street with open valves on the part of these illegal industrial waste haulers--of some industrial collectors, appear to be somewhat common knowledge in the trade. This is over and above the outright illegal direct discharges by both registered and unregistered collectors.

Just an aside here. Massachussettes released a study that showed, in their opinion, at

least seventy percent of that state's industrial waste being illegally disposed of. If you take a very conservative estimate on Long Island, say, thirty percent of the industrial waste being generated in Nassau and Suffolk being dumped illegally, you are talking about hundreds of thousands of gallons a day with a different and unique contamination threat, given our total reliance on an underground aquifer system.

ground fuel storage tanks have been reported in increasing numbers. Only recently did it become apparent floating gasoline was not the only hazard presented by such leaks. Dissolved benzene, toluene, xylene and other gasoline constituents, because of their relative solubility, present an ever greater water quality hazard than perhaps the gasoline itself.

Town and county statutes are being developed -- the Town of Islip has enacted a statute -- to better regulate storage tank installation in order to minimize this very serious problem.

Eleven. Industry is not the only source of contamination by direct discharge. The

collective impact of disposal of hazardous materials, such as solvents, pesticides and other household chemicals, by private individuals, can also be significant.

State legislation to ban hazardous cesspool and drain cleaners has been proposed.

The attorney general's office has convinced manufacturers of these chemicals to remove their products from the market, pending reformulation.

Number twelve. One small, but possibly significant, aspect of the problem is the inability of the regulatory agencies to presently collect and dispose of household pesticides and other chemicals which would otherwise be casually disposed of in refuse, down storm drains, or in back yards. This is a particularly difficult problem in the light of the recent EPA ban on silvex and 245 T, where the ban has been opposed. But the resources to enable the collection and the safe disposal of these materials has not been provided.

We're been confronted with the fact that twenty-five thousand outlets, merchandising

outlets on Long Island selling these materials, continue to have them on their shelves and, in essence, most of them would have to voluntarily remove the products.

We have a grand total of two inspectors covering both counties to, obviously, inspect twenty-five thousand stores and that would take years. So we have made an appeal to their various community organizations to go out and take a look and see what's on the shelves and inform these shop owners of the ban and try to get them, volutarily, to remove it.

Number thirteen. The greatest constraint to defining the extent and potential impact of contamination caused by hazardous waste
disposal sites and discharges has and will be inadequate resources. It is this work that will
help to shape our future directions.

Projects to determine feasibility of corrective measures cannot even be initiated on a demonstration basis without these resources.

A major initial step in this direction was the request of this department for funds in the supplemental budget for groundwater monitoring.

Fourteen. It should be noted that the nearest, acceptable, comprehensive, industrial waste disposal facility, Rollins Environmental Services, is located in southern New Jersey. The costs associated with such disposal are hardly conducive to good disposal practice.

Though no one wants such facilities in the back yards, convenient regional disposal facilities are badly needed.

Fifteen. Special notes should be made of the nature of groundwater flow and contamination. Contaminated groundwater is not of the same relatively transient nature as are contaminated stream flows.

We cannot dredge our contamination sources from the aquifers as we can from streams and lakes. Once in the aquifers contamination can persist for tens and hundreds of years.

Contaminants now held on soils can continue to be released to the groundwater with each succeeding rainfall.

Therefore, investigations and solutions will neither be simple nor inexpensive.

The federal government has an important

role to play in the management and control of inactive hazardous waste disposal sites. We feel
strongly that the nation, as a whole, has berefitted
from the chemical technology that industrialized
states like New York have developed. The nation,
as a whole, should therefore share in the cost of
the program to assure protection of public health
in the environment from problems created by toxics

Commissioner Flacke has already testified about the need for major federal inputs in several areas.

These include, number one, EPA issuance of final regulations quickly and in a form that will insure effective management of hazardous wastes.

Number two. Specific federal standards where state programs dealing with inactive sites, to assure that states like New York, with aggressive programs to deal with the problem, are not adversely affected by the loss of industry to states that are more lax.

Number three. High level federal funding for state programs to control toxic problems like abandoned dumps, toxic sediments in the

Hudson and Lake Ontario and contaminated sole source or otherwise significant groundwater aquifers, in recognition of the broad scope of the problem and the inability of states to fund state-wide cleanup and remedial programs.

Number four. An increase in federal funding for ongoing state regulatory programs.

Number five. Raising some part of the federal money for assisting state programs by imposing fees on generators, on haulers, and disposal site operators across the country. These fees can only be imposed nationally because state imposed fees would only encourage the movement of wastes—and industry, in general—out of that state.

Number six. Federal funding to assist in siting of construction of regional hazardous waste collection, treatment and disposal facilities.

Number seven. Federal government encouragement of new technology.

Number eight. Increased funding for, and utilization of, federal agency expertise, such as in the United States Geological Survey, to assist in solutions to the hazardous waste problem.

Number nine. Substantial federal fund-

ing for the states to cope with emergency situations requiring immediate action to assure physical
health and safety of residents and provide safe
water supplies.

This expanded federal commitment, together with the state program I have described,
will insure that the health and environment of the
people of New York will be protected.

I commend you for holding these hearings on Long Island, which indicates your committees' sensitivity to the special problems we face
in protecting our sole source aquifer, and I thank
you for inviting me to participate in the hearing.

SENATOR DALY: Mr. Middleton, how much do we know about the quantity of toxic waste that is generated on Long Island?

MR. MIDDLETON: 208 study recommended location of two industrial waste treatment facilities on Long Island, one in Nassau and one in Suffolk. Didn't target it any further than that. It indicated that these facilities should be able to treat approximately four hundred thousand gallons of industrial waste and sludges per day.

That's why I got that figure before of

perhaps four hundred thousand gallons.

SENATOR DALY: Four hundred thousand?

MR. MIDDLETON: Yes.

SENATOR DALY: Does that 208 study specify type of treatment or treatments that should be in that waste facility?

MR. MIDDLETON: It covered the range of solidification and detoxification and high temperature incineration and so forth. But I think a different type of technology has to be tailored to fit the particular industrial waste you're talking about, plus a clearing house where one business could take and use an industrial process of what would be a waste product of yet another industry or business.

SENATOR DALY: Who developed the figure? Where did the report get the figure of four hundred thousand gallons a day?

MR. MIDDLETON: The report--it was a three and a half year project and spent 5.2 million dollars in various technical consultants in various aspects of the study. I don't know which particular consulting firm. Does anybody know who generated those figures?

SENATOR DALY: We'll find out.

MR. MIDDLETON: We can get it for you.

SENATOR DALY: When you mentioned a specific violation, as an example of what you think is happening, these unscrupulous people taking advantage of a state of desperation, in many cases, of industry not knowing what to do with waste and taking over this waste at a high cost and then, as you said, getting rid of it, certainly illegally and improperly.

One case you mentioned a sanitary land fill that was put in.

Do you know where that waste originally came from? Do you know who dumped it?

MR. MIDDLETON: In that particular instance, it came from a firm that provides industrial uniforms to various businesses and they use this solution to dry clean, in effect, the uniforms.

SENATOR DALY: One of our considerations that show how desperate we feel the situation is, is to actually not only penalize the person who dumped the waste improperly, but also to
penalize the person who generated the waste, on

the basis that if we go back that far when they give that waste to someone, they're going to make sure it's handled properly.

What would you think of that approach?

MR. MIDDLETON: It makes sense. That whole cradle to grave tracking is only going to be as effective as the restraints built into it. It has to be to the original manufacturer, the person who distributes it, right down to the guy who disposes it and the person who treats it.

I think, certainly, if there's any way that the manifest system can be tampered with, the will will be there.

I think in Jersey, where there has been something of a manifest system, people have simply tampered and falsified manifests and so forth.

That kind of protection has to be built in for the program to be effective.

SENATOR DALY: Are you familiar with the proposal of the committee, Assemblyman Grannis, Assemblyman Zagame, Assemblyman Yevoli, Assemblyman D'Amato and myself and other senators, to build regional waste disposal sites, have the state build them and bond it? We would have the state build,

operate and maintain those sites.

Are you familiar with that proposal? MR. MIDDLETON: Just in reading the paper that a bill has been advanced in that regard.

SENATOR DALY: I'd like to know what your opinion would be, whether or not that should be owned and operated by the state, or should we allow private industry to build and operate such a facility? We have not been willing to do it thus far.

Say someone was willing to do the job. Do you have any preference as to how that should be put into law? Should it be done by the state?

I think the authority MR. MIDDLETON: that's been granted the environmental facilities corporation should be strengthened. The bill should be presented. There's no model that can work best.

Probably, the best would be a mix of private and public construction and operation. think private industry would be more than willing to come in and do that job if they had acceptably pre-cleared sites.

EN-DE REPORTING SERVICES, LTD.

10 11 12

14

13

15

17

16

18

19

20

21

22

23

24

25

If you could guarantee up the block in Mineola, a five acre parcel would be environmentally cleared and all permits delivered up to Rollins, for instance, they would come and build the plant.

The real problem they face is finding a place they can successfully build and operate an industrial waste treatment facility.

CHAIRMAN GRANNIS: Do you think it would be the preferred route to have private industry do it over government?

MR. MIDDLETON: That's tough. It would make sense to provide a public capacity to do the job, where and when private industry couldn't do it.

In terms of speed and in terms of the construction of such a facility, private industry would be preferable.

I'm quite sure they would do it if they had a place where they would not run into insurmountable opposition by the community.

CHAIRMAN GRANNIS: We have been stung before. It's a problem with the long range storage of these. There's a problem with the bonding,

You can't get those bonds in perpetuity and some of those chemicals have half lives of hundreds, maybe thousands of years, depending on how they're stored and what kind of access there is.

There's not a chance for breakdown because they're stored in drums and underground and if they're packed properly, biological processes won't work to dissolve these.

The industry may do it in the short
run. What happens fifty or a hundred years from
now if the company goes belly up--and that's been
sort of the trade we've gone back and forth to
make sure the sites remain secure. The money is
there to continually pump them out, keep them
covered, keep them secure from public access.
That's really the trade and I don't think we know
the answer.

The reason we proposed the bond issue is because it's our feeling that perhaps the public interest is better served, the long range public interest is better served, if a state or public body does it, we can go have our difficulties with finances, and the state is going to be around

-

a good deal longer.

SENATOR DALY: The state can't leave the state, basically.

MR. MIDDLETON: I can't pretend to be familiar with the proposal. But we see a system of state guarantees in mixed fashion, without crossing the boundary between public financing and private profit. There might be a compromise in that regard.

I don't know how that can be worked out. Maybe state guaranteed bonding or availability of insurance along those lines.

CHAIRMAN GRANNIS: Using the facilities corporation might be a partial solution.

SENATOR DALY: One of the bottom--when you talk bottom line, you are talking money.

The study on regional sites on Long
Island, what was the estimate of costs of building
the regional site?

MR. MIDDLETON: I don't believe they got as far as putting a dollar figure on it.

SENATOR DALY: Do you have any feel for that as to what--very honestly, we have gotten costs ranging from ten million to a hundred and

fifty million dollars. That's what a nebulous world we're working in, as far as developing a complete system: solidification, fixation, incineration, separation, reclaimation, and the whole thing and we are trying very strongly.

If you know of any input we can get as to what costs we can estimate, we'd appreciate it.

Here we go back to whether or not private industry could have put up a hundred million dollars, would they be willing to put it up.

MR. MIDDLETON: I think it would. I think the Bridgeport plant in New Jersey, Rollins plant, something like forty million dollars stick in my head as to what they paid for it. It was a decade ago.

I had a recent conversation with the guy from Merrill Lynch who is involved with marketing and helping finance construction of these facilities all over the country, and he indicated to to me if an acceptable pre-cleared environmental site was available, any number of companies would come in and construct an industrial waste treatment facility, whether it's for ten million or a hundred million. There's that much profit in it.

Unfortunately, there's a lot more profit in the illegal disposal.

ASSEMBLYMAN ZAGAME: Just along these same lines, what about if the state was the land-lord and owned a piece of property and just rented the site to private industry to operate, Rollins or one of these other companies? How would you view that in terms of the state's ability to maintain control over what goes on in the site?

MR. MIDDLETON: Again, that kind of turnkey approach, if you will, would be an effective one. Again, I think it's not an either/or situation, straight public or straight private. I think if you can match maybe a state landlord rights and some kind of bond guarantee insurance approach to the private industry's ability to get in and build something and run it, that might make for the most effective answer to how we're going to get rid of our industrial waste all over the state.

ASSEMBLYMAN ZAGAME: Yesterday, we held a hearing in Poughkeepsie, and one of the issues that was raised there was the question of drinking water and whether or not it should be filtered.

Do you filter the water here with carbon filtration in Nassau County?

MR. MIDDLETON: I don't believe that's done anywhere on Long Island.

ASSEMBLYMAN ZAGAME: Is it being considered?

MR. MIDDLETON: The federal rules and regulations call for granulated carbon filtration for any water district that serves more than seventy-five thousand customers. That would effect most of the forty-six districts in Nassau and certainly, the Suffolk County Water Authority.

They recently estimated that system of filtration treatment at the well head would cost each customer two hundred thousand dollars a year and above and beyond that, it really isn't necessary at all on Long Island.

Drinking water drunk from surface water, if you're talking about that, this general treatment, you're going to hear testimony from the Water
Authority, and their opinion isn't going to be each one of the nine hundred ninety-two wells in Nassau and Suffolk.

ASSEMBLYMAN ZAGAME: A program of well

testing. Do you see that as being necessary for the future, for the next few years, to keep monitoring these wells now?

MR. MIDDLETON: That's an ongoing program that is going to continue.

Part of the problem there is, that any number of these toxic substances can be locked in the soil and eventually, through the pressure of rainwater, leachate down into the water and while the well might prove to be clean on Monday, it might not be clean on Wednesday.

That program will have to continue.

ASSEMBLYMAN ZAGAME: You mentioned a special fund to pay for this in the supplemental budget.

Do you think we should have some kind of ongoing funded program for this type of testing so you don't have to rely on supplemental budget each year?

MR. MIDDLETON: The health department's budget has to be expanded to include the ongoing analysis of all public water supplies for organics, certainly on Long Island.

ASSEMBLYMAN ZAGAME: One final ques-EN-DE REPORTING SERVICES, LTD.

tion.

When you have a violator, someone who has broken the law here and dumped illegally, what do you do? Are there civil remedies?

MR. MIDDLETON: We can approach it both civilly and administratively. Generally, we proceed criminally or civilly or administratively. Generally, we proceed administratively, because the fines are higher.

We recently completed an action against a chemical company in Glen Cove that resulted in a seventy-five thousand dollar fine.

They had another fine levied against them by a next door business that had been hurt by their pollution.

ASSEMBLYMAN ZAGAME: Is that fine high enough in that case? Did it hurt that company enough?

MR. MIDDLETON: I think they have cleaned their act up since. It certainly had a lesson potential for them.

CHAIRMAN GRANNIS: A couple of questions on the study the state has been doing and the two counties have been doing on waste disposal

sites.

How many are in Nassau and Suffolk Counties?

MR. MIDDLETON: You mean illegally?

CHAIRMAN GRANNIS: Straight sites receiving toxic wastes, active and inactive sites.

MR. MIDDLETON: Thirty-four active landfills and you can certainly consider them an in-place source of toxic contamination, either from direct dumping or from contaminants placed into a landfill.

You probably have another thirty plus inactive landfills in Nassau and Suffolk, all of which are contaminated from the leaching down into the water supply.

CHAIRMAN GRANNIS: Are there private sites? Any private sites?

MR. MIDDLETON: Only two or three and they have been since closed down.

A VOICE: We have some demolition sites.

CHAIRMAN GRANNIS: What about sites run

by companies for their own wastes?

MR. MIDDLETON: I don't think we have

any.

A VOICE: We have none, no.

CHAIRMAN GRANNIS: You have made a statement about the amount of waste generated in these two counties.

Some of it is sludge, but where are the companies disposing of their wastes now?

MR. MIDDLETON: In the Bridgeport plant, the Rollins plant. Some take it up to Connecticut to Sealand, some all the way down to Philadelphia, where it is being legally disposed of.

CHAIRMAN GRANNIS: We get very different testimony.

MR. MIDDLETON: The treatment facilities, I'm talking about.

CHAIRMAN GRANNIS: Certain kinds of waste, but PCB's can't be treated unless it's high temperature incineration. We're not aware of many, if any, effective incineration sites.

What about the Rollins site? Do they have a secure landfill as well?

MR. MIDDLETON: They have, I think, the whole gamut. They, in fact, were given one of the EPA demonstration approvals to incinerate PCB's and

they have not been able to do it because of community opposition.

CHAIRMAN GRANNIS: Are they accepting PCB waste from Nassau and Suffolk industry?

MR. MIDDLETON: I don't think we're generating any. They have not been quite able to handle it yet.

CHAIRMAN GRANNIS: I'm not sure what handling them means.

MR. MIDDLETON: It could be they're putting in secure burial facilities for the time being.

CHAIRMAN GRANNIS: Is your survey finetuned enough? Do these industries tell you where their disposing?

In other words, who is hauling it, what its destination is.

MR. MIDDLETON: Whether it gets there or not is the crunch, of course.

CHAIRMAN GRANNIS: But you are able to start off the manifest system by knowing where it's supposed to be going?

MR. MIDDLETON: We were supposed to conduct that kind of door-to-door survey as a result

of what occurred in 1976 with the Grumman plant contamination. It's the kind of thing that has to be systemized. It has to be the ongoing part of our regulatory program. That means dollars.

Whether it's federal dollars or state dollars, they have to be there.

Both of the county health departments recently responded in the crisis-like fashion in improved manpower from various units to conduct this job over the last two and a half years. But that, of course, detracts from other worthwhile protection programs as well.

CHAIRMAN GRANNIS: One of the concerns and critisisms that is raised in other hearings, is that there is not a single lead agency responsible for toxics. It's divided between state and local health departments and, mainly, the state environmental department and the state transportation department.

