LANDS COMMISSION

OF THE STATE OF CALIFORNIA

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| IN THE MATTER OF | ) | |
| | ) | |
| MEDICAL WASTE DISPOSAL | ) | Public Hearing |
| | ) | |
| ALONG THE CALIFORNIA COAST | ) | |

# TRANSCRIPT OF PROCEEDINGS

Tuesday, December 13, 1988

Santa Monica City
Council Chambers
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Reported by:
Priscilla Pike
State Hearing Reporter
Notary Public

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State Lands Commission

Public Hearing on Ocean Pollution

December 13, 1988

10:20 a.m.

-- P R O C E E D I N G S --

CHAIR DAVIS: All right, I think everybody is ready and we will commence this hearing.

The Chair notes the presence of the Lieutenant Governor and the Controller, and that constitutes a quorum of our three-member authority.

Before I begin, I just want to make a brief opening statement. I have called a series of at least three meetings to deal with the whole question of ocean pollution. Today's meeting will focus on medical wastes, but obviously there are other forms of ocean pollution, including agricultural run off, dredge spoils dumping, sewage discharges, each is a serious threat and needs to be examined.

The purpose of these hearings is to try and find out who is contaminating the ocean, why they are doing it, and what policies we can adopt at the state level to stop it.

The people that use these oceans for recreation deserve to be able to do so without fear of contamination or

risk to their health. The fishing industry deserves the right to ply their trade without having all of the fish in the Santa Monica Bay too toxic to eat, and certainly the ocean themselves may well be so spoiled and contaminated that their very survival is in question, so for all of these reasons we've called these hearings.

Today's hearing begins and focuses on the question of medical wastes.

Leo, would you like to make an opening comment?

COMMISSIONER MC CARTHY: Mr. Chairman, I want to thank the leadership of the government of Santa Monica for letting us use their chambers here today. We appreciate that very much, and I want to concure with your introductory remarks and say what we are going to be pursuing very actively here is who is responsible for allowing medical and infectious wastes to visit the California shoreline, and what is it we can do in providing leadership and coordination with other governmental entities to stop that waste.

Thank you.

CHAIR DAVIS: Mr. Hight, do you have anything you want to offer?

CHIEF COUNSEL HIGHT: No, Mr. Chairman.

CHAIR DAVIS: All right, then we will call our first witness, who is City Attorney James Hahn, of the City of Los Angeles.

Thank you for coming, Mr. Hahn, and for being our first witness at today's hearing.

MR. HAHN: Thank you, Mr. Chairman, Lieutenant Governor McCarthy, Mr. Hight.

I appreciate the opportunity to address the Commission on this most important issue, because the coastline and the ocean are among our most valuable and also our most vulnerable natural resource. Along the beach front and coastline of the City of Los Angeles millions of citizens use the beaches and recreational facilities every year, and until recently there hasn't been adequate protection against the medical wastes that is dumped into the oceans and washes up on our shores.

Before last month federal regulation had been virtually non-existent. Even with recent legislation, only ten states -- New York, New Jersey, Connecticut, and seven states bordering the Great Lakes region -- monitor waste disposal.

The laws have been silent as to the dumping of medical wastes into the ocean until now. I am pleased that both Senator Art Torres, and Assemblyman Tom Hayden, have talked about introducing legislation, and I appreciate the fact that the State Lands Commission is making this a matter of statewide concern.

The City Attorney's office in Los Angeles has been at

the forefront of criminal prosecution of toxic polluters for many years. Our office is one of the few to ever achieve a conviction for illegal disposal of infectious medical waste, back in 1982. Even so, it has been a thorn in the side of prosecutors that we must prove that medical wastes are infectious. When it is considered that broken needles and syringes, shards of broken glass, debris, blood, tissue refuse, these kinds of things, pose an incredible danger to sanitation workers and the general public, of communicating all kinds of diseases, it is no wonder that investigators are a little bit leery about dealing with some of this material, once it is found.

In some instances that we have come across, the sanitation department when they come across this material contact the County Health Department. In many instances, the County Health Department has told the sanitation officials to destroy the medical wastes that they found, indicating to them that it would be impossible for the Health Department to prove whether or not a particular waste was infectious.