In a time of crisis, there's no place to turn for a single source of information or a single conduit to reach available resources, personnel resources and financial resources in the state.

Is that a particular problem you are aware of? Who should have that responsibility?

MR. MIDDLETON: I think part of that problem is going to be addressed by our new office of toxic substances, which will be a cental office in our Albany headquarters.

I don't think we had that problem in working together at the Long Island level. But when the crunch came in November of 1976 and whenever since, I think we have worked very effectively with the local and state health departments.

Initially, it was a major problem with the absence of certified laboratory capacity to conduct these examinations, but that's under control now. It's working very well now.

There are a number of private certified labs and the state health department lab has been expanded, as has been our state laboratory facility at our Stony Brook office. Additional technicians have been added and more sophisticated graphs and telecommunication systems have been put in.

CHAIRMAN GRANNIS: Are you aware of any waste imported into Long Island for in-ground stor-

1

3

4

5

6

8

7

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

age and disposal?

Thank God that hasn't MR. MIDDLETON: happened, to my knowledge, at least.

One of our major problems is, as I men tioned, lack of investigative resourses in that regard. We have one little undercover van that we use for trailing industrial waste haulers and we caught a few of them on occasion, but we know it's going on and it's regularly and we are not able to keep a close investigative oversight on it.

CHAIRMAN GRANNIS: You mentioned one other point which is the problem of the pesticide Pesticides are banned by the state or federal law. government.

What happened in the New York series of pesiticides? Whatever happened to those? Were those collected on Long Island? Were they left in storage rooms in the small shops around the area?

MR. MIDDLETON: That was several years I think it was a phase-out. ago. I wasn't around at that point in time, but I think people that had them on the shelves were allowed to sell off what they had and that was it.

> CHAIRMAN GRANNIS: There was a phase-

courage, or to require distributors to collect
those pesticides and this was not done.

So a great many of these things have
disappeared, either by disposal or sale or dumped

down toilets and sewers.

out on some and some were outright banned and there

was going to be a state program to collect or en-

When we have imposed these bans, there has been no mechanism for what happens to the guy

that is left with these products on his shelf.

But that's a particular

MR. MIDDLETON: I know there are a number of state DEC pesticide storage areas in the state. Again, materials are simply sitting there with no real understanding of how they're going to be treated and probably disposed of.

A VOICE: The first banning we had, we collected it. We had one at the Farmer Bridge and the state let out a contract to people to come collect it and at the time, the high temperature incinerator was running at Erie County. It was packed in in a certain way and they carted them out and burned them up there. This time, there's no such thing.

CHAIRMAN GRANNIS: One final question on this story about the Islip dump.

Do you have sufficient authority on that matter? You knew what was in that dump and then the town went ahead and decided they needed additional room to add municipal waste and put a hundred tons of additional substances on top of these drums of toxics?

MR. MIDDLETON: They were well buried, by the way, by the time we were made aware of the fact they were illegally deposited there.

CHAIRMAN GRANNIS: I have the New York

Post story in front of me. It looks like one of

the statements was that you knew the chemicals were

there. Town officials made the decision to go

ahead despite requests to not go ahead and they're

now looking to the state to dig up those drums and

dispose of them.

Do you have authority in that kind of case to say that there will be no dumping on the particular site and the emergency authority or standby authority to say no more dumping?

MR. MIDDLETON: We would have had.

On those barrels, it was a real ques-

tion as to where they were located to begin with, and they were well buried by the time the district attorny's office brought the action against them. By the time of the final decision, they were buried like a hundred and ten feet--

A VOICE: A hundred and forty.

MR. MIDDLETON: That decision was made on the basis of a number of considerations.

First, on the information, we couldn't find them even if we tried to excavate and if we did find them, they would get crushed in the process of being ground. It would create another problem in terms of what we do with saturated garbage if we could find it.

The final decision was made that probably the safest thing to do, was to leave them intact and agree they remain intact and had not been ruptured by the original placement and the bull-dozing that went on after they had been dumped, they cap a very large five acre area in terms of providing maximum protection with an impermeable barrier. When the landfill reaches its final elevation, it will be capped with the second impermeable barrier and that will stop downward percola-

tion of those contaminants.

We have to have a system of monitoring wells south of that landfill. We know there's a flume of leachate contamination. There has been an ongoing system of contamination, monitoring the flume and its nature and speed.

CHAIRMAN GRANNIS: Does the town want the state to pay for them?

MR. MIDDLETON: They would prefer the state and the state would prefer the federal government. But somebody has to get up the dollars to do that job.

There's an initial program of well drilling going on right now with the State Department of Environmental Conservation and the County Health Department. It certainly needs to be accelerated.

We proposed the addition of a two million dollar item in the supplemental budget to develop that kind of capacity, deep well drilling
truck rigs and so forth and the staff to do that
kind of job.

ASSEMBLYMAN YEVOLI: In the area where we had Hooker and Hicksville, for instance, what do

those tests we had show? Are there abnormal amounts of toxics still in those wells but enough so the wells don't have to be closed?

MR. MIDDLETON: We're getting, basically, the same kind of reading out of the Grumman wells, are we not?

A VOICE: (Unintelligible.)

CHAIRMAN GRANNIS: If you're going to answer from the back, you have to speak up, because the stenographer can't see and it's hard for us to hear and you just make it hard for the stenographer. Really speak up if you're going to do that.

MR. MIDDLETON: Basically, they're getting the same kinds of readings, the same degree,
that can be considered encouraging. It serves to
contain the contamination. If there isn't any
treatment going on, it's, in effect, recycling.

ASSEMBLYMAN YEVOLI: The basic problem came in the leachating pond that existed to the
rear of Hooker Chemical and found its way into the
water supply.

Was there ever any treatment that was done?

MR. MIDDLETON: No. During the time EN.DE REPORTING SERVICES, LTD.

they discharged the vinyl chloride waste, I don't believe there was any treatment.

ASSEMBLYMAN YEVOLI: Has anything been done since it was discovered?

MR. MIDDLETON: They have since gone to a holding tank process.

ASSEMBLYMAN YEVOLI: What exists in that pond has remained and what is it doing at this time?

Does it still find its way into the water supply?

MR. MIDDLETON: No. In 1974, they went to a contained process, concrete line holding tank operation.

A VOICE: They're doing destructive incineration of the waste now.

MR. MIDDLETON: We're pursuing the possibility of an action against Hooker to treat the well. In fact, we were in yesterday talking to the attorney general about it.

We can mark that legal cause a link of what is coming out of those Grumman wells and practices of Hooker at that time. We can allay the cost to Hooker's doorsteps to get those contami-

.

nants out, as well as paying for a system of ongoing monitoring well constructions and sample analysis.

ASSEMBLYMAN YEVOLI: Haven't you seen the results of the tests on all the public wells?

If you had to categorize the kind of conditions of Long Island's water supply, what would you say about it?

MR. MIDDLETON: I'd say I'm cautiously optimistic about the future purity of the aquifer system on Long Island. Particularly, once the chemical cesspool cleaner ban, hopefully, as soon as possible comes into effect. I think that will be a positive step in the right direction.

ASSEMBLYMAN YEVOLI: One last question.

It is my understanding-tand most people have identified various sites that we do have
aquifers on Long Island that are virgin in the
sense they have not been the recipient of any contamination whatsoever.

Do you think--someone is shaking his head no--but this is what I have been told.

MR. MIDDLETON: I don't know anywhere on Long Island that it's crystal, pristine pure,

because those illegal dumpers go all over the place and even out into the middle of the pine barrens.

ASSEMBLYMAN YEVOLI: That was the area I was thinking of.

MR. MIDDLETON: The last year and a half, we have been marshaling the efforts to protect the central pine barrens of Long Island from Rocky Point down to Flanders, almost coterminous as hydrogeology zone 3, a deep charge aquifer area.

barrens is based upon the fact it's probably the largest natural space area on the eastern seaboard, certainly in the metropolitan area. It's a unique ecological area as well as overlying, probably, the greatest pristine water supply remaining on Long Island. It's a relatively separate aquifer in that it flows out in an area—begins to flow, instead of north—south, begins to flow in an easterly direction and a development hasn't occurred there. There isn't any industry or even private homes out there to speak of, and the water is very, very pure. We want to keep it as pure as

possible.

The RCA gift in that regard where they gave the state seven thousand one hundred acres, five thousand--fifty-one hundred in Rocky Point and two thousand in Riverhead, was a critical component in building what we hope will be a national Long Island pine barrens reserve.

We have to call on federal resources if we're going to do that.

ASSEMBLYMAN HINCHEY: What else have you done? What kind of actions have you taken, other than those purchases to preserve the pine barrens?

MR. MIDDLETON: We're developing a number of different things.

First of all, public education programs to get people to understand the unique resource that is the central pine barrens of Long Island.

A number of articles have been produced, LILCO is underwriting a documentary film on the central pine barrens.

The New York Conservationists is going to devote an entire issue in February to the pine

barrens. So Long Islanders and New York State people can see this natural resource.

We have identified all the critical areas in the pine barrens that are in imminent threat of development. We know what should be purchased in terms of acquisition strategy.

Beyond that, a Long Island, waste control system needs to be developed. We have talked about state legislation that can be preserved, something of a takeoff on the Adirondack Park Agency, a Jersey Park Commission.

We have asked local government and they have been surprisingly receptive to it, to exercise a greater degree of control and inspection in those areas. We're developing a proposal for Commissioner Flacke, asking that the secretary of the department of interior consider setting up a contingency fund grant to match the RCA gift. That was written off by RCA to the tune of twenty-one million dollars.

What we would like to do, is have the secretary of interior recognize that gift and qualify it for matching funds and dip into his contingency funds, which is something like a hundred mil-

15-60

lion dollars, to bring us the ability to deal with those priorities which have an imminent threat of development.

We have also modeled federal legislation that will be going up to the govenor's office in a month.

So there are many things going on.

ASSEMBLYMAN HINCHEY: Any specific legislation as far as the state commission or legislation is concerned?

MR. MIDDLETON: Assemblyman Bianchi had a bill directed and we reviewed it with the Long Island pine barrens test course, and the feeling was, we ought to hold off on the state legislation until we we see what happens with the proposed federal legislation, as well as the proposed federal acquisition fund, and if that happens, then we're going to have the dollars, really, to make a state piece of legislation work properly.

ASSEMBLYMAN HINCHEY: We're working on a piece of legislation that would relate to your pine barrens, as well as the pine bush around Albany. I would like to send you that.

MR. MIDDLETON: Great. Hope to see it

SENATOR DALY: Thank you very much.

Assemblyman D'Amato can introduce the next speaker, but I'm going to hold that honor for myself.

The next speaker, of course, is the presiding supervisor of the Town of Hempstead, Alfonse D'Amato.

MR. D'AMATO: It's nice to be with you and the other part of the D'Amato family team.

I think, number one, you are to be commended for being down here and bringing this hearing to Long Island, where we face some very critical problems.

I would be remiss if I said I didn't think that Donald Middleton and his staff have not been doing a great job with the factors that they have to deal with. They have to deal with the inadequacies of the budget, with the problems of staffing, with the kinds of things that have been developing of recent days, contamination of our drinking water supply and new testing techniques which, prior to recent times, have not even been used.

The fact that certain of the toxic

chemical we now consider dangerous, to go back several months ago, we had very little knowledge and we still have, relatively speaking, little knowledge of the long terms effects and what might be declared dangerous or not.

I'd like to first make a brief presentation which we have written and then, possibly, share some thoughts with you.

I think your committee today is important. I think the work you're embarking upon, particularly in your efforts to deal with the critical problem of disposal of hazardous waste material in an adequate and safe manner, are of the utmost importance, particularly here on Long Island.

As you know, Nassau County depends solely on its ground water as its drinking water supply.

Recent evidence of contamination of ground water due to chemical leaching from both the land disposal sites and from gasoline stations, has brought a very, very serious and ominous note to the fore.

The town has demonstrated, Town of Hempstead, its commitment to resource recovery and

construction of a new and innovative recycling facility. This takes the place of the land disposal. It eliminates the leaching of contaminants into our ground water supply system, which has been taking place for years.

I believe a similar innovative approach is needed in the area of chemical waste disposal and hazardous materials. We can no longer tolerate the indiscriminate dumping of chemical wastes. These wastes should be recycled through waste exchanges which match chemical byproducts with those industries which can use them in their industrial process. This waste exchange concept recognizes that one company's waste is another company's raw material, and this is the kind of innovative thing we need if we are going to make, really, a meaningful effort in controlling contaminants.

With these waste exchanges, we can recycle, we can produce and we can cut the cost of the disposal of hazardous materials. Otherwise, I think we're going to have a difficult time, both municipally and in the private sector, to deal with this problem.

So a concerted effort should be made

to isolate them from the main sanitary landfills and the sewerage disposal plants and the illegal dumping that is taking place on a regular basis, because it's cheaper and even those men hired for trucking this material to various disposal sites, there are those, and there may be relatively few, who resort to the dumping right into the ground waters, right into the waters which flow out into our harbors and into our beaches, et cetera, and we must stop it.

I note that the Hazardous Waste Management Act of 1978, provided a mechanism for the
very sort of cooperation that has worked out well
for our town. That is the linking of private resources with government help, and allows participation of the private sector in operating them.

I don't believe that the state or local government has the capacity, the technical know-how, to attempt and to build to operate the sites in and of itself. I think it's an impossible task.

However, with the cooperation of the state, I think it can be done, a joint effort, and that's why I think this bond issue is so impor-

tant. We will be developing a program where we can have one hundred and fifty million dollars, so that the state—and also charging industry for the disposal of these materials—so that the tax—payers themselves, the homeowner is not called upon to pick up this tab, but those industries which utilize these things will pay. The payment of these bonds, that's the key and that's the way we get the public to support this concept.

I think it's imaginative and it's important and long overdue. Most of us, including
myself, never had any idea of the serious consequences, never thought about the disposal of chemical wastes until about a recent time.

Love Canal demonstrates so vividly,
the kind of consequences that can take place. We
must move forward with determination and strength
in ending this real threat to our environment.
Whether it's upstate or Love Canal or downstate
here, we have got the problems and we have the
technical ability and, I think, the legislation
proposed in making available one hundred and fifty
million dollars for this purpose certainly is the
way to do it.

I support a bond issue. I think it's long overdue.

Let me close by saying this. We in Long Island face a very, very real threat to our drinking water. Anybody who says that we should be optimistic, at this point in time--and that's why I differ from my colleague in government, Don Middleton, and again, I say he's done a terrific job where day by day you don't know what is going to happen next.

We have thirteen gasoline stations leaching gasoline, the chemicals, the benzene, which is a carcinogenic, in the ground water supply.

I have six wells over in East Meadow which we are monitoring very closely because of the recent spills taking place there.

I will depart and digress and say I do not believe the State Department of Transportation is doing a good job. It's a totally inadequate system.

When you talk about trying to monitor and getting to do something, it's taken them five or six months to get Exxon to begin to pump gaso-

5

7

8

6

9

11

10

12

13

14

15

16

17

18

19

20

21

22

23

24

25

sewage disposal system rather than line into a pump it back into the ground, where the benzene is contained therein, and they didn't have the gumption or the wherewithal and, I don't believe, the knowledge to undertake it and I would like toand although I reserve the right at times, as I recognize the DEC reserves their right to make their judgment on what we do, the local government--I would still they're far better equipped to handle this kind of situation than is the State Department of Transportation. They're totally in adequate, don't have the money, and the money is there by way of legislation, but they don't have the manpower to get out there and enforce and I don't think they have developed the knowledge and sophistication.

DEC is way ahead of them. Those functions should be transferred to them.

Spills and control of those contaminants. When in thinking about the contamination of our drinking water, there is no relation to the State Department of Transportation as closely linked as Donald Middleton and the environmental people. I think it is important we get a proposi-

tion on the ballot to see to it that the state can aid private industry in selecting the sites and having the public hearing.

Somebody has to bite the bullet. Nobody is going to come in unless it has the public
people there, the government, state and county and
town officials, saying this is the site we designate and we're going to support it. I think it's
going to be too much to expect for private industry to do and we'll have to wait too long a period
of time.

I thank you for giving me the opportunity for sharing these thoughts with you today.

SENATOR DALY: I'm delighted you feel the bond issue is a good idea and you will give it your support. Hopefully, we'll give you that opportunity.

I might add, knowing that I'm also very happy with your emphasizing paying attention to the problem of toxic waste, I convey to you, as an official that comes from an area where a catastrophic tragedy has occurred, that as a local official, you have to be up there to truly appreciate it.

I know my colleagues, Assemblyman
Zagame and Assemblyman Grannis were in my district
last week and to take a ride around that town and
see all those boarded homes and to see the tragedies, the destruction of family--the father says
"I want to stay," and the mother says "I want to
go--" I'm delighted that your government is taking
steps to make sure it never occurs in Long Island.

MR. D'AMATO: I think only by the passage of this kind of farsighted, progressive legislation, can we hope to avoid those kinds of consequences. Maybe not as readily in terms of some of the things we are concerned about with maybe some of the children coming down with various diseases, but I'll tell you this period our drinking water is our lifeline. They'll never build a pipe soon enough or quick enough to get a necessary water to replace that which lies in our wells down below, in our vast resevoir down beneath Long Island, and it is in jeopardy today.

No one should make a mistake about that.

Assemblyman Yevoli knows and I'm very concerned. Right now, we have our water department trying to set up a system of interconnects and I

can tell you that in certain areas in two or three or four wells to go out, the consequences to that community could be very, very serious indeed.

When we talk about the industrial growth and capacity and the business growth and capacity, making a place livable without good, clean potable water, we have no ability to do that. So that's so important and that's just one small aspect of what we're talking about and what we're trying to protect here today.

So I'm prepared to work for the passage of this bond issue. I think it's important not only for Long Island, but for the state.

Thank you.

ASSEMBLYMAN ZAGAME: I'd like to commend you for your farsightedness in the Town of Hempstead for the resource recovery plant you have built and I think we can learn from that, because to my understanding of what really made that go-and there was an article in the newspaper here, Newsday, that what really made it go was the fact there was a guaranteed waste stream for a number of years to the company that's operating that plant.