When the material is destroyed, the evidence is destroyed, so that makes it impossible for prosecutors to prosecute a case without evidence. We have no way of proving something is infectious waste unless we know beforehand what virus or what bacteria has infected it. We think that all medical waste is dangerous and should be subject to the law.

Proposed laws indicate that there will be no exemptions for facilities that produce less than 100 kilograms, or 220 pounds of waste per month. Unlike laws in other states, there will be no exemptions for doctors' or dentists' private practice, nor for office laboratories that serve three or fewer practitioners. And, the reason that I think it is important that we make no exemptions is that the amount of medical wastes produced even by these small operations is staggering. A small hospital, with no more that 200 beds produces over 400 tons of potentially infectious medical wastes each year, including hypodermic needles, used gauze, vials of blood, and other material.

When you consider the number of medical facilities, and the number of beds in larger facilities in the County of Los Angeles alone, you begin to appreciate the dimensions of the dilemma.

We've heard about the pollution occurring on our east coast beaches and on our south county beaches in recent weeks, and by the time this dangerous cargo washes ashore it is too late. We have to find out where medical wastes originate, what should happen to it, and who monitors it.

The problem with medical wastes in the oceans, of course, is a serious one; but, we have to consider this issue in terms of the whole scope of the problem. The greater Los Angeles area is a huge metropolis and is growing every year.

We are rapidly running out of land fill areas. We are approaching the point where no land fills may be opened for disposal either in the city limits of Los Angeles, or in nearby surrounding areas.

Some proposals are on the board for -- by the federal government -- to consider the use of ocean-going freighters as offshore incinerators in our oceans. New York, which has virtually no land fills left, has begun using the ocean as a primary disposal site. Many have proposed placing radio active infectious, or other hazardous wastes, in sealed containers to be dropped to the floor of the ocean.

The issue before us today, the disposal of medical wastes in the ocean, is but a single frame of a larger picture. What are we going to do with our waste materials? Where are we going to put it? In an ever-shrinking world, which places ever increasing demands upon the environment, we must act quickly and responsibly to deal with these health and environmental consequences.

The State Lands Commission can take a leadership role in making sure that the ocean is never considered a disposal site. Without sweeping legislation, we can't monitor the potentially hazardous effect of medical waste disposers, and without effective and efficient prosecution we are not going to be able to apprehend and punish those who are circumventing the law for the main reason that they want to

save money. Now, they are putting the materials in the dumpsters because it costs too much to dispose of it properly.

I would pledge to the Commission the support of the City Attorney's office. I would also urge the Commission to stay in contact with prosecutors throughout the state through the California District Attorneys Association, and prosecutors, so we can develop legislation that will enable us to effectively prosecute people as well. I think that we have had some well intentioned legislation on the books that provide for some very stiff fines now penalties for disposing of infectious medical wastes are quite sufficient. Our problem has been we have been unable to prove these cases because we are unable to prove that the material is infectious. I think that all medical waste is hazardous, and small producers as well as big producers should be covered.

Thank you.

CHAIR DAVIS: Mr. Hahn, if I could just ask you a couple of questions, particularly on your point of eliminating the concept of infectious as a pre-condition to prosecution.

One of the Commission's guiding doctrines is the public trust doctrine, and under that doctrine we view any form of disposal into the ocean as a nuisance, and certainly prosecutors could view these kinds of offenses, if you will,

as nuisances and seek at least misdemeanor actions against them.

I agree with you that whether or not a needle, or some other medical debris, is infectious should not be the determining factor as to whether a prosecution is forth coming. They are still polluting the ocean. They are still posing risks to health and safety.

With that, could you describe the nature of the one prosecution that you made in '82?

MR. HAHN: Well, that involved Cedar Sinai Hospital. That case resulted in a plea as part of a settlement of the case. They pled nolo contendere to charges of violation of disposal of medical wastes. It was before the law was increased to make it a felony wobbler.

In that particular case, infectious waste was traced to Cedar Sinai, and they paid a $1000 fine, and were put on 18-month summary probation, and did not violate probation during the terms of their probation.