When we get involved with cooperating between private and public tier in industrial waste, do you think it might be advantageous for us to try to duplicate that and provide that for a certain number of years or indefinitely, that all waste generated in New York State would have to go to three or four approved sites and then the industies that might come in and operate the plants on the sites would be assured of a waste stream?

MR. D'AMATO: I believe that would make the difficulties of building and operating these plants much more attractive and make the financing possible, where, otherwise, it might be more difficult. That's the kind of thing we need in the region and further legislation, as you were to move about to actually legislate and require that these plants that operate in your area remove their materials to a particular disignated facility.

Number one, the transportation of these materials as well as the disposal, bona fide disposal is certainly within the realm of the state's prerogative to protect and I think you should require them to use, certainly, sites within their areas and that's the kind of thing, guaranteeing a

in a region to that site, and I think you'll get the large checmical companies and the industrial complexes to pool their resources and develop facilities for their disposal.

ASSEMBLYMAN ZAGAME: Right now, you have a twenty year commitment to provide all of the town's garbage to the site in Hempstead where it's being recycled?

MR. D'AMATO: Once the plant is certified, although we are disposing right now, twelve thousand tons of garbage a day at the facility, we are under a seventeen year contract to provide a minimum of six thousand tons a week. So that is the basic agreement. We give you at least six thousand tons a week.

The fact of the matter is, we'll be operating at about eleven thousand tons a week. We have the right to ask them to enlarge the facility so that we can take up to three thousand tons a day.

So I think the same kind of situation whereby you guarantee the state through its bonding or the region, if you set it up regionally,

guarantee a site X number of gallons of material to dispose of. That way, they set up the bottom rung. They know what the resources will be to pay their bond indebtedness, to pay their staffing, whatever. I can assure you the bottom fee would not be sufficient for them to operate, but that's how you have to get private industry. But at least it gives them a certain cost factor they can deal with. It makes financing available that other wise might be very difficult to obtain.

ASSEMBLYMAN HINCHEY: I'm really impressed with your perception of the urgency of the
problem.

I would agree with you, particularly as far as the water supply.

An island is, obviously, a finite ecosystem. There's only so much there.

Do you feel, at some point soon, that Long Island, as a whole, is going to have to develop an effective land use management plan to control the growth of the Island?

MR. D'AMATO: I think that that is so important. We can only support a limited number in terms of population, that is correct.

We kind of have gotten away from that, because we have had a dramatic increase and if you would speak to Mr. Padar and other people in our health department about our water levels, it's gone up.

We had the drought years in 1968 and 1969, when we were, very, very concerned. Within the recent past ten years, past decade, that water table has gone on very dramatically. But it can turn around and make that kind of situation we experienced back in the late '60s, within no time, a reality and salt water intrusion and contamination of our wells.

We have great problems with the wells on the city border. Jamaica water has tremendous problems determining the adequacy of supply and quality of that water.

Population control, density control, disposal sites. I am concerned and we passed a rather comprehensive law with respect to gasoline stations on the storage of undergound tanks, because we have maybe eight hundred of them in my town alone, the Town of Hempstead, eight hundred gasoline service stations.

Now, we require a well be driven so we can monitor those tanks. We have encouraged speed ier deployment of them. Just in the area of gasoline service stations underground storage, I'm very fearful.

There are thirteen stations that have come to our attention that have leaks.

This is just the tip of the iceberg.

We have the kind of subsoil conditions in many

areas that have rotted throughout these tanks.

With poor inventory control and in those service stations which were not company owned and controlled, and we have a small person who dumps twenty or thirty thousand gallons a month. He might have a leak that has been taking place for many, many years. By the time we find out, in certain cases, it might be too late in terms of our groundwater supply.

I'm very concerned.

ASSEMBLYMAN HINCHEY: Do you think the people of Long Island are prepared to accept the land use management program that would limit the density and so forth, one that now exists in the Adirondacks?

MR. D'AMATO: Yes, I do.

When you speak to County Executive

Klein with regard to that out in Suffolk, certain
areas, Brookhaven, I believe, that certain areas,
we have moved to two acre zoning, the pine barrens
where RCA had made it a gift to the county and
state. Those are the kinds of things people are
much more knowledgeable about.

I think that we have, again, certain reasons I mentioned. The water supply situation, we don't think is as critical today, at least in the minds of the public, but it is in terms of the quality. But I think when we run into some more problems that are just around the corner with respect to the wells which are on Nassau's western border, we have critical problems and I wonder about the life expectancy of those wells.

Then we're going to start the short fall that was projected some years ago and we're going to, again, to draw down on that water supply.

ASSEMBLYMAN YEVOLI: There's no question in my mind that your administration in Hemp-stead has been one of the most progressive on Long Island you ought to be commended for that.

You mentioned before the State Department of Transportation in terms of the problems
you're having with the gasoline leaching into the
water supply.

What can we do to help with them? I don't know what their rules are in this.

Maybe we can straighten it out.

MR. D'AMATO: I believe that, honestly, their function is in terms of control of those spills that take place on our public highways, et cetera, except toward the immediacy of cleaning them up, that if the chemical reactions are anything that develops, from, let's say, the gasoline station sites or underground tanks, that those police powers be given to the Department of Environmental Control. I do not believe that the state DOT has the ability, and also the funding source.

We talked about the spill legislation that has been set up so that on every barrel of oil, there is a money set aside, that, obviously, you can't give the responsibility without also making the moneys available. I think it makes for better sense. I really do.

SENATOR DALY: That, I think, is an

4

5

6

8

7

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

excellent suggestion.

One question.

Are you generating energy at your solid waste disposal plant?

MR. D'AMATO: Yes. As a matter of fact, we project that within a full year -- the estimates have been revised several times. started out with an estimate of about four hundred and fifty thousand barrels of oil that would be saved, the equivalent in terms of energy that would be produced.

We anticipate the year's operation will generate two hundred and fifty million kilowatts of electricity, roughly five thousand barrels of oil will be saved annually. We have produced enough electricty, if you said how much oil would it have taken to produce that in excess of a hundred thousand barrels have been saved.

When we talk about solid waste recovery, when we talk about the recovery of toxic materials, again, as I mentioned, one person's toxic material can be someone else's product. We can recycle. I think an industry has the capability of doing these things. We have to give them the hand to set the

climate, and that's the kind of thing that would make it possible for New York State to have a resurgence again.

As a result of our production of electrical power on site, it makes this project one that, financially, is suitable, instead of paying twenty dollars a ton for burying garbage, and that's what the cost is to bury garbarge at a landfill site. Acquisition of the land, payment of bonds, payment of incinerators, which, basically, never operate, and again, it's because, basically, we in government, we went out and hired someone who designed them and built them and we shouldn't have been in that business. But be that as it may, the cost is about twenty dollars a ton to run the landfill site. That's if you want to figure the true cost, and everything.

We anticipate that we will reduce that cost in terms of using a resource recovery facility quite substantially and most of the economic benefits being derived in the sale of electric power.

In our situation, we get forty percent of the proceeds back gross from the sale of that

electrical power. We earn two, two and a half million dollars in the first full year. That will be used to reduce the tipping fee. Our tipping fee is about sixteen dollars and thirty cents. I think we will develop an additional capacity that some of the communities both within our region and next to our region, will have the opportunity of using this resource and gaining, again, a further advantage, not only for their residents who won't have to operate an antiquated facility but also for our own, in terms of making our operation even more efficient and reducing the cost per ton in the amount of money the taxpayers have to pay.

SENATOR DALY: You have given me an interesting idea.

To handle hazardous waste properly and through incineration is an energy intensive process. It just dawned on me that down the line, we ought to consider the possibility of obtaining some of that energy we're going to need if we're building sites from the solid waste disposal sites, perhaps located nearby.

MR. D'AMATO: It's the kind of thing that, as enthusiastic and optimistic as I might be

and we have had success with this plant. Even those who have detracted and deprecated some of the efforts that have gone into it, I would admit there are some benefits. But it has been characterized by some as environmental nightmare, because you see, when you produce electricity, one of the byproducts is steam. It has been characterized as the kind of thing that is second to another Love Canal by another critic.

with respect to the facility, let no one kid you --

to it, and it's the same discharge, absent the fact that we no longer burn the steel, the glass, the aluminum, with the addition of having far superior electrostatic precipitators and devices to wash out the gases, that is completely lost. The fact we have been able to close down our four incinerators which were violating all of the state and federal levels closed down as a result of this plant coming down the line and were we to compare the tremendous contamination they put into the air in comparision to this facility, there would be no comparision and the air quality has been proved.

In spite of this, there is still an outcry, par-

ticularly from anyone who can see or anyone in the immediate proximity of the plant.

disposal of hazardous material and mixing it into the general solid waste stream, I think you have got to be very careful on this, because you will get these kinds of situations where people, then, say, listen, in order to get rid of some of these materials, you have to have a high temperature burn. I'd say that I think that most of these things, most of the toxic waste that we handle, or the waste materials that we handle, can be eliminated at fourteen hundred degrees farenheit. We burn at about twenty-two to twenty-three hundred. So we can handle that situation.

You are going to be dealing with those sensitivities. The minute you tell people it's a hazardous waste plant, the problems we have experienced, now, will pale in comparison to what the public outcry will be there. That's why government has got to show, and the state. The state has to come in and do it. No private corporation could have the ability to come in and get a site and do it on its own. It just will not be.

CHAIRMAN GRANNIS: How about having the state select the site? Nobody wants the site in their back yards.

MR. D'AMATO: I think the state along with the county and town officials, I'd say don't give us a veto power. Just listen to us and give us veto power, you'll never get it done.

CHAIRMAN GRANNIS: Your energy is sold to LILCO?

MR. D'AMATO: Yes.

CHAIRMAN GRANNIS: Was that a negotiated contract with them? Was there difficulty in neogtiating that contract?

MR. D'AMATO: All the problems we have had in the area with LILCO--and we have disagreed and had our battles on some things--that they have shown, in this respect, one of the most enlightened policies becoming involved with us in this project and this goes back, now, about six years ago that we started with them.

I have had the opportunity of meeting with Florida Power and Light and I would say that LILCO showed a far more energetic, enlightened approach.

25

So it's always easy to kick a utility, particularly when the public is down on them. the fact, in this case, they were extremely cooperative and without their saying they're willing to buy that power, there could have been no total recycling effort here in Hempstead.

Thank you very much Mr. SENATOR DALY: Supervisor.

I'd like to say, anyone who would like to testify, if you just give your name at the desk.

A VOICE: This is a public hearing. The problem is, I'm a public citizen on my own expense here.

A lot of public officials are here and they come and testify and leave and the public never gets a chance to ask questions.

SENATOR DALY: You ask us anything you want when you get up here. We're holding the pubhearing, hopefully, for our benefit in gaining knowledge from public officials and citizens.

If you are testifying before us, you can ask any questions and we can ask you any questions.

We would be delighted to have you come up and talk to us and give your opinion and question us, if you like.

A VOICE: 10:00 o'clock in the morning is not a public hearing.

SENATOR DALY: Last Thursday, we sat until 9:00 o'clock at night.

Our next witness will be John V. N. Klein, Suffolk County Executive.

MR. KLEIN: Thank you for giving me the opportunity to testify here today.

The 1.3 million residents of Suffolk

County rely on groundwater as the sole source of
potable water. In recognition of this, the

United States Environmental Protection Agency has
designated Long Island as one of only three sole
source aquifer regions in the nation. For decades
Suffolk's water supply has been bacteriologically
and chemically of superior quality.

In 1975, testing by the Nassau County
Health Department of water supplies around the
Grumman Aeorspace Corporation in Bethpage yielded
high concentrations of trace organic compounds.

There are groups of compounds, pri-

marily man-made, such as chloroform, polyvinyl chloride and halogenated hydrocarbons. Some have been found to cause cancer in experimental animals. Some, such as vinyl chloride are suspected carcinogens in man. All, in large enough doses, are known to cause acute toxic effects in man.

Thus, although the long term effects on man of small doses of these compounds are not fully understood, we must, as responsible officialis, assume these materials—in whatever quantity we find themare hazardous until there is more precise information about their health effects on man.

When the results of the testing in Bethpage were known in 1976, the Suffolk County Department of Health Services and the county water authority began testing public supply wells in the western part of the county. Of the six wells tested, four showed higher than recommended concentrations of trace organics. Although the initial efforts were directed toward community water systems; for example municipal water supplies and private water purveyors serving year-round residents, the testing program was later expanded to cover non-community water systems and private wells

The non-community water systems include schools, restaurants, office buildings and other water supplies that have at least five service connections and serve more than twenty-five persons on a transient basis.

Organic contaminants may originate from many sources, including illegal industrial discharges or accidental spills and commercial and residential uses of products containing the organics. Many of the organic substances eventually find their way int the groundwater via cesspools, leaching fields, recharge basins and direct percolation through the ground. Our county Board of Health is in the process of developing a new article of the Suffolk Sanitary Code regulating the storage and handling of hazardous materials. This, in addition to our current efforts at controlling industrial wastes, should help reduce groundwater contamination from organics.

Through the county's testing program, we have taken 1,311 water samples from community water systems, 265 from non-community systems and 1,254 from private wells. They have been tested from the most commonly used halogenated hydro-

carbons and on occasion for benzene, toluene and vinyl chloride. Results indicate that the state-recommended guidelines--50 parts per billion for individual substances and 100 ppb for the aggregate have been exceeded in 3.2 percent of the community water systems, in 3.9 percent of non-community water systems and in 5.8 percent of private wells. In addition, detectable concentrations were found in 14.3 percent, 12.3 percent and 24.4 percent of the samples from the above sources, respectively.

wherever we identified these contaminants in the public water system, the water company was asked not to use these wells but to switch
to uncontaminated ones. We were able to do this
because of the presence of additional wells in the
same wellfields.

not to use the water for drinking purposes and to try to find an alternate source such as bottled water or to connect to public systems. This has been a major difficulty. The cost of connecting homes to the public supply when a group of homes is isolated is prohibitive. However, the joint efforts of the towns involved and the Suffolk

County Water Authority has led to success in some cases.

It is difficult to say whether the levels of trace organics we find are higher or lower than they were prviously. Historically, there has been no testing for trace organics anywhere in the nation so we have no base line date.

I feel as we continue to test our drinking water supplies, we will continue to find organics. That leads to several problems. First, it is essential that we have the proper monitoring capability and the cost of testing for organics is high.

Over the past two years, we have used private laboratories in addition to the county's and New York State's facilities. When testing was performed for more than one group of synthetic organics, the cost of testing one water sample ranged from \$150 to \$300. Although we received partial support from the State Health Department, the continuation of our monitoring program, especially for the 60,000 to 80,000 private wells in the county, will impose a tremendous financial burden on the county's budget.

I would think, therefore, the unique situation of Nassau and Suffolk being sole source of aquifers would justify aid for our monitoring program.

In addition, the lack of standards for trace organics poses another problem. Although there are guidelines, and although the U.S. Environmental Protection Agency is supposed to be developing more certain standards, we really do not know whether there are any safe levels of organics. I hope the state and the EPA can move forward more promptly to develop more precise standards.

Finally, I feel it is important that homes and businesses served by private wells be brought under public water supply. Not only for trace organics but for public health and environmental safety, it is important that we have the capability to monitor our drinking water supply adequately.

I thank you for this opportunity to address you and I want to tank you for having brought this hearing to Long Island, so that we can make our causes known to you.

SENATOR DALY: We have been made aware

by your representatives of the serious problems you have here and we thought it was imperative that we come down to Long Island for one hearing.

MR. KLEIN: Thank you.

ASSEMBLYMAN YEVOLI: County Executive Klein, one very quick question.

We discussed this before in terms of the pine barrens in eastern Suffolk County.

Do you think it would be safe to say that Long Islanders, or certainly, residents of Suffolk County, would be willing to consider the kind of stringent land use management plan that would be used in the Adirondacks?

MR. KLEIN: I must tell you, that I'm not sure I'm as optimistic about the public receptability as was the last witness, Mr. D'Amato.

I would say that the attitudinal fix on people is a lot more flexible than it was ten years ago, for a variety of reasons. But I am not sure that the reaction to that, both from the local governmental level—and, I mean, the town and village level—and the people themselves, would be entirely receptive. I think you are running into a home rule issue.

I know, tangentally, the kind of problem the Adirondack thing brought about and I suspect you would find some resistance to that "Invasion of home rule land use prerogatives."

I think it might be rougher sledding than some people think.

ASSEMBLYMAN YEVOLI: A way to avoid that would be to do it on a local level. It could be done either on a bi-county level, if that were possible, realizing Nassau has no real jurisdiction over the pine barrens.

But if there could be a cooperative effort with the villages and towns, perhaps we could develop a plan for future use.

I may disagree with some of the speakers. I'm certainly not an expert on this subject, but I would say within the next twenty years, the way Long Island's water supply is now going, it's seriously in danger and I think there have been many esoteric plans that have been proposed, piping water from the Hudson River and doing all kinds of things that would cost billions and billions of dollars, and yet, I look at the pine barrens, that may be a pristine source of water that we may all

3

6

5

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

have to avail ourselves of.

So the protection of that area is some thing we ought all to work jointly to at least accomplish.

MR. KLEIN: I would agree with that one hundred percent. I would also respectfully submit to you that we have in place one of the most effective regional planning agencies in the state, which has recently undertaken and completed one of the largest 208 studies in the nation and for those reasons, I would say, the atmosphere is much better than it had been in the past. But I just underline that I think that it would have to be done with a high degree of sensitivity, that the discussions would have to come from the bottom up rather than from the top down, if it were to have any element of success.

But I think the mechanism is there to get that kind of productive discussion going with some ultimate results.

ASSEMBLYMAN ZAGAME: Mr. Klein, you have talked about water quality monitoring and the problems you think you'll have in reading the cost in the future.

Can you tell me, in your dealings with the Health Department, did you find you had to wait a long time for samples to return or analysis to be done?

What I'm about to give you MR. KLEIN: is secondhand information and that question should probably be answered by a member of the health administration in Suffolk County.

I have not been told of any inordinate I would be very happy, if you think it's delays. important, to get that kind of information on a direct basis.

ASSEMBLYMAN ZAGAME: It is, because the Health Department is requesting additional funds for water quality monitoring. The purpose is to expand some of the laboratories.

In my area, we have had to wait, particularly with samples from the Love Canal.

We would like to know if you had inordinate delays in those test results coming back, so we can substantiate the Health Department's request for additional funds.

MR. KLEIN: I would be glad to forward that information.

EN-DE REPORTING SERVICES, LTD.

21

20

22

23

24

25

7 8

ASSEMBLYMAN ZAGAME: Just one caveat.

You're not so unique here in that you depend solely on groundwater for your supply of water. There are many areas in upstate New York where, because of private wells and so forth, that is the sole source, probably in most of my district that the groundwater supply there finds its way into the Oswego River, which goes into Lake Ontario.

So the idea of monitoring wells in the County of Suffolk is similar to what we have to do in the County of Oswego. We need state assistance with federal reimbursement to help a lot of different places in New York State that have to do this monitoring New York State in years to come at a pretty substantial cost.

MR. KLEIN: I recognize that and obviously, your scope of responsibility here statewide. You have to forgive a rather parochial point
of view when we testify here, but we have to respect that position.

CHAIRMAN GRANNIS: I don't think in this planning process where you're going to have competing interests of small, local municipal

bodies that anybody is going to be in a position to make a decision on long term planning. It was a fairly distinct step in the Adirondacks, but the decision was made because of a long term need and the recognition that local government would not try to limit the growth that he Adirondack plan has adopted.

I am familiar with the hostilities and difficulties they had. I'm not sure if it was left up to local governments to work that out, because of the parochial interests, in saying we need to agree, why should we be limited by our neighbor.

You saw the map in yesterday's paper about who is going to get the gasoline and who isn't. This scuttled the president's gas rationing plan. I'm not sure that planning will provide the protection that might be necessary for generations to come to protect the groundwater, unless it comes from higher authority with cooperation from local authorities.

I do understand your position.

MR. KLEIN: That is not really my position. If I give that impression, I will apologize.

But I had said to Assemblyman Yevoli's question, that the players must clearly be the state, the region and the localities and that includes the county and the towns. What I'm saying to you, is that fifteen years ago in Suffolk County, there was not only a lack of cooperation between the town and county planning agencies, there was open warfare. Today, that is a reasonably happy marriage.

All I'm suggesting to you, is that if you want to approach that subject, it should not come in the form of a bolt of thunder from Mt.

Olympus down to the locals, but that the state, the region, the county and the local municipality should sit down together and weave the fabric of the solution together, because the surest way to kill it is to have some infinite wisdom—and I'm not being facetious—come from Washington or Albany to tell the locals what they want.

In fact, if the locals are made a part of it from the inception, I think you will be pleasantly surprised with their willingness to deal with the subject.

ASSEMBLYMAN YEVOLI: We are the bene-

ficiaries of a designation "sole source acquifer" by the government and in conversations with the EPA, there seems to be some confusion as to just what we're entitled to, as we now have this designation.

I can get no rules or regulations from them.

In terms of funding, when questions are raised as to protect our supply, since we have been so designated as a sole source acquifer, again, usually at the other end of the line, there is dead silence.

So we are the beneficiaries of this, but if the kind of title that has been bestown upon us with nothing behind it. Maybe you know about it.

MR. KLEIN: I won't take the time to give you the laundry list of benevolent titles bestown on us, and there are many.

CHAIRMAN GRANNIS: One final tangential question involves the Shoreham power plant.

Is that a concern, whether or not the location develops at the Shoreham plant and water is contaminated, would that reach the acquifer and

the pine barrens? Is that a concern of the county health department?

MR. KLEIN: It certainly is.

On Tuesday, I spent a full day in
Harrisburg talking to people and visiting ThreeMile Island. Without getting into a long dissertation, it was probably the most profound experience
I have been through in a long time.

What took place outside the plant was almost as catastrophic as what took place inside the plant.

There was no hazard assessments capability by anybody and clearly, if you project the potential occurrences at Shoreham, the implications are not only in terms of radioactivity, but what you just raised, the issue on the impact upon groundwater.

Because the Island is divided by a spine and there's a northward flow and southward flow, if this is on the north shore, it has an impact. But that is certainly within our concerns.

But for the most part, the flow patterns of sub-surface waters on the north shore are toward the Sound and since this facility is located on the

Sound, it limits the impact of such an occurrence.

CHAIRMAN GRANNIS: Should that function be a state, local or national function?

MR. KLEIN: It has to be all three,
that planning function, and I made that suggestion yesterday.

In terms of total response capability,

I think we are in Neanderthal times and I think

that was proven in Pennsylvania. I think it must

be a tight, precise functional relationship among

the three levels of government.

CHAIRMAN GRANNIS: Hopefully, we have learned from the Three Mile Island lesson.

MR. KLEIN: I hope so.

CHAIRMAN GRANNIS: Thank you very much, Mr. Klein.

The next witness is Peter Skinner, representing the Attorney General of the State of New York.

MR. SKINNER: I am Peter N. Skinner,

P.E., Environmental Engineer for the Bureau of Environment Protection in the office of the Attorney

General of the State of New York. I am in charge

of evidentiary reviews for hazardous waste manage-

ment, investigation and litigation, as well as for investigation and litigation in the area of septic tank cleaners and additives, and ground-water pollution.

By way of introduction, the Attorney General would like to reiterate his appreciation to your committees for scheduling these hearings, and providing for state-wide discussion of the problems posed by hazardous waste.

The Attorney General has, in previous testimony in Albany, April 26th, outlined some of the legal remedies being considered against those who created hazardous dumps. This effort is proceeding, as legal and technical staff ame now researching the grounds for legal action, even while the Attorney General awaits the decision of the Governor and the legislature on his request both. for subpoena power and for the funding necessary to do the job fully and properly.

The range of problems posed by hazardous chemicals being dumped into the ground; and,
by one manner or another, polluting the environment
and threatening public health is enormous. Many of
these problems have been discussed in previous

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

testimony. However, it is vitally important to restate, at every opportunity, that landfilling of these wastes is a very dangerous practice in perpetuity.

Past dumping practices without such careful oversight have resulted in tragic conditions, at Love Canal and elsewhere. Present and future practices must avoid such results. Attorney General feels that one method to be employed in the future is to impose a moratorium on the burial of synthetic organic chemicals, the most dangerous and persistent of these wastes, and instead provide for retrievable safe storage of these chemicals until they can be safely, permanently destroyed; legislation to mandate this procedure is presently being drafted by the Attorney General working closely with representative of the Ligislature. At the same time, legislation is also envisaged to provide for perpetual care of hazardous waste sites, including closure and post-closure monitoring and maintenance, and providing various financial mechanisms; included in the legislative proposal would also be a provision for safe elimination and destruction of buried wastes, so that

3

4

5

6

7 8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

sites can indeed be rendered truly safe.

Thus, the Attorney General is proceeding to investigate possible litigation against
existing and abandoned sites, and, at the same
time is assisting in the preparation of legislation
to prevent future Love Canals by providing proper
management of these wastes.

Hazardous chemicals have become an ever larger part of our industrial worlkd, and are affecting the people of this state not just through dumping, but by other means. In particular, very dangerous chemicals have been found in septic tank cleaning products which can and do enter drinking water. In a recent case on Long Island, in response to a motion for a preliminary injunction, the Attorney General was successful in gaining the agreement of a major manufacturer of such products, the Janyon Manufacturing Corporation, to stop selling and distributing "Drainz" and "Super Strength Drainz," both of which contain hazardous chemicals which have contaminated Long Island's groundwater and drinking water supply.

While litigation such as this is vital and will be pursued by the Attorney General to pro-

tect the people and the environment of this state, there is at present an Attorney General program bill already in the Legislature--S. 2382-A, A. 3111-A, introduced by Assemblymen Bianchi and Yevoli, with twenty-five sponsors, and by Senator La Valle and three others.

This important measure would amend the environmental conservation law to prohibit the sale or distribution of sewage system cleaners and additives which contain certain dangerous chemicals such as were found in the Long Island case.

The Attorney General feels that passage of this bill is vital.

Of course, the problems created by hazardous wastes require both Federal and State efforts, and the Attorney General is committed to working on all levels, with the Legislature and the Governor to see to it that the health and safety of the public are protected for generations to come.

CHAIRMAN GRANNIS: You talk about asking the Governor for the subpoena power.

The Attorney General does not have subpeona power to carry out this kind of investigation?

MR. SKINNER: Under Section 638 of the Executive Law, the particular capability which we feel would be appropriate for the investigation of the hazardous waste dumps in the state, at present the only, as I understand it—being an engineer, I should be careful of what I say—there are only limited legal remedies available to obtain the documents that we—that are so important to our investigation, and those are not particularly applicable to the 488 sites we have to deal with.

CHAIRMAN GRANNIS: Would you ask some-body in your office to get us a memo on what legal authority you have and don't have and what can come directly through the Governor and what kind of legislative mandates might be required to change your legal authority, if it's a case by case basis or overall subpoena power.

I'm surprised, given the very broad mandates in the State Constitution and State Mandates, you don't have the power to go after the records you need.

Get a legal memo on that.

MR. SKINNER: It exists and we will provide it to you.

CHAIRMAN GRANNIS: I know you are drafting legislation. We have talked about this before.

When do you think that legislation is going to be ready, either in final form for presentation or draft form, so we could see it?

MR. SKINNER: We are presently scheduled to meet with members of your committee staff to discuss our proposals on Monday, which is at 11:30.

CHAIRMAN GRANNIS: Final questin.

There is a call for a moratorium on the burial of waste. The alternative is above ground storage in secure sites.

Is that what your proposal is, until
we can develop ultimate disposal technology or
techniques or facilities or ultimate disposal?

MR. SKINNER: Absolutely.

We consider the appropriate method for doing this as properly isolated—I'm sorry—concrete bunkers which will make it possible to retrieve the waste and have them burned when the system that you envisioned in your legislation is in place, and also, provide a stockpile of materi-

als which could provide that ongoing supply of waste that is necessary to keep private industry operating such facility with the kind of materials that they need, although it may not be much of a problem.

CHAIRMAN GRANNIS: What is your estimate of the quantity of toxic waste generated in this date every year, let's say?

I don't think I have MR. SKINNER: those numbers at all.

CHAIRMAN GRANNIS: The figures are staggering, though.

MR. SKINNER: It's a huge amount and looking at the materials coming into the Chemtrol site in Erie County, if we can't generate them, states in the United States can certainly provide them to us in the amounts we don't really want to have.

CHAIRMAN GRANNIS: Do you have any estimates in the amount of toxics we export for treatment elsewhere and import for treatment here?

MR. SKINNER: I don't think any such efforts have been made. The best place to go for that would be Tom Quinn and his toxics program, and

I hope their long awaited report will be provide that information.

CHAIRMAN GRANNIS: I'm as concerned on storing these toxics aboveground as burying these.

We went and saw one of these landfill sites. Whether that's safer than storing it in concrete bunkers after it's been shipped around the state and other states in drums, to take it off the drums and put it into the concrete bunker-I don't know what the best solution is.

MR. SKINNER: We should look at the radioactive waste situation. The problems that have plagued the radioactive waste management program for the United States has necessitated continual storage of these radioactive wastes, depending on the decision on the geologic depository or other sites. It's clear to our office that secure landfilling does not represent that permanent approach to the problem. It would be inappropriate to continue that practice when we know full well that relevant technology does exist and with the kind of guidance the legislature is presently putting forth in your efforts, we may have

those facilities soon.

So to continue on the wrong route would be inappropriate.

ASSEMBLYMAN ZAGAME: I'd like to follow up on Pete Grannis' comments to you about providing us information where there may be a deficiency in the law with respect to your ability
to get information.

Maybe you're familiar with the bill in the legislature that has probably generated more controversies than any environmental bill I have seen hit the floor, that would allow DEC to enter property in an emergency situation and do whatever needed to be done to stop, perhaps, a breach in a dike that might be holding chemicals back, which was the case in my district, or some environmental problem.

Do you think that type of legislation would be helpful where you could enter property, do what needs to be done in the way of remedial. action and go to court within seventy-two hours under the bill that's bound to get some kind of court order allowing continued surveillance of the site?

MR. SKINNER: First, from a mechanistic standpoint, it's absolutely necessary. This kind of legislation, although unpopular, is something vitally needed.

Coming from a litigative standpoint, without the necessary evidence to go forward with any kind of enforcement action, we're really power less. The capability of having the Department of Environmental Conservation and Transportation personnel go on site would be necessary to collect their evidence we would use seventy-two hours later. Without the capability of going on site, we're powerless to collect those data.

It's absolutely necessary.

ASSEMBLYMAN ZAGAME: We are aware the organized crime task force is investigating the potential involvement of organized crime in this industry and you mentioned there may be deficiencies with respect to collecting data.

What about deficiencies on those who are found to violate environmental laws? Are we dealing with the situation where the punishment doesn't fit the crime?

What do you do with somebody who dumps

ten thousand barrels of PCB's along the highway? What would be the charge?

Would they go to jail or just get a fine?

MR. SKINNER: I would prefer to answer that in specificity by memorandum form. The reason I do that is that I'm an engineer and my answers would not be as good as what my lawyers could provide to you.

Our lawsuit on the Mattis case, I think it's Glen Cove, where seventy-five thousand dollars was recovered as a fine, clearly did not deter them from continuing operations. Their present operations they have been significantly better in the past. However, it's indicative that
the cost of doing business can certainly cover the
seventy-five thousand dollars fine they received.

ASSEMBLYMAN ZAGAME: That's my concern, that these fines could just be a cost of doing business, if the business is as profitable as we are told when the dumping is done illegally.

If it's done illegally, the profit is actually one hundred percent. If you are caught and you pay a seventy-five thousand dollar fine, it may repre-

sent only a small portion of what was returned as a profit to that company.

MR. SKINNER: Considering the impact on the state's resources that cannot be replaced, i.e., our groundwater, seventy-five thousand dollars is a drop in the bucket, and the cleansing of the groundwater is a difficult, if not impossible, job.

Once those materials coat the particles of soil that hold groundwater, cleansing it is very, very difficult, if not impossible.

ASSEMBLYMAN ZAGAME: Could you have your attorneys, when they draw up this memorandum, add an addendum as to remedies we should be providing as to your ability to seek a serious penalty for the people who violate the conservation laws, because some of the correspondence I have between the Attorney General and district attorneys and district attorneys and their legislatures in the state seems to tell me that the penalties, right now, don't fit the crime, that this crime of dumpting toxic waste should be treated much more seriously than other violations of the conservation law and I'd like to know if we should up the

•

penalties and see one pays the higher price.

MR. SKINNER: One thing I want to stress, is that the development of the data that are necessary to "prove the case," is very, very expensive, and such a program is the kind of program we ask the Governor to assist us in funding.

Our office has been reduced in its appropriations this year and with the future problems that I have already found in our materials that are available on such things as Love Canal and other areas, this kind of investigation has got to go forward to get the kind of proof we need and it's going to have to cost money and whose pocket it comes out of is probably going to be up to you people and I can only stress, and I stress for the Attorney General as well as myself, as an engineer who put together these evidentiary case files, money is going to be needed.

ASSEMBLYMAN ZAGAME: Do you have a request for around nine hundred thousand dollars?

MR. SKINNER: Nine hundred and fifty thousand dollars.

ASSEMBLYMAN ZAGAME: For the purpose of this investigation?

MR. SKINNER: Yes.

ASSEMBLYMAN ZAGAME: Love Canal or

state-wide?

MR. SKINNER: My request covers all.

But even with that nine hundred and fifty thousand dollars, getting these cases off the ground
is going to have to be done on a very limited
number of sites. The amount of legal maneuvering,
the lawyers tell me would be necessary, would be
quite time consuming and necessitate a lot of efforts and I know that the production of proof
will be, a, very difficult; b, necessitate efforts, and that's why cooperation of the other
agencies is a key here and thirdly, will necessitate some money to go take other samples where
the samples were done improperly or not done at
all.

about this before and the priorities that can be set by the Attorney General in pursuing these cases. I can see where the Love Canal situation demands most of our attention, but I would hope a good portion of those resources would be applied to pursuing some of those illegal dumps that may

have been operated by organized crime.

I'd like to know if you could get for us the information how that money is proposed to be spent? Is some of it going to be channeled to the organized crime task force or is it going to be used to litigate some of the cases we have heard already in Erie and Niagara?

I think the highest priority should go to pursuing those cases that relate to the possible involvement of organized crime, particularly in the southern part of the state.

MR. SKINNER: I think it's terribly important and the criteria we are developing in the office to deal with the plethora of sites, four hundred sites we're talking about, we must recognize that very area you find important.

I would, however, also indicate that our first and primary area of concern is for public health. Where any litigation could assist in the development of a remedial program to protect the public health where it's endangered, that's got to receive our first and most important concern.

Secondarily, as I understand it, the EN-DE REPORTING SERVICES, LTD.

•

statute of limitations may also limit certain other kinds of cases and we must be cognizant of those as well.

There's going to be pushing and showing, but within the next two weeks, we will have
a very good idea of exactly which site will receive our first attention without the nine hundred
and fifty thousand dollars, although it will be
severely limited in our efforts to go forward and
we're going to need all the help we can get.

ASSEMBLYMAN ZAGAME: Thank you.

SENATOR DALY: I wish you would, for me, get an impression and recommendation and criticism from the Attorney General's office on this legislation, which would really attack a problem of that transporter of hazardous waste.

Now, one of the things that really has been pointed out to me in our hearings around the state, is that we do have many, unfortunately, "fly by night," unconscionable opportunists who are taking advantage of this hazardous waste situatin. They're being contracted by industry, by manufacturers or by the user to dispose of the waste and they're disposing of it very illegally

4 5

improperly and by unhealthful means.