CHAIR DAVIS: Is it your belief that more prosecutions would be forth coming if we eliminated the requirement to demonstrate that the waste was infectious?

MR. HAHN: We believe it would be.

Our experience has been that we have had to reject cases for prosecution as we were unable to get County Health Department, or any other lab, to be able to prove that waste

material that was kept -- in the few instances where it was kept -- was infectious. So, in those cases, if the requirement that the prosecution prove beyond a reasonable doubt that the material was infectious was removed, we would have been able to file in those cases that were rejected.

And, I think that we have had at least a dozen of those cases in the past few years, where we have had to reject prosecution because we were unable to prove infectious.

CHAIR DAVIS: Leo, do you have any questions?

COMMISSIONER MC CARTHY: No, I don't have any.

Thank you.

MR. HAHN: Thank You.

CHAIR DAVIS: Thank you very much for coming here today, Mr. Hahn.

Our next witness is Robert Sulnick, who is the Executive Director of American Oceans Campaign.

I want to thank Mr. Sulnick for attending today's hearing.

MR. SULNICK: Thank you, Mr. Chairman, for having me.

Mr. Chairman, members of the Commission, my name is Robert Sulnick. I am the Executive Director of the American Oceans Campaign.

I would like to begin by saying that it has become clear to us that medical wastes reach the ocean through

sewage outfall, non-point source, storm drain runoff, and illegal dumping, and we see the problem as one of a greater problem of waste management and disposal.

The existing federal and state regulations that we know have existed in the United States do not adequately address the risks and problems associated with the exposure to medical wastes, which include infectious as well as other wastes produced by hospitals, clinics, doctors, and dentists offices, and of course a variety of other sources, nor do existing regulations establish clearly defined federal and state roles for regulating medical wastes.

The American Oceans Campaign believes that a framework is needed now to establish minimum requirements at both the state and national levels for dealing with this problem of increasing medical wastes in the waste stream and in our ocean.

There are many risks and problems associated with exposure to medical wastes. The obvious and immediate concern is public exposure to wastes washed up on beaches, dumped on streets, or otherwise illegally disposed of.

Wastes washing up on the beaches expose the public to risk from puncture, possible contraction of infectious disease from contaminated wastes, and additional symptoms such as rashes from effected bodies of water and disease carried by animals attracted to the wastes.

The types of wastes present include laboratory rats and human stomach lining, in addition to syringes, blood vials, and plastic debris, all of which have been found washed up on shores throughout the United States.

The medical waste problem in the ocean, although quite serious, is not the only aspect of medical wastes, nor is it the only aspect of medical wastes that we believe you should consider. Incineration is also a problem. Indeed, the most critical problem raised by medical wastes, in our view, is incineration and the lack of regulations or parameters for the air standards and emissions, operating temperatures, operator and training and monitor specifications, and disposal requirements that are now not in place.

The absence of regulations is significant in light of the fact that hospitals are estimated to incinerate 70 percent of their infectious wastes. The need for such requirements is becoming important as the risk posed by incinerator emissions and ash are increasingly being recognized.

Pollution controls are needed to reduce the levels of dioxanes and furans, acid gases, and heavy metals, and particulate matter emitted by medical waste incinerators.

The need to do more to control these emissions is illustrated by the fact that the incineration of medical wastes has been shown to produce dioxin -- which is very,

very harmful -- and furan levels that are one or two orders of magnitudes higher than those produced by municipal solid waste incineration. In part, the emission problem results from the high composition of plastics which account for 30 percent of the medical waste stream.

Incinerator temperatures during operation, not only effect emission levels, but are critical to the destruction of the infectious material, itself. Where operating temperatures are below 1600 degrees F. viable infectious organisms may be released into the surrounding environment.

For these reasons, the AOC believes that all medical waste incinerators, whether existing or under consideration, should be equipped with pollution control devices. If older onsite facilities are unable to comply, they should be retrofitted. In addition, requirements should be developed to insure the existence and adequacy of operator training programs, and the use of monitoring systems to maintain optimum operating conditions and emission controls.