One of the pieces of legislation that we are considering is to put on the backs of the user or the manufacturer who has to dispose of that waste, the responsibility to make sure that the waste is disposed of in a proper manner. In other words, for example, this case brought up this morning of the person who put those cans or barrels in the Islip dump, would not only penalize criminally with criminal sanctions, also, I might add, not only the person who did it, but also the person who gave him that waste to be disposed.

In other words, what we're thinking is, we will make them responsible for whoever handles this waste after they try to get rid of it and perhaps giving them the possibility of criminal sanctions, criminal penalties, that they will be more careful in who they give their waste to and how it is disposed.

I would like to get a recommendation from the Attorney General's office for legislation on that nature.

MR. SKINNER: The question of secondary liabilities has not been explored by the court in

great detail and it's an area we have been discussing on a continuous basis for many months, now, and because of the need to develop such a set of case law, we must move forward strongly and we plan to do so after this next two or three week period when we're trying to determine where the best cases lie to protect public health and develop the case law we need to go forward.

I'm not sure whether you can make it retroactive, but it certainly would be helpful to make it a general policy of the state in the future. Of course, we have to not forget that the proposed regulations under the Resource Recovery and Conservation Act, may well provide that kind of thing as well.

CHAIRMAN GRANNIS: When they come out in a year and a half.

ASSEMBLYMAN YEVOLI: Peter, I just wanted to tell you, in terms of that assembly bill 3111A, you know, we have had many meetings and the Attorney General's department has participated and we thank you for that. We have reached the final stages with the bill. We anticipate it will be on

the calendar within the next two weeks in both houses.

MR. SKINNER: Good.

ASSEMBLYMAN YEVOLT: We're optimistic it will pass two houses of the Legislature and, hopefully, it will be on the Governor's desk two or three weeks before we adjourn. Hopefully, we will have a law on the books.

MR. SKINNER: Good news.

SENATOR DALY: Thank you very much.

Thank you and thank the Attorney General for us,

also.

At this point, we'll take a short break.

(Whereupon, a short recess was taken.)

SENATOR DALY: Ladies and gentlemen,
with your cooperation, we will reconvene with the
meeting.

Our next person to testify is Mr.

Francis Padar who is here in a dual capacity. One of his capacities is representing the Nassau

County Department of Health and secondly, as a member of the Conference of Directors of Environmental Health Services of New York State.

-

MR. PADAR: The Nassau County Department of Health has been at the forefront of efforts to identify and abate toxic chemicals in the environment. The Department has long recognized the need for extraordinary efforts to protect our unique and sensitive local environment and its efforts have been supported by traditionally progressive County administrations.

Consequently, we have pioneered in a large measure in both the identification and resolution of threats to our air, land, and water resources.

As far back as 1948, groundwater contamination was discovered from chromium wastes discharged by an aeronautical firm and an industrial wastewater control program was launched which became a model for the current State program. In the 1960s we started a comprehensive groundwater quality assessment program replete with computerized data evaluation.

Sewage contamination of our water supply caused by cesspool systems was demonstrated and the Department became the prime advocate for comprehensive sewering of the County which is now

4 5

realizing full fruition.

In 1976 we discovered contamination of our aquifers by synthetic organic chemicals which are suspected human carcinogens. An intensive testing program was launched which in eighteen months enabled us, using sophisticated GC/MS laboratory techniques, to sample each of 437 public wells at least twice and remove tained wells from service. Concurrently we launched a door-to-door survey of over 3,135 suspected industrial and commercial establishments to identify sources of groundwater discharges of these chemicals. We found 269 sources and as of now have abated 185, and the remainder are in process of correction.

We also conducted a study of consumer products and found 230 household products which contained organic chemicals of concern and also potentially hazardous because through their use and disposal could seriously contaminate the groundwater. This study led to the development of the legislation now being considered by the State Legislature to ban cesspool cleaners containing such toxic chemicals.

Since May 1976, we have been experienc-

ing increasing numbers of spills from underground gasoline tanks totaling 46 confirmed incidents with total discharge to the groundwater of an estimated 250,000 gallons. Moreover, the Department has discovered that certain gasoline constituents and additives though only slightly soluable, have serious groundwater contamination portential notably from benzene--a known carcinogen and tetraethyl lead, a recognized toxicant.

We have been instrumental in stimulating the development of field techniques to treat contaminated groundwater segments to remove benzene and other gasoline hydrocarbons. In related matters, we have significantly augmented State efforts in recovery operations with a heavy commitment of our laboratory resources to test both water and air samples, have provided technical expertise, and tried to motivate more expeditious handling of gasoline spills in general and of the more significant individual spills.

For many years we have maintained close control over industrial wastewater discharges and have 38 establishments under SPDES permit over and above the recent program on organic chem-

icals.

The control of industrial waste sludges and residues have been a particularly difficult problem which we are coping with as effectively as our authority and the technical state-of-the-art permits.

Ment have addressed methane migration in a survey and follow-up of 50 existing and abandoned land-fills, the design of a proposed regulation of hazardous substances which are not wastes under our Public Health Ordinance and the development of proposed regulations to prevent and control gasone spills.

tion and abatement of toxic substances has been presented not only to illustrate the nature of our problems, but also to demonstrate local health department capability and expertise in the identification and abatement of the threat of human health and the environment of toxic chemicals and hazardous substances. Our long and broad experiences in the management of environmental quality we believe also qualifies the Department to speak

-

authoritatively to the questions posed in the notice of this hearing in the area of program administration, best available technology, and the scope and content of needed legislation.

Our comments address the adequacy of the present response of government to environmental emergencies, the identification and classification of in-place toxics, as well as the manner of allocating costs for remedial measures and the approaches needed to regulate hazardous wastes now being generated. A series of specific recommendations is also provided.

and local governments to hazardous substances emergencies is inadequate because only limited resources and expertise can be mobilized to confront a crisis. The approach of both federal and State agencies is to provide at best only that assistance which is beyond local capa bility and is usually limited to technical consultation and laboratory support.

Local programs in turn are shrinking in response to local austerity. The environmental health staff in Nassau County has dwindled from

171 in 1970 to 152 today.

This condition persists despite the fact that under the State Constitution, the responsibility for public health protection, including environmental control, rests with the State. State monetary assistance provided to local health departments of up to 50 percent of local program costs to implement State public health and not responsibility. This local assistance in reality amounts to a payment to localities of only 35 cents on the dollar.

environmental control program resources are shrinking, and with it the amount of "matching" State aid, the State is mandating more and more work to implement one new federal environmental program after another, is delegating increasing functions to localities, and, in an ultimate travesty, is not sharing with localities the federal revenue provided for the very purpose of implementing federal environmental laws.

Finally, there are serious inequities in the administration of local assistance which penalize the more progressive local health depart-

3

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ments.

The problems of inadequate appropriations at all levels of government prevent the systematic assessment of environmental threats and the design and implementation of both corrective and preventive strategies. Toxic waste emergencies such as Love Canal are merely symptoms of a historical failure on the part of government at all levels to recognize their responsibility to properly control hazardous substances. Excursions of PCB's, mirex, synthetic organic chemicals, asbestos, mercury, gasoline, radioactive materials, and other hazardous substances will continue to occur unless and until our existing ticking time bombs are defused and new bombs are not created.

While the overall environment control programs need substantial infusion of money at all levels of government, there are specific shortfalls which need particular attention at both the federal and State level. Primary among these is the need for toxicological assessment of human risk from human exposure to a large group of toxic substances individually and synergistically. More important, a decision has to be made as to what level of risk

our society is willing to tolerate recognizing that the cost of prevention will escalate disproportionately as the risk is reduced.

Antoher significant need is the development of laboratory analytical methodologies able
to accurately identify all organic chemicals of
concern at the trace levels at which they are significant to health and to generate both governmental and commercial laboratory capability sufficient to supply the growing needs for emergency
responses, as well as for comprehensive investigations and basic program needs.

We have also experienced an inability on the part of the State DOT to respond effectively in their responsibility to administer the Oil
Spill Compensation Fund Article 12 of the State Navigation Law.

To begin with, staffing is woefully poor with only two engineers and one clerk assigned to the Long Island region where since the beginning of 1979 alone there have been 25 reported gasoline spill incidents. The program is also inadequately organized and administered which prevents a decisive and thorough response to these types of

emergencies. The State DEC in turn has one engineer assigned to this program in the region to fulfill their assigned role to provide environmental assessments and technical guidance. The result is that the local health department must take up the slack at two echelons below the lead agency, performing environmental assessments, stimulating USEPA technical assistance, collecting and analyzing samples of air and water, motivating enforcement of corrective action under DEC law, and both designing and motivating more productive administrative processing and criteria for clean-up operations.

In summary the response to toxic chemical emergencies by government at all levels is inadequate due primarily to insufficient funding.

While we have as a society developed sophisticated analytical tools to better identify problems, we are faced with ever increasing emergency episodes but with diminishing resources to perform the needed corrective and preventive actions.

The identification and classification of hazardous waste dump sites in Nassau County EN.DE REPORTING SERVICES, LTD.

represents a problem of different dimensions than in areas with a heavy chemical industry such as Niagara County. We have 15 active landfills and 36 which have been closed. These include conventional refuse disposal facilities, as well as those which contain building demolition materials and agricultural waste. Many of these have accepted industrial wastes during their operating life which included hospital and nursing home wastes, sewage solids, outdated drugs, and industrial residues which only recently have been placed under regulation.

At the Syosset landfill there is evidence of disposal by the Hooker Checmical Company after 1965 of an undertermined quantity of waste in drums identified only as coagulated latex and carbon black filter cake.

Limited testing of landfill leachate at two landfill sites revealed presence of substances in excess of drinking water standards consisting of barium, cadmium, hexalvalent chromium, fluoride, synthetic detergents, iron, manganese, sulfate, and zinc. Organic chemicals were found in one of two sites at which leachate was tested containing

80 ppb of methylene chloride and 130 ppb of toluene which levels exceed the drinking water interim guidelines for organic chemicals in New York State.

Tests of wells in vicinity of these sites have not demonstrated migration of toxic con stituents, although such tests have not been exhaustive nor, except in isolated cases, installed expressly to minitor the influence of leachate on groundwater quality.

Thus while gross contamination from landfilling of hazardous substances is not evident in Nassau County, neither has a comprehensive investigation been conducted.

The recommended approach is to systematically study the problem by installation of test wells as typical types and ages of landfills under hydrogeological conditions which prevail. A toral of 16 sites should be selected on this basis and with three or four wells at each site.

Groundwater should be tested for full range of inorganic substances listed in drinking water standards, as well as for a full spectrum of volatile and non-volatile halogenated hydrocarbons, and for gasoline constitutents and additives.

uated in terms of the potential threat to water supply aquifers and assessment of available remedial strategies. Investigation should then proceed to other lanfills with similar characteristics to those found initially to present a problem.

The initial investigation should proceed under a special State appropriation with priority assigned to those localities dependent on groundwater sources of public water supply.

Federal legislation should be encouraged to authorize such investigations and appropriate necessary funds for the implementation including reimbursement to the State for prior work accomplished. An amendment to the RECRA appears to be an appropriate approach for such federal legislation.

Where remedial action is required for in-place toxics, the responsibility for corrective action should first be sought from the dumper on a volunatary basis. Tailing this effort, liability of the perpretrator for remedial measures should be southt in courts of competent jurisdication.

As a last resort, funding should be provided by

federal legislation which should also authorize necessary investigative and remedial actions to properly treat and dispose of hazaradous wastes uncovered.

We do not recommend the taxing of entire industry segments today for the failures of their predecessors. There is a need however, to quickly develop the methodologies and administrative controls to prevent the creation of future problems of in-place toxics which of itself will sufficiently tax the industry of today.

tered concern on landfills. Planned programs should however include other repositories of toxic chemicals such as stream beds, ponds, lagoons, and groundwater segments. In Nassau County toxic inorganic and organic chemicals have reached the groundwater essentially in much the same manner as other toxic chemicals have found their way into landfills.

Collectively, 33 MGD of pumping capacity of public wells have been lost to use because of water quality standards which are exceeded. Analysis of trends indicates that 64 MGD of capa-

city will eventually be lost. The loss represents 17 percent of our total pumping capacity.

A quality profile of our groundwater has essentially been completed. A detailed assessment of contaminated segments needs to be conducted involving hydrogeological modeling, development and evaluation of alternatives and selection of the most cost-effective solution for groundwater management.

Investigative and remedial measures should be funded in the same manner as for inplace toxics buried in landfills.

A final issue is the prevention of the problem of toxic wastes intruding into our environment and threatening human health. The basic choices are the use of "secure" landfills or destructive incineration. We do not espouse either as the automatic solution.

Instead, we believe that each hazardous waste should be evaluated in terms of the most
effective manner to neutralize or destroy its
deletious properties which would include chemical
treatment, encapsulation, and incineration.

Where present technology prohibits any

. 12

feasible solution for a specific waste, then burial in a secure landfill is considered appropriate provided that the site is protected, designed to prevent leaching or other excursion, and monitored indefinitely.

Conditions of the permit for any site may provide for options on the part of the State to later require removal of specific wastes from the burial site when the technological state-of-the-art improves to the point where alternative solutions are acceptable.

The following actions are recommended on the part of the State Legislature and the State Administration:

- 1. State monetary assistance provided to local health departments be revised to fund at least 50 percent of total local programs, including fringe benefits, and that local revenue from other sources including federal grants and service fees be considered part of the local share of program costs. Inequities in the present finding formula should be investigated and corrected.
- 2. The cesspool cleaner ban now being considered by the State Legislature be adopted with

with provisions to authorize other consumer products to be added to those banned by the Commissioner of Environmental Conservation.

- 3. The State DOT be required to improve its administration of the Oil Spill Compensation Fund to permit more expeditious and effective resolution of each spill to include adequate staffing of regional offices, standardized procedures, criteria for clean-up, and a more forceful approach toward perpetrators of spills.
- 4. A program to investigate and correct potential risks from in-place toxics in land-fills and groundwater segments should be initiated state-wide by legislative action and appropriations with priority for implementation assigned to areas dependent on groundwater as sole source of drinking water.
- 5. A state-wide program should be authorized and funded by legislative action to assure the safe disposal of toxic chemicals as described heretofore and other hazardous wastes to be administered by the State DEC.
- 6. A state-wide program should be adopted by the State Legislature for the purpose

of controlling hazardous substances which are not wastes to protect human health and prevent environmental degradation.

That concludes my statement for the Nassau County Department of Health.

Would you want me to continue with the other statement?

SENATOR DALY: Just sum it up for us.

MR. PADAR: The other statement is on behalf of the Conference of Directors of Environ-mental Health Services of New York State, which represents the directors of environmental health of 25 local health departments in the State as well as 10 districts of the health department.

at least, implement environmental health programs of the State Health Department as well as environmental quality programs of the State Department of Environment Conservation.

We feel uniquely qualified to address both the technical and administrative aspects of control of hazardous substances by virtue of our individual experiences in coping with such problems on a day-to-day basis and on the basis of our

colletive interest which was thoroughly reviewed in a three day meeting of our conference last October and further refined in a recent survey of our members.

I will not discuss the technical recommendations because they're in the report and they are fairly similar to the Nassau recommendations.

But I would like to summarize the administrative aspects.

CHAIRMAN GRANNIS: Further summarize to the extent they're not duplicated in your first statement. We can understand the record.

Your statement will be reflected in the full-record of the hearing, so if it's not read, it still will be in the hearing.

MR. PADAR: On behalf of the Conference of Directors of Environmental Health Services of New York State, I welcome the opportunity to appear before this joint Senate and Assembly Committees on Environment, Toxic Wastes, and Hazardous Substances, which is commended for seeking authoritative viewpoints and recommendations on a vital issue to the health of the residents of New York.

20.

tors of Environmental Health of 25 local health departments in the State as well as 10 Districts of the State Health Department. Collectively, we implement environmental health programs of the State Health Department as well as environmental quality programs of the State Department of Environmental Conservation.

We feel uniquely qualified to address both the technical and administrative aspects of control of hazardous substances by virtue of our individual experiences in coping with such problems on a day-to-day basis and on the basis of our collective interest which was thoroughly reviewed in a three-day meeting of our Conference last October, and further refined in a recent survey of our members.

Our assessment of the adequacy of present federal, State, and local response to environmental emergencies is that there have been sufficient episodes of a variety of types in New York to warrant a more formally structured approach to future incidents to coordinate State and local efforts under the leadership of the State

Departments of Health and of Environmental Conservation.

Our Conference has made a formal recommendation to both State agencies to jointly develop
appropriate reference material as well as to develop standard operating procedures for all types
of spills and excursions.

while disemination of available information and better coordinated approaches will allow more efficient use of available expertise and resources, there remains a basic overall lack of sufficient staff and supporting services to provide the minimum essential environmental services to the people of New York. Consequently, the repeated mobilization of resources to cope with one emergency after another at both the State and local level saps the strength and dilutes the response to basic preventive programs with the net result that the potential is increasing for more frequent and serious environmental excursions in the future.

This condition is graphically demonstrated by the relentless reduction in local assistance "matching grant" funding by the State of local health departments in recent years which is

a good measure of the trend in size of local health department programs.

In 1974, the State provided \$98 million which gradually dwindled to \$65 million in
1977. The current allocation is \$66.7 million.
The decreasing trend is dramatized by the impact
of inflation of approximately 10 percent per year.

The reduction in capability of local programs in the area of environmental control has been reduced even more dramatically than the overall local public health services. Environmental health services are primarily regulatory while personal health services offer diagnostic and rehabilitative services mostly to the economically depressed and the chronically ill.

There is an inherent resistance to regulation by society and an aversion by governments at all levels to subsidize programs which will arouse significant segments of their constituency. Unless and until a problem reaches crisis proportions, regulatory programs do not fare well in competition for the budget dollar.

The problem of inadequate staffing is further compounded by the increase in mandated pro-

grams which local health departments are required to implement as a consequence of comprehensive federal legislation, such as the Safe Drinking Water Act and the Clean Water Act as well as State legislation, such as the Environmental Quality Review Act and the Uniform Procedures Act.

The net result is an increasing failure to perform the basic corrective and preventive programs due simply to the lack of adequate resources.

The severe reduction in environmental budgets of local health departments is paralleled in areas of the State where no local health department exists. There, the delivery of environmental services is provided directly by the State which bears the full costs with a traditionally lower level of services.

The State Departments of Health and Environmental Conservation also assume responsibility for environmental control programs in those areas where the locality has abdicated their commitment to perform this work in one program or another. Here too, the level of services decline.

Local environmental directors and their

staffs are, nevertheless, extremely dedicated to the correction of local environmental problems and responsive to the total community of which they are a part. Their academic qualifications are equal to those in the State agencies and their experience in program implementation exceeds that of Central office personnel who are more atuned to remote administrative functions. The critical need then is to encourage the growth of environmental health programs in local health departments.

This can be accomplished by increasing the funding by the State of local health departments' programs, in environmental control through raising the percentage of State Assistance, by crediting service fees collected to the local share of costs, by including fringe benefits as part of the total local program cost in applying the State Assistance, and by eliminating inequities in the system.

Concurrently the State agencies should also augment their environmental services in areas of the State with no local health departments and to provide those services which local health departments are mandated to perform. Revenue to support

-

such services can be generated by assessing those localities with the same share of costs which are borne by taxpayers in areas served by local health departments.

Unless the pump is primed, we will see a further progressive decrease in ability to provide essential environmental services and open the door to more and more toxic emergencies.

The fault will clearly lie with the State Administration and with the legislature.

Increase in funding of local programs by the State is a bargain up to 100 percent of the cost of such services, recognizing that the responsibility inherently belongs to the State.

administrative problems relating to in-place toxics as well as the control of new sources of hazardous substances, will need the combined resources of federal, State, and local governments and a greater commitment by industry.

There is a general recognition that
the federal government will have to bear the brunt
of both designing and subsidizing the overall program to investigate and remedy the problem of in-

place toxic wastes. It is equally apparent that the substantial lead time required to adopt and implement federal legislation mitigates against an early response to the problem. It is therefore recommended that the State adopt legislation and appropriate the needed funds to enable an interim investigation and resolution of the potentially more critical sites. Such sites should not be limited to repositories of buried chemicals but include all conventional as well as special landfills and contaminated environments such as stream beds, groundwater segments and lagoons.

tigation and classification of such "hot spots" is a systematic assessment of adverse quality impairment of adjacent air, land, and water segments, and a thorough search for available information on the nature and quantities of substances initially disposed, which will enable an evaluation of potential risk and the assignment of priority for the remedial action required. The corrective action where indicated may take the form of excavating and safely disposing of the hazardous wastes in one extreme to merely a monitoring program at the other

7.

extreme.

The overall responsibility for the program should be assigned to the Department of Environmental Conservation with responsibility also provided to the State Health Department to decide on priorities and to establish the limiting criteria for environmental quality for the protection of human health.

Whenever possible, the direct supervision of site investigation and development of recommended remdial work, should be performed by local health departments which demonstrate capability and expertise to perform the task.

These agencies should be fully funded for the effort expended. The use of State teams recruited for the program or consulting firms will not be cost-effective being less efficient and slow in performing the task.

The monies for the program, both interim by the State and long-range by the federal
government, should be provided by legislative appropriation with provisions for replenishing the
fund in those instances where the original dumper
or the owner of the property accepts responsiblity

or is forced to accept liability by litigation.

Provisions of federal law should reimburse the State for interim work performed.

The control of toxic wastes which are generated now and in the future involves a more conventional administrative approach but difficult decisions on technical approaches. Here too, as for in-place toxics, a combined federal, state, and local effort is indicated.

The regulation of the treatment and disposal of hazardous wastes is already in process through current provisions of the Safe Drinking Water Act and the proposed regulations of both the Resource Conservation and Recovery Act (RECRA) and the Toxic Substance Control Act (TOSCA). It is appropriate that criteria and compliance schedules be adopted on a national level to prevent competition among the States for relocation of industrial plants.

The indicated State function at this time is to address the current provisions of Section 360 of the Environmental Conservation Law which permits the disposal of hazardous wastes in "secure" burial sites. While the concept of se-

of Part 360 are of recent origin.

Canal, are technically viable with some degree of risk which can be offset to a large extent by an accurate record of materials buried, careful controls to segregate antagonistic materials, marking of site contents, fencing and security of the site, perpetual maintenance, and continuous monitoring to assure site integrity and to permit an early alert in event of excursions from the site.

There are nevertheless the costs to consider, the sacrifice of the land which can be otherwise put to more beneficial use, and the relegation to our progeny of the spoils of our generation with attendant health risks.

The alternative is to seek, where costs are not prohibitive, the safe neutralization or destruction of hazardous wastes. In many cases such solutions are technically feasible and reasonable in cost particularly when compared with the cost of perpetual control of a burial site. In such cases the short term solution is most appropriate.

It should be understood too, that the disposal of toxic wastes removed from in-place toxic waste repositories, would also have to be addressed using the criteria for new wastes.

There is another aspect of the problem which needs to be addressed--the control of
substances which are hazardous but not wastes and
not necessarily toxic in their impact on human
health or the environment. Gasoline, explosives,
and a host of other products of our society are an
obviously serious threat when not properly controlled.

Legislation is needed to authorize regulation of safe generation, processing, storage, transportation, and use of hazardous substances.

Oil spill control legislation, certain provisions of the State Conservation Law, as well as other legislation addressing individual substances, tackle these problems piecemeal but they are insufficient to effectively regulate the overall threat.

Our Conference membership was virtually unanimous in recommending such legislation.

Ideally the federal government should develop and promulgate a broad control strategy in

this area. State legislation should however be enacted in the interim to authorize the State Conservation Department to adopt regulations as they are indicated to control such hazardous substances

In summary, then, the response to existing hazardous waste and the prevention of future threats will require a substantial infusion of State monies to implement present and future programs. Enabling legislation and the appropriation of adequate funds is needed at both federal and State levels to cope effectively with existing repositories of toxic wastes.

The treatment and disposal of toxic wastes generated now will ultimately be effectively regulated by federal programs by a need existing in New York for interim decisions on safe disposal methods. Regulation of hazardous substances which are not wastes should be promulgated by the State in the absence of current federal interest.

The leaders of environmental control programs at the grass roots in New York are prepared to implement the environmental legislative mandates of the U.S. Congress and the State Legislature. They need only authority to act and the

resources to accomplish the mission.

CHAIRMAN GRANNIS: If you would, just highlight the recommendations from this group.

MR. PADAR: I might highlight it in this fashion.

In those health departments similar to the Nassau County Health Department, the problems I outlined in terms of support and of funding apply. In addition to that, the ten areas—the ten district offices of the State where there are no health departments, these environmental services are provided directly by the State health department and the State Department of Environmental Conservation.

The level of services in those areas is even less than in organized State health departments.

But a third category is the problem of where a local health department, for example, declines any further responsibility for handling a particular program via be it the State health department or DEC.

At that point, the State agencies have to, by law, take over the function and thereto, the

indication is that the level of services has de-

CHAIRMAN GRANNIS: Do you have a specific example of where that might apply?

MR. PADAR: I understand New York City abandoned their air pollution control program.

CHAIRMAN GRANNIS: We have proposed having it taken over by the State, but not any longer.

MR. PADAR: I know pieces of the program have been eliminated, some in Erie County and some in Sullivan County.

Of who was going to run the question in New York
State and New York City. They found out that by
terminating the program, however, they would lose
substantial federal aid.

Do you have any other examples?

MR. PADAR: I know some pieces of the program were dropped in an area--I forget the name of the county. I thought it was Sullivan, but I'm not sure.

So that type of thing does occur.

CHAIRMAN GRANNIS: If you could find

out where those specific examples occurred, it would help, so we're dealing with specifics. It makes it easier for us.

SENATOR DALY: While you're doing that

I would appreciate if you would present to us, if

you would be so kind, any ideas in writing, where

we can avoide duplication. I'm talking about duplication of government, performing the necessary acts

of government, to get the hazardous waste problem

under control.

If you would give some thought to that, give us some of your ideas down the line as to what you think that the county should be doing and what you think the State should be doing, this would be appreciated.

Might I say, your testimony is very complete and thorough and we thank you for it.

ASSEMBLYMAN YEVOLI: Just one question.

I don't want to turn this into an adversary proceeding.

There has to be accuracy of the statements in terms of the record.

The one I must disagree with was made on the first page. That reads, "In 1976 we dis-

covered contamination of our aquifers by synthetic organic chemicals which are suspected human carcinogens."

You know, I was actively involved in this. The discovery was not made by the Nassau County Department of Health. They knew it existed for a two-year period and failed to take any action whatsoever.

nothing which you proposed at that point and at least you are now considering monitoring all the wells and there seems to be a different attitude based on the statement you made here today. Hopefully, that is true.

But in terms of the accuracy of the statement that was made on the first page, it is inaccurate. In fact, your commissioner of health stood before an assembly health committee and said, in terms of vinyl chloride, he knew it couldn't be breathed into the human system and he knew it couldn't be absorbed through food. But he wasn't so sure if it was contained in the water supply that there would be any danger whatsoever. That is the accurate statement.

MR. PADAR: I agree with you people.

I thought that was a long since resolved issue and
I don't want to take public issue with you on that
problem.

I think--

ASSEMBLYMAN YEVOLI: You can't delude the members of this Committee into thinking that the Nassau County Department of Health was in the forefront of that particular situation when, in fact, that was not the case.

MR. PADAR: I don't think that's a true statement. I'm not going to take the time to dispute it, at this time.

ASSEMBLYMAN YEVOLI: One further recommendation I would make.

Nassau County. You have many others. There have been numerous proposals you have made here today and I have to say this in all candor. In the years since we encountered that situation, I have never heard from the Nassau County Department of Health in terms of any recommendations for any legislation or in terms of any recommendations for any funding that could be provided.

I'll tell you quite frankly, when we go before the New York State Legislature and we meet with the leaders and the various individuals who are involved and we seek funding for programs, it becomes essential that our local officials and our local departments of health back up our position.

So if in fact what is presented here this morning is accurate, and we do sincerely feel that way, we would like letters from you indicating support of the various programs, particularly those for funding we are seeking in the Legislature. It would be quite helpful.

MR. PADAR: We'd be happy to provide it.

Let me just say one thing, that the problem of encountering synthetic organic chemicals in the groundwater a few years ago, illustrates the kind of problem we have. We're going to find other problems tomorrow.

We don't have enough staff to marshall the appropriate group to efficiently and expertly and quickly identify and resolve the problem and the reason is, that we don't have enough resources,

and the reason for that is we don't have enough support from the federal, state and from the local government.

I think that the primary problem with toxic substances—and this is reflected throughout the State—we had a three day meeting about this, of all the directors, of the primary problem, is that local resources where the action is are too thin. We have not been able to afford or have not had the commitment to beef up that program enough if those problems could be resolved, identified and resolved.

SENATOR DALY: Thank you, Mr. Padar.

Our next witness is Mildred Langone.

Ms. Langone represents the Pure Waters
Association.

MS. LANGONE: PureWater Association of Nassau County.

SENATOR DALY: Thank you for taking the time to come before us today.

MS. LANGONE: Thank you for the opportunity of being here.

As a registered professional nurse, and a mother of four, I regard the addition of

fluoride to drinking water to be a threat to my children and their children, and, a large part of our population problem.

What can be more important than this most precious commodity, water, which already contains so many pollutents that special tests have to be made to determine the nature of some of them.

If that is not enough, we actually have added to a large part of the country another highly toxic chemical that could not even be used in World Ware I as a poisonous gas because it could not be contained in glass and most metals for more than a few hours.

Since fluoride is a highly active element which readily displaces and combines with other elements in water to form new and potentially harmful compounds, it would seem logical to keep it out and avoid that part of our problem. So little is known about the effects of these new compounds.

People who live in fluoridated areas
may well exceed the lppm. set as the recommended
dose and may actually exhibit symptoms of fluorisis.

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Since we can inhale the substance and absorb it through our mucous membranes, levels can also exceed the toxic dose to certain sensitive individuals without even ingesting it.

According to an official Canadian report the average adult intake of fluoride from food and beverages, including lppm fluoridated drinking water, is between 3.5 and 5.5 mg/day. Not included in this estimate is the additional intake from air, cigarettes, dentifrices, mouth wash and pharmaceuticals.

They point out that there are those in the population at risk even at exposure levels currently regarded by health officials as perfectly safe. These include:

Individuals in poor health or with sub-optimal nutrition, especially with respect to calcium and magnesium.

Can I interrupt you? Please speak up and when you're reading you read very quickly. You make it hard for the stenographer and you make it hard for us to under-So please speak a little more slowly and stand. loudly and it would be helpful.

EN.DE REPORTING SERVICES, LTD.

CHAIRMAN GRANNIS:

	5
	6
	7
	8
	9
1	O
1	1
1	2
1	3
1	4
1	5
1	
1	
1	8
1	9
2	C
2	1
2	2
2	
2	
2	
-	,

2

3

MS. LANGONE: I'm not used to this. This is my first time.

SENATOR DALY: You're doing well.

MS. LANGONE: 2. Persons residing near or working in fluoride polluting industries.

- People living in regions where goiter is endemic.
- Persons with kidney impairment and related disorders.
- Individuals who drink excessive amounts of fluoridated water.

Clearly the hazards referred to affects millions of people.

Those in the population who cannot tolerate this substance must be penalized for the privilege of drinking fluoride free water by purchasing and carrying tax supported bottled wherever they go--all in the name of public health.

The main function of the Health Department is to protect the welfare of each and every individual.

Is it my welfare they are protecting?or the welfare of patients on kidney machines who
are being treated now in hospitals using deionized

_

water because of deaths related to fluoride poisoning. Even in surprisingly small amounts, long term intake of fluoride, especially with kidney impairment, and produce deleterious changes in blood, kidneys, liver, spleen, nerves and other organs of the body, besides bones and teeth where it continually accumulates cause alterations in structure and composition.

Perhaps it is the welfare of the aged in whom there is noted bone fragility and spontaneous fractures which occur with increasing frequency.

It might be for the welfare of allergic and hyperactive children, who, because of its low molecular structure fluoride finds its way into the very tissues thereby adversely effecting this sensitive part of the population.

Or is it the welfare of supposedly well people, according to Dr. Moolenburgh or Holland, who states that side ffects range from dull to rather severe—sometimes colicky pains in the stomach—sores in the mouth—very painful white lesions—headache, excessive thirst (only to ingest the poison in greater amounts), also, burning sen-

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

sation when passing urine, trouble in ment concentration.

With greater exposure to fluoride,
there was noted arthritic like pains. The complaints in many cases were so general you could not
recognize (as in the case of some practitioners who
refused to recognize) it as fluoride poisoning.
There was dyspnea, asthma, allergic skin rash,
urinary irritation, and spastic colon.

Or is it for the welfare of babies, a group for which leading denal authorities of the ADA are now showing concern. They feel fluoride supplementation is unnecessary or actually excessive, and that they may, in fact, be receiving adequate levels from food and formula. tend, "responsible debate should be welcomed when data on a specific subject are open to criticism for any valid reason. Such debate requires us to reassess our present knowledge of a particular subject and helps us to determine what additional research is needed. Without the evaluation of this knowledge, the individual practitioner cannot make informed decisions for the best clinical management of his patients."

7 8

Or, was it for William Kennerly, a three year old boy in Brooklyn, who depended on the judgment of his parents and dentist to care for his wellbeing, but, who died in a city clinic as a result of a routine cleaning. He was not given a toxic dose, he just had the misfortune to swallow it. For this, the family was awarded \$750,000.

I used to think the job of public health was to protect the people from toxic chemicals such as this instead of promoting them.

The rhetoric is not reassuring. We are causing damage to the environment and food chain we can ill afford--and, for some, the damage will never be repaired.

I do not think that in a free society that we should use the water supply as a vehicle to medicate, for a lifetime, with total disregard to biologic individuality, intolerances that exist, with any substance, diseases for which fluoride is contra-indicated, and to different environment factors causing humans to consume quite different amounts of fluoride.

In addition, it is prescribing without consent when there are rational alternatives. I do

not object to the availability for those who wish to use it, but there should be a freedom of choice for those who do not. And a choice denied is a right denied.

We must admit the fluoride question is at least, debatable, and, very much, not the closed issue the proponents would have you believe it is.

When doctor disagree, is it not the rational approach to stop the further contamination of our environment with a corrosive element which has never been proven safe, and which has caused inestimaable damage to the environment.

For this, the taxpayer was beset with the double burden of added revenue and ill health for themselves and for future generations of Americans yet unborn.

Thank you for this opportunity.

SENATOR DALY: Thank you very much,
ma'am.

Carol O'Berine, president of the Malverne Environmental Council and Nassau District PTA Ecology Chairman.

Is Ms. O'Berine in the room?

Well, then, we'll go to Father William

Brisotti, Priests' Councils of New York State on Jusitce and Peace Committee.

FATHER BRISOTTI: I am here to represent the interest and concern of the Justice and Peace Committee of the Priests' Councils of New York State. This group consists of representatives of priests' councils of the eight dioceses of the State, Rockville Centre, Brooklyn, New York, Albany, Syracuse, Ogdensberg, Rochester and Buffalo.

One of the projects of this standing committee for the past few years has been the organization of a network of priests from every state assembly and senatorial district. Its purpose is to convey to the legislators in Albany the pastoral concern of the committee about certain issues.

The New York State Catholic Committee helps the Justice and Peace Committee of the Priests Councils of New York by providing information concerning issues and bills in Albany as requested.

One of the issues chosen this year for our network is legislation on land use and management. I am providing copies of our short background statement on the subject. Allow me to quote briefly

a few sections which are pertinent to toxic waste control.