Autoclaving is also a process that we believe needs to be monitored and regulated. Autoclaving, or steam sterilization, is applied to approximately 15 percent of the medical waste stream, yet the process remains unproven, in our view, as an effective means of treating medical waste. Available information suggests that operating conditions and practices vary widely among facilities and among states.

We believe that the state should be directed to develop testing procedures to demonstrate the effectiveness of autoclaving, and to determine proper operating conditions. We also are aware that land fill and land fill disposal of medical wastes is another aspect of this problem. The inadequately protective conditions to Sub-Title D, under municipal solid waste, land fills across the nation rule these facilities out, in our view, for the disposal of medical wastes in the forseeable future. The vast majority of such land fills are unlined, lack leach collection systems, and do not monitor for ground water contamination.

AOC therefore recommends that land fills and medical wastes not be put together, and that they be excluded from such land fills.

Sewage disposal is of course a primary source of medical wastes finding its way into the ocean. Astonishingly, the practice of pouring medical wastes down sewer drains remains one of the "recommended" methods of disposal throughout the United States. In theory, facilities discharge their wastes in the expectation that their wastes will be dealt with at a municipal and county sewage treatment plant. In reality, however, medical facilities following this recommendation are releasing their wastes without assurance that treatment will in fact take place, and are contributing to the nation's water pollution problems in several respects:

first, many municipal sewer systems continue to discharge millions of gallons of raw sewage, either as part of their operating procedures, or accidentally. The discharge of raw sewage is a particular problem for those communities with antequated systems that overload with storm drain runoff. High bateria counts from sewage wastes are also responsible for recent beach closings of both here in California and elsewhere throughout the country.

Second, the state's sewage treatment plants have not demonstrated, in our view, sufficient implementation of secondary and tertiary treatment systems.

Finally, medical wastes contribute to the contamination of sewage sludge, which in itself is just a tremendous problem for ocean pollution, if indeed sewage sludge is continued to be dumped into ocean.

Sewage treatment technologies are not suited for the treatment of the chemical, radio active, and metalic agents contained in some medical wastes. The problem is particularly critical because of the difficulty of disposing of contaminated sludge. In AOC's view, the state's sewage treatment systems cannot and should not handle medical wastes.

The classification of medical wastes, which was just touched upon and spoken to by the City Attorney of Los Angeles, is another issue which we believe needs to be dealt

with. The classification, medical waste, should include those wastes which pose a hazard to health or the environment, which are generated from any medical facility, or facility that performs a related function. The need to expand the regulatory structure to cover all medical wastes is necessitated by the fact that medical wastes, other than those defined in the specific category called "infectious waste" may present similar, and/or their own set of risks and threats to public health and the environment.

For example, in EPA's guide, wastes, such as those from surgery and autopsies, contaminated laboratory wastes, dialysis unit wastes, and "discarded equipment and parts that may be contaminated with infectious agents" are listed only as optional for designation as infectious waste, and therefore for special handling and treatment. The definition of medical waste should also account for those agents which exhibit acutely toxic or radio active characteristics.

It is also our view that acquired immune deficiency syndrome be dealt with specifically and exclusively in any recommendations that your Commission comes up with. It is our view that the public fear of AIDS is in large part behind the public uneasiness over medical wastes being washed up on our shores, although I do not mean to minimize medical wastes that are not contaminated with the AIDS virus, but it does seem to us that that needs a special designation and special

categorization and treatment if it is to respond to the public fear that is now generated about medical wastes.

Specific recommendations on the best available methods and technologies for the management of medical wastes should obviously be developed. Factors such as location, size and budget should be taken into consideration. Failure to do this leaves too much latitude to those making the decision on the individual facility, without some limits on the exercise of discretion in the form of best available technology, or design, and operating specifications. Without such limits, the least cost alternative is likely to be selected, and in some cases, regardless of the potential health and environmental impacts.

Finally, medical wastes should be listed as hazardous substances, irrespective. By listing medical wastes as hazardous wastes, medical waste would qualify as wastes which can be monitored from cradle to grave, or from inception to waste stream disposal.

AOC believes that the most expeditious way to control the management of medical wastes would be to place them in an already existing regulatory system, which would define them as hazardous, and therefore demand that they be monitored stringently and consistently from inception