"Public policies on land use affect the quality or potential for life. People are suffering physical disability and economic hardship, such as devaluation of property, due to inadequate management of toxic chemical and radioactive wastes and other industrial pollution.

"The right to ownership and use of the land is always subordinate to the 'common good'.

"It is a further right of public authority to guard against any misuse of private property which injures the common good. By it's very nature private property has a social quality deriving from the law of the communal purpose of earthly goods.

"Private property does not constitute for anyone an absolute and unconditional right.

"Our leadership in land use must reflect our recognition of the 'global village' within which we live, God's earth which we share interdependently with billions of other people. We must work for the 'common good' which includes preserving and, if possible, improving the environment

for those now defenseless generations who will come after us.

"Deterioration of the environment leads to diminished potential for human life and the dignity accorded to human persons. It is unjust.

"Environmental consciousness is not anti-progress; it simply affirms that the basis of any real progress must be the survival of the people whom this progress is to benefit. Their survival depends on the maintaining of the environment.

"Cost benefit--whose cost and whose benefit?

"Conflicts must be settled through the legal process: legislation and enforcement.

"Rights to a legitimate profit versus responsibility for the common good;

"Governance by regulation is often necessary to preserve the principle of participatory government.

"The social justice teaching of the Church must be part of the crucial debates on land use, as we seek to fashion a new relationship with-

in the human community in which people can live together justly and productively, within the natural environment which sustains us."

I would just like to add, just in listening to all the various testimonies and the different kinds of statements about the various types of chemicals, various types of radioactive waste, which is, of course, becoming an issue. It is an issue as far as Brookhaven is concerned and Long Island and will become a greater issue as far as Shoreham and possibly Jamesport.

Basically, we're dealing with human fallbility. The decisions we make today, the results, if we made mistakes in our decisions and judgments which we're dealing, the result can be catastrophic.

I heard a question before, how much risk will the public tolerate as far as toxic chemicals. Well, if someone will tolerate my pointing a gun at his head and pulling the trigger, it is stillimmoral for me to do that, because I have to answer to a higher law.

So we're not dealing with that which the people will tolerate and what is being done to

educate and to deal with the people who perhaps are not able to come to such a hearing as this, are not articulate enough, are not perhaps powerful enough to be listened to in our State, and most importantly, the risk as far as dealing with radioactive waste and chemical waste, we're talking about sustaining environment which we will be handing to our children.

We're talking about something, now, which has great consequences for people who cannot be heard from now.

How can they be educated or polled on what they will have to do to live in this world which we'll be handing on to them, and I just want to, as I say, the whole purpose of my being here, is to express the concern of my portion of the religious community of this State on the issue of toxic waste management in the State of New York.

I'm happy to be here.

Thank you.

SENATOR DALY: Thank you, Father, very much.

ASSEMBLYMAN ZAGAME: I think we have tried to grapple with the issue you have raised

Father.

about private responsibility and public responsibility with this bond issue that's been put together, which would raise 150 million dollars and then assess the cost of paying for those bonds on the industries which generate chemical waste.

If this issue is passed by the Legislature, it goes to the voters for their approval
this fall and groups such as yours would be critical in determining whether or not the public reception of the problem is serious enough to warrant voting for the expenditure of that kind of
money.

So I hope you'll be watching carefully for this bond issue, if it does get on the
ballot this fall, and really get behind it because
that would give it a tremendous push.

FATHER BRISOTTI: How would I get the precise information?

ASSEMBLYMAN ZAGAME: I have your address here and I'll see you get it.

FATHER BRISOTTI: Thank you very much. SENATOR DALY: Thank you very much,

Our next two speakers will be Mr.

Richard Budd of Atlanta, Georgia, president of Jancyn Manufacturing Corporation, to be followed by Evelyn Hannan of the Merrick Environmental Council.

First, we have Mr. Budd, the president of the Jancyn Manufacturing Corporation, which has been mentioned before today.

Mr. Budd, we're delighted you would take the time to come all the way from Atlanta to be with us.

MR. BUDD: Thank you. I felt it was quite important for me to be here.

Mr. Chairman and members of the Com-

I am here today with mixed feelings-appreciation for the opportunity to speak to you
directly and frustration over having been condemned in the past with no opportunity to present
my side of the story. I do hope we will be able
to correct the situation and to leave you with a
balanced view of the facts.

Let me begin by observing that a panic psychology has overtaken many of the people of New York--and of other parts of the country.

It is a case in which all chemicals are suspect in the public mind as being carcinogens regardless of the facts. Indeed, proof is no longer needed. All that is required to start the legal chain moving is an accusation.

Compare this situation with the events in Iran and Cambodia where individuals are able to eliminate competitors of people they don't like merely by accusing them of being enemies of the state.

In our case, the results are not so drastic. People don't get killed. All that happens is that small companies are wiped out or products badly crippled or not surviving after being vindicated.

This is precisely what is happening in the case of Jancyn Manufacturing Corporation, my small company. Jancyn has developed and is presently marketing a highly effective cesspool degreaser, called DRAINZ.

Since its introduction, this product has enjoyed an excellent reputation on Long Island where many cesspools and septic tanks are located.

Introduced into the cesspool via the

plumbing system, DRAINZ penetrates the solid grease barrier that prevents liquids from escaping the cesspool to be filtered through the earth and return in purified form to the groundwater supply.

About a year ago, DRAINZ was accused of introducing carcinogens into the Long Island groundwater. Paying absolutely no attention to evidence to the contrary, the authorities began what amounted to a witch hunt against my company.

None of the charges or legal submissions have carried the accusation that the product is carcinogenic, however.

In the best James Bond tradition, investigators literally sneaked around the back of
my facilities, then located on Long Island, taking
pictures and trying to find evidence that we were
illegally dumping chemicals into the ground.

They went to this trouble, despite the fact that I had invited them to come in through the front door at a time or times of their own choosing, and without advance notice. They ignored this invitation, I guess, because it was more fun to spy on us the other way.

One result of these activities has

been the introduction of legislation that would in effect prohibit the use of DRAINZ as it is present ly constituted. This proposed legislation was drawn up without any input from me or anyone representing me.

In its present state, it is ill-advised and could have a far-reaching negative impact upon those people of New York who must rely
on cesspools for sanitary waste disposal.

Before going into the merits of my case, permit me to briefly describe how a cesspool works and what it does. Basically, when waste enters the cesspool, the liquids seep out into the soil and are filtered and purified as they return to the water table. The solids theoretically are supposed to decompose through bacterial action and restore nutrients to the soil.

In actual practice this does not work as well as it should. The draining process stops.

In effect, cesspools help nature to recycle and to purify waste products when they operate properly. Functioning properly, then, they are much more desireable than sewer systems which spew waste into the ocean.

However, fats, grease and other solids enter the system no matter how careful a homeowner might be. These fats solidify and eventually seal the openings through which the waste liquids usually pass.

When that happens, the cesspool fills up, creating a critical sanitation problem and a growing economic burden on the homeowner. Under present conditions of high costs of sewer construction and waste treatment, cesspools might be the most economical answer.

DRAINZ has been proven to be an effective means of penetrating that solid barrier and of allowing the cesspool to return to its normal operation. However, two chemicals that were used in the product-trichloroethane and methylene chloride have had two serious charges levelled at them.

First, it is claimed that they are toxic and are carcinogens; and second, that when used by consumers they find their way into the groundwater, thereby polluting it.

We refer you to results of research performed by Dow Chemical Company which states,

"Evaluation of results after 24 months of inhalation studies with rats underway at Dow Chemical U.S.A. indicates that 1,1,1-trichloroethane and methylene chloride do not produce cancer.

"Furthermore, this research shows no indications that long-term repeated exposure at currently accepted levels may be hazardous to man.

"These conclusions highlight Dow interim reports which have been given to the National Cancer Institute, the National Institute of
Occupational Safety and Health, and the National
Institute of Environmental Health Sciences."

What do the agencies of New York State offer to contradict these tests?

Dow added that the quantities of vapor inhaled far exceeded amounts that could be ingested in water.

To our knowledge, these results have not been given any consideration by the legislature of the Attorney General of New York.

As for allegations that groundwater has been contaminated by cesspool degreasers containing these chemicals, we offer the following in rebuttal:

It is true that 1,1,1-trichoroethane has been found in selective wells in heavily industrialized areas of Long Island. It is also true that this chemical is very heavily used by industry, including the huge Grumman Aircraft works. It is our contention that the 1,1,1 which has been found originates in industry. It is, and has been, a popular chemical for degreasing vats and for production parts cleaning.

This contention is supported by the fact that DRAINZ, the leading cesspool degreaser on Long Island contains both 1,1,1 and methylene chloride.

However, methylene chloride does not appear in any of the wells in which 1,1,1 is found. It would require considerable stretching of the imagination to make a case against a product containing two ingredients where one of the ingredients does not shop up at all in contaminated water.

Further, according to the New York
Times of May 6, 1978, the Federally financed 208
report says that leakage from cesspools in the
208 district drinking water is drawn because of

impermeable layers of clay.

These factors have also been totally ignored by proponents of the ban.

At this point, let us state that because 1,1,1-trichloroethane has been found in groundwater, and despite the fact that contamination results from industrial usage rather than the use of DRAINZ, Jancyn Manufacturing Company has voluntarily removed that chemical from its formulation.

However, it maintains that methylene chloride is not a contaminant and should remain in the formula.

If this proposed ban is permitted to be enacted, the economic and health impact on the people of Long Island and other parts of New York State could be immense. Proponents of the ban suggest three alternatives to the use of DRAINZ in treating clogged cesspools:

- (a) Pumping, and I might add, acceleration of the heavy use of sulphuric acid,
 - (b) Hydrofacture
- (c) Greater care in disposing of fats and greases through the plumbing system.

All three alternative are impractical.

Here is why:

Pumping will empty the cesspool, but it will not clear away the problem of solidified grease inhibiting the normal functioning of the cesspool. Thus, pumping would have to be conducted on a regular basis—usually several times a month at a cost of \$80 to over \$100 per "treatment."

As a consequence of puming, draining eventually stops entirely as coagulation increases creating a "sealed container" which must be pumped several times a week. In addition, pumping would create another problem--waste disposal.

Waste treatment facilities on Long
Island are already straining. In Suffolk County
they are overloaded. To add to the problem by
pumping out thousands of gallons of toxic waste
water could produce a serious health hazard.

If pumping was the answer, and waste disposal was adequate, and did not also create heavy economic burdens, then logic would then dictate that each home have a holding tank for removal of waste three times a week.

Normally accompanying pumping is the dumping of huge quantities of sulphuric acid into the cesspool to dissolve the solid grease and soap curd. This also creates a hazard.

One of the side effects of this extremely corrosive acid is that it eats away at
the cesspool itself. We can point to hundreds of
collapsed cesspools every year resulting from
heavy use of acid.

Anyone who has seen what a collapsed cesspool can do to a lawn will understand the apprehension for the safety of children, women and men who may be on the lawn at the time of a collapse.

Moreover, no one knows what happens to the acid after it enters the ground. Could it not be polluting drinking water. There is no evidence or substantiation that sulphuric acid does not have a deleterious effect on the drinking water either in its original state or under conversion. The effects of sulphur on the environment is well known.

For the second "solution" a method of "hydrofracture" was offered to the legislature.

In all my years in this industry, I have never heard of an air injection method that was practical or effective.

Might I suggest you pack heavy sludge in the bottom of an open cup compressed tightly against the ground. Bubble the sludge by injecting air through a straw. The sludge will settle down and seal ground pores again. The new waste entering the cup, or the cesspool, at a fast rate will surely overcome any possibility of small seepage, and the cup will overflow. A highly unknown and unproven technique, this cannot be considered viable.

The final suggestion--care in disposing of greases--is ludicrous on the face of it. True, pouring grease into the plumbing system will hasten the clogging of a cesspool, but the clogging will take place no matter how careful a homeowner may be.

This is not a solution. Solid particles even under the most careful methods of disposals, will eventually coagulate the ground and
seal it.

We believe that all factors be con-EN-DE REPORTING SERVICES, LTD.

sidered by legislators before they come to a decision on the legislation which is pending. We believe that we have a strong case against such legislation on the grounds that the products referred to will not contaminate the water supply, that they are not carcinogens or toxic, and the imposition of the ban would impose an onerous economic and sanitation burden on the people of New York.

That's the end of my statement and I thank you. I'll answer questions, if you want.

ASSEMBLYMAN YEVOLI: The only statement I would make--I'm sorry I was out of the
room. I presume you're Mr. Budd.

MR. BUDD: Yes.

ASSEMBLYMAN YEVOLI: This legislation came about at the recommendation of the local department of health and department of environmental conversation, the New York State Department of Environmental Conservation and the Attorney General's office.

There was a great deal of expertise on the last day before this legislation was even proposed and I would really have grave reservations

that all of these individuals involved, all the departments, all the doctors and all of the hydrol ogists and I can go on and on and on. This was not hastily drawn legislation. An awful lot of thought was given to it. Everyone involved was contacted. This was the consensus of opinion. It was unaminous that this legislation would be adopted into law.

I understand why you stand here and say it would have a deleterious effect. I can't accept that, not based on the evidence given to us by all of the departments I have discussed.

MR. BUDD: I wouldn't want to debate the thing here, but I would say, in answer to that, I was selected out on this and it happened to be for some reason that I was not given substantiation.

As a matter of fact, pending judgment to be made as of today by a judge on whether or not my product would be removed from the shelf or not removed from the shelf. The Attorney General has not given me substantiation prior to the legislation being written. You might have it, but I don't. The case will be judged on its merits in

the future.

what you said. I contend this is not substantiation. I contend, also, that the individual, if you will, or selected wells that were involved in the situation are contaminated, which I'm freely willing to admit. I do not feel that I, per se, should have been selected and I understand I was given the distinction of going to the Legislature as a product name with Mr. Middleton, in clear view of newspapers and the mention of my product name on a continuous basis, without, again, any substantiation any time in court or any real documentation that I know of, at this point.

I might also say the documentation and the test of availability, I'll present at the proper time from Dow Chemical Company will also include to show you what my particular viewpoint is, that the two chemicals being charged by the Attorney General, one of them is used in the food industry. This is sold by major manufacturers, methylene chloride, I'm specifically referring to. The Attorney General ignores this particular piece of evidence, if you will. This has never been and

I don't know if it's available to the Legislature as being knowledgeable and known. Methylene chloride is used in the decafinating of coffee, for vitamin pill capsule encasements and it's used for extraction of oils from herbs and spices and whatnot. There's a long list of uses where this particular chemical is used.

Shall I not say those little things we eat that we have a popular two names for, little candy things with a casing. They're used to case the candy. You could go on and on and find that I admit the contamination of those wells did occur.

I removed the product considered to be the contaminator, which is 1,1,1-trichloroethane That was not satisfactory to the Attorney General.

I have been harassed. My accounts have been intimidated. My accounts do not want to advertise any more. My accounts do not know what to do. They don't know if the Attorney General is going to do something to them. My wholesalers are intimidated and I have not had an opportunity to present my particular case.

Of all the contamination, a very

2

3

4

5

6

7

9

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

strong factor I brought out here, no methylene chloride was ever found but still the contamination of bringing cesspools additives in their own category to the Legislature is not substantiated It also will not involve the problem to pass one law on one facet of chemical or chemical additives, if you will, when the same identical chemicals are used in a multitude of products, that if the legislators wanted to go into any prestigous store in Long Island or Oswego or any place else and pick up the can and find out what the label on that can states, I think, in most cases, you will find a profuse use of 1,1,1trichloroethane and you'll find a profuse use of methylene chloride.

It is ludicrous, again, to think that a law on cesspool additives is going to stop something from a toxic nature that would be deleterous to the drinking water when all the other products that are not considered to be cesspool additives have an end result dispensing or disbursement into a septic system or cesspool.

The legislators know people don't go in and buy paint thinner and various products you

can find in innumerable quantities on household shelves. If the Legislature passes the law, all those products are going to exist in Nassau and Suffolk. They're going to be purchased by homeowners who have those same two chemicals and they are going to be dispensed with when the man gets through cleaning his paint brush or wall. It's going to go down in the cesspool.

There's the argument I present.

CHAIRMAN GRANNIS: There was a decision made in Nassau and Suffolk County to ban the use of phosphate detergents which were going through the septic system. They were finding themselves very prominently in the drinking water in Nassau and Suffolk County.

The ban of the use of phosphate completely in one county and the phase out in the
rest of the state has led to a decrease in that
pollutant in the drinking water which came into
the septic tank system as well.

I don't think I can accept your scientific information on hydrology and how materials go into household use into the drinking water.

MR. BUDD: There's no basic contamination of the basic aquifer of Long Island. The groundwater on Long Island is one of the best in the country. It's on the record. We are going after something individually found to be in contamination of wells, where heavy population and density in living is the problem.

The detergent ban that happened in 1971, the conversion of what they did not have to use in detergents and phosphates didn't stop the general public from using detergents, because if the investigators wanted to investigate it, they will find the detergents are coming from Nassau County.

CHAIRMAN GRANNIS: There is a ban on phosphate detergents. We have a ban on phosphate detergents in New York. If they're coming in, they come in illegally.

MR. BUDD: The ban is ineffective.

CHAIRMAN GRANNIS: It's ineffective, according to the product sold on the shelf.

I was part of the enforcement in drafting effort on that and I have looked in the department store snelves. So I know the products being

sold here say "no phosphate."

MR. BUDD: I appreciate the opportunity to talk here. I won't take up any more of your time.

CHAIRMAN GRANNIS: What's the status of your case? Was there a move for preliminary injunction? You moved into an agreement with him not to sell your product?

MR. BUDD: My product is still on the shelf and continues to be. My product is reformulated.

First of all, let me categorically go through this.

The two products involved, my product was selectively discriminated against, because I am a "cesspool additive." It couldn't change anything if somebody uses the same chemicals. I'm a "cesspool additive."

I saw the ills of what was happening.

I spent good money with a scientific force to
have my own investigation done and my own conclusions given to me and the conclusions given to me
were that for me to try to defend the situation
on 1,1,1-trichloroethane would be very difficult,

in view of the fact that the amount of contamination documentation and substantiation that has been given on methylene and 1,1,1 is there.

So consequently, I am not making an admission I'm a contaminator. I say, fine, if you see that happening and we do have a problem, because the saturation of that chemical is heavy, why should not I then continue to do that.

I voluntarily removed the 1,1,1
trichlorethane. That did not matter to the Attorney General, because the legal expenses I have
been put through is exorbitant. The Attorney
General, in his press releases, called me a major
manufacturer. I am not a major manufacturer. It
is a misnomer by the Attorney General, Robert
Abrams.

CHAIRMAN GRANNIS: That's neither here nor there.

MR. BUDD: The point is, I removed the chemical. I continued to have the methylene chloride in the product. There is no methylene chloride in the test that is of any consequence whatsoever in the wells.

He forced me in a position where I had

to condescend on the preliminary injunction to remove both chemicals. If I didn't I had to come up with more legal fees.

I said I'll condescend to your requirement. Even after that, he still will not allow this thing to settle down. He's going to the press. He went to the press on May 7th before the judge had an opportunity to even make a decision and the judge still has--I know it right now-- hasn't made a decision.

CHAIRMAN GRANNIS: Is your product on the shelf right now?

MR. BUDD: It's on the shelf and it will continue to be there unless a judge tells me that it has to be taken off.

CHAIRMAN GRANNIS: I understand.

SENATOR DALY: Thank you very much.

MR. BUDD: Thank you very much.

SENATOR DALY: Our next witness is Evelyn Hannan of the Merrick Environmental Council.

MS. HANNAN: Our organization would like to go on the record, as being adamantly and unalterably opposed to any further contamination

to our environment, whether it be deliberate or accidental. At a time when a water purifer, chlorine is deemed questionable, we are appalled that our legislators could even consider further contamination of our drinking water by the deliberate addition of another toxic waste chemical, fluoride.

It seems ludicrous that Govenor Carey, who in the midst of a close primary election, put up ten million dollars in state funds, so all the families on the immediate rim of the Love Canal could pack up their belongings and leave, could possibly condone a deliberate pollution of our drinking water, with a toxic waste like fluoride.

We feel that the people who want fluoride should have it in any of the readily available forms, for example, mouthwash, toothpaste, tablets, or dental application, it is their right, but their rights end where ours begin, and to add this to our drinking water would unquestionably deprive those of us who do not choose to ingest this chemical of our rights.

Fluoride in the drinking water supply cannot be selective about which faucet it will

come out of!

Since fluorides only claim to fame is supposedly to prevent cavities in children's teeth it seems ridiculous to inflict this kind of poison on people with dentures.

However, the osteomalacia and cancer that it causes is a very real fact, and in our opinion, the risks far outweigh the benefits.

There are 32,000 known chemical waste dumps in the United States at this time. Please don't make our drinking water supply No. 32,001.

I would like to ask a few question, if I may. I have a question on this DRAINZ situation.

Mr. Budd alluded to Dow Chemical as his source of saying this is fine and, you know, Dow Chemical has been known to come out and say agent orange was all right too.

So I would find that kind of questionable, too.

The Cornell Veterinarian Magazine has come out with the study that fluoride is not only a water pollutant but an air pollutant. They have pictures in here of cattle whose teeth have com-

pletely eroded and are missing and the bones of those cattle are degenerating, as is the case with osteomalacia.

So the addition of this to the water supply is questionable to all the people.

It also is a killer. It has killed a three year old boy in Brooklyn and the State is paying \$750,000 damages for that boy's death.

They had it in North Carolina in the Mouthman Program, which they're trying to push through also.

CHAIRMAN GRANNIS: Explain the boy's death in Brooklyn, please. I don't understand.

If the City would add it to its system, it would be a City decision.

MS. HANNAN: A three year old boy died of a topical application at the Brookdale Medical Center.

CHAIRMAN GRANNIS: It's, then, a medical malpractice case against the dentist.

MS. HANNAN: Right.

But if this is done under supervision-CHAIRMAN GRANNIS: I just wanted clarification on the point.

MS. HANNAN: My dentist took this to the Dental Society at their convention and he questioned it and the answer to it was the boy didn't die from the fluoride. He died because he didn't get treatment quickly enough.

Let's face it, if he hadn't had the fluoride treatment in the first place, he would still be here.

But getting back to the thrust of the issue, the bill is 1790 and A2598, are the bills to ban fluoride and we would like to ask your support in this, because the situation is drastic.

Many studies coming out through Dr.

Dean Burke of the National Cancer Institute and

Dr. Yamianis, who is also a biochemist and very

much into this, and the studies are showing the

cancer rate in the areas that are fluoridated

artificially, are much higher than those areas not

fluoridated.

of silence between the press and the media in that their main income comes from the press people and whoever, and this issue should be out in the air and debated, because there are many, many dentists

and scientists who are adamantly opposed to it.

SENATOR DALY: Thank you.

MR. BUDD: May I say something else?

CHAIRMAN GRANNIS: Yes.

MR. BUDD: The Dow Chemical Company
has been involved with the agent orange. I do
want to clarify that the tests that Dow Chemical
Company does and submits to the National Cancer
Institute, in my particular case, are standard
medical tests and they are bona fide tests.

So I just wanted to set the record straight.

SENATOR DALY: Thank you, Mr. Budd.

Our next witness will be A. A.

Guerrera, chief chemist for the Suffolk County Water Authority.

Is Mr. Guerrera in the room?

CHAIRMAN GRANNIS: We have a statement from Mr. Guerrera that will be included in the record, as will any other statements that were submitted and will be submitted at these hearings, by interested parties.

SENATOR DALY: Herbert Goldstein from Massapequa, New York, a chemical consultant.

SENATOR DALY: Do we have a copy? Is that your only copy of the testimony?

MR. SUHR: Yes, handwritten in blue and red ink.

SENATOR DALY: If you'll submit it to us, I will make sure you get it back by return mail.

MR. SUHR: I could type it out and send it to you.

CHAIRMAN GRANNIS: We originally scheduled two sets of evening hearings, one in Syracuse, which has a tremendously sensitive population and one in Niagara Falls. It's a problem, as an environmental lawyer and environmentalist. Back starting in the early 1970s, we have tried to work on evening hearings. The public, we have found on a great deal of effort, doesn't come out for them. You would think they would. It would be easier for homeowners and people that work and students to come to hearings that they have not attended regularly.

So we were going to set up evening hearings and nobody showed.

It's a particular problem, as well.

MR. SUHR: We need to reach more peo-

CHAIRMAN GRANNIS: I think we sent out these hearing notices state-wide.

MR. SUHR: But the average citizen doesn't get it.

CHAIRMAN GRANNIS: We do have records you are welcome to have to receive copies of hearing notices. As a legislator, I have not heard of your group either before.

MR. SUHR: We're new and we're trying to get outselves together.

CHAIRMAN GRANNIS: You can get on a list to have copies of hearing notices, at least for legislative hearings. They're being held.

You send them to the media. Whether they choose to print them, that's up to them.

MR. SUHR: Would it be possible--a lot of senators and assemblymen send little things around to their constituents. Would it be possible to list what hearings--like, if you could list--

CHAIRMAN GRANNIS: There are hundreds of hearings from different prospectives. The list

of hearings of the legislative hearings is six or eight pages long. Every month they come out with different kinds of hearings and there are departmental and local hearings. I don't think that's a practical solution.

This involves money. We don't print it like the federal government does. We mail those out, it costs you and me money, because my taxes pay for it, too.

I think we do the best we can. We have consolidated lists of hearings in the Legis-lature. Those are available.

MR. SUHR: Is there some place we can contact? Is there one place that would have all this information?

ture, yes. From every single state agency, too.

They develop their own list for their own hearings.

There's no point in sending certain people that are interested in the trucking industry notices from the education department or health department about hearings on fluoride, because that's not the interest of their particular association.

So I don't think that's a practical EN-DE REPORTING SERVICES, LTD.

25

approach, that the best way is to get on record with those agencies that have hearings and what your group is interested in and I think they do send out periodic notices.

MR. SUHR: What do you think we're going to do to get people awake?

I think if we could CHAIRMAN GRANNIS: figure out that answer--that's something we are concerned about as you are for a great many different reasons and a great many different issues. It takes groups like yours and the people concerned about flouride. You can't generate it, we certainly can't.

MR. SUHR: I thank all of you for coming here. Have a good weekend.

SENATOR DALY: Mr. Guerrera from the Suffolk County Water Authority.

> MR. GUERRERA: Thank you.

My name is August A. Guerrera. the chief chemist for the Suffolk County Water . Authority.

I welcome this opportunity to appear before you to present the views of the Suffolk County Water Authority with reference to the con-

trol of hazardous wastes in New York State.

The Suffolk County Water Authority is a public benefit, non-profit corporation. It's the largest water utility in the State of New York, with the sole exception of New York City. We are serving 230,000 accounts, which represents an equivalent of 860,000 persons.

We wish to stress the uniqueness of
Long Island's geology and hydrology. We realize
we're not unique in utilizing, solely, groundwater,
as there are other areas in the State that utilize groundwater only.

Where we are unique on this Island, is between Nassau and Suffolk County, we serve two and a half million people with groundwater on an island surrounded by salty water and the maintenance of that balance is a very delicate and very severe engineering problem.

The Suffolk County Water Authority'
obtains all of its drinking water from goundwater
sources utilizing more than 400 high capacity
wells located at 150 separate locations. The only
source of replenishment to this groundwater supply is precipitation and recharge of that precipi-

25

tation to the groundwater reserve. The residence time of this water in our underground system is extremely long, being measured in decades or even hundreds of years for the deeper formations. U.S. Geological Survey has estimated that a drop of rainwater that falls on the center of this island, say, near the groundwater divide you have heard of before, percolates vertically downward to the first aqua cloud and goes outward either to Long Island Sound or to the Atlantic Ocean and may take as long as 800 years to pass the barrier.

If we have a problem in the well a hundred feet deep and we know there's an industry that's a potential source of that material and we abandon that well or shut it off and drill a well six or seven hundred feet deep. Drilling that well six or seven hundred feet deep, we're obtaining water that fell as rain two hundred years ago.

We know that the Indians didn't dryclean their moccasins. So if we find a drycleaning fluid in a eight hundred foot well on the South Shore of this Island, we know we have something other to look for than contamination on the surface or the activities of men on the surface.

That's what makes the water supply on this Island unique and interesting to develop, because of the long residence time and the very slow movement of groundwater.

We estimate the movement as only one or two feet a day. So you get a character in the middle of the Island going out Saturday afternoon, knowing the local regulators don't work on weekends and dumps something overboard. He's leaving a legacy for our children and our grandchildren, because it will take decades before it reaches the groundwater.

This would be particularly insidious because the long residence time and the very slow rate of discharge of these systems to the salt water systems.

We have heard several times today about the sole source aquifer designation and I'll pass that paragraph by.

We in the water supply business, especially in Suffolk County Water Authority, consider that the control of hazardous substances and
toxic chemicals waste must consist of more than
the regulation of dump sites. But we must provide

for an accounting of very chemical from the time of its generation through the storeage, their transportation and their ultimate disposal.

I have heard this concept enunciated several times today. We need an accounting system to keep track of every pound of vinyl chloride through its generation, through its manufacture, through the waste generated by that process. Who handles the waste? Who takes it away? Who takes it somewhere else, and who ultimately disposes of it?

The Water Authority was a member of the--and you heard their conclusions enunciated also, today--the 208 tudy. We feel that these problems may be best resolved in a county or bicounty basis.

With the waste handling and treatment and disposal facility, perhaps the best place to locate it would be alongside of one of the county sewage treatment plants, which has an ocean outlet.

We know that equipment and people both fail. We ought to have a vent somewhere to get rid of some of the stuff we can't handle or that

**

becomes too much for us.

We feel that preventative measures

must be provided other than cleanup techniques or

procedures after the wastes have effected the

quality of the groundwater. We would rather not

treat the groundwater, but we would rather avoid

the contamination in the beginning.

To accomplish this, we feel that funds must be made available, preferably on a county or bi-county basis, firstly to identify a hazardous waste inventory industry by industry and chemical by chemical.

We have heard, again, the trite expression, we need a monitoring program. Well, the monitoring program on this Island is an extremely expensive undertaking and if we decide we're going to drill a well near a particular industry, we should really only monitor that particular well for the chemicals that that particular industry is either generating or developing as a waste, because the cost of analysis—and that's been brought up before by Frank Padar and County Executive Klein—the cost of analysis is substantial. So if you were to come to me and say, I want you to find

out whether there are any of these industrial degreasers present, such as trichlorethane or methalene, I would have to set up a gas chromotography, that in the process of the deduction, would automatically exclude benzene and toluene.

If you ask me to look for them, I would have to set up another analysis to look for those with a detector that would not see the chlorinated hydrocarbons.

If you say, I want you to look at two classes of compounds, that's one, two, three hundred bucks. If you want me to look at three, I have to charge you again. I have to do the whole thing over again with just as much labor as the first time around.

We feel after the inventory is made, then, projections should be then made as to future generations of volumes and types of wastes, followed by the development of a monitoring scheme and the implementation of this scheme based on the sources of these wastes.

This is especially critical in that the sampling and analytical procedures are extremely expensive and highly variable, depending upon the

material being discharged. We feel that a more intensive inventory must be accomplished to identify both publicly and privately owned landfills or other disposal sites.

one of the purposes of doing the 208 study was when we sampled some of the soup coming out of the bottom of our sanitary landfills, we found contaminants in four digit numbers. But the contaminants we expected to see very large volumes of were not found. Whereas, in other places where we found relatively uncontaminated water, even in residential areas, we did find some of the degreasers.

In contrast to some of the earlier testimony, I do think that cesspool cleaners are a major potential source of contamination to the Long Island groundwater system.

We also urge that funds be made available to assist industries in the establishment of waste clearinghouses where the waste of one industry might be exchanged to provide a resrouce to another industry. You have heard that concept enunciated earlier, also.

But most import by far, is the pro-

tection of the drinking water on this Island. We feel regulations concerning the control of the discharge of toxic substances must be more rigid than for the rest of the State of New York, because of a particular susceptability of our groundwater resources to pollution.

SENATOR DALY: Thank you very much.

CHAIRMAN GRANNIS: Thank you very much.

SENATOR DALY: Is there anyone else who would like to testify?

Perhaps, Ms. Pajak, you could share with us some of your thoughts.

Thank you for taking the time to come before us and Ms. Pajak, by the way, is also with LEAF, the organization, Lead on Environmentally Aware Future.

MS. PAJAK: I'm particularly disturbed about the chemical contamination of our ground-water posed by radioactive and toxic waste discharges on Long Island.

I'm also disturbed that there is a lack of concern about the disposal and transport of these wastes through Long Island. I feel it is vital to have stringent regulations to prevent

the transport and discharge of these wastes in sensitive ecological areas.

I'm very concerned that there is no attempt by the EPA to stop chemicals like poly vinyl chloride dioxin, organic acids and pesticides from entering Long Island's groundwater.

Public input is vital to get these regulations passed.

Concerning the status of hazardous waste in this State, I also resent the disposal of toxic waste into the open environment. I feel we will be faced with the catastrophe if we allow toxic waste to be disposed of improperly.

It will also be a diaster to Long
Island's groundwater and farm land to have those
toxic wastes unregulated.

I want to site examples to get my point across. I don't want any more Love Canals on Long Island.

On March 7, 1975 on a farmland in Illinois, there was dumping and burying of hazard-ous industrial waste on land. The contamination of the groundwater from cyanide. The cyanide was kept in 55 gallon drums. This packaging is an

outrage.

In January 1976 in the Rock Mountain area, there were toxic substances, algerin and deldrin discharged into the Rocky Mountain arsenal. There was resultant contamination of the groundwater.

We must not let this occur.

There are possibly several Love Canals here on Long Island.

There is one company, Hooker Chemical Company, who is allegedly discharging poly-vinyl chloride, pesticides, synthetic latex, poly-urethane, organic acid and monoesters into Long Island's retrudge basin.

I feel this is unacceptable for the polluter to use this like an open sewer.

We must not let the above incidents occur. It will wreak havoc with Long Island's groundwater.

I feel the same way towards the transport of radioactive waste in unsuitable containers.

I feel that 55 gallon drums are inadequate to store
these fiendishly toxic wastes.

On several occasions, the integrity of EN-DE REPORTING SERVICES, LTD.

the containers were violated.

I'm particularly concerned about the routing of those radioactive and other toxic wastes to populated areas. The packaging requirement should be more stringent. These containers are unsatisfactory.

I urge you to pass strict regulations for containers to prevent pollution of the environment.

If no steps are made to improve the container, then, the waste shouldn't be allowed to go through the populated areas.

Our future generations cannot afford to be left without this protection.

I also think that the operator should notify the public that the waste is being routed in these areas. If the industry doesn't notify the public, they shouldn't be allowed to transport these wastes.

I urge you to act on the above sug-

SENATOR DALY: Thank you very much.

I would like to thank my colleagues and all of you for joining us today. We do hope

that as a result of this very intensive search by both houses of the Legislature--and I'll point out that this is a very strong bi-partisan effort and that we have joined forces so that we can be more effective both in our hearings--

A VOICE: I have one question.

Now long will the written record be held open for further comment?

SENATOR DALY: I would say it will be about two weeks. We are going to be down here next week in New York City at 270 Broadway. Our next public hearing on this matter will be next Thursday in New York City.

So if you could submit the legislation to me, we'll be glad to give you the proper address, or perhaps you'd like to do it yourself next Thursday.

We are trying to come up with solutions.
We realize the importance of the matter and we
feel, Peter and I both and Maurice and Lou and
John, that politics will not play a part in it.

CHAIRMAN GRANNIS: That's all. Thank you very much.

The hearing is closed.

(Whereupon, at 2:30 P.M., the hearing was concluded.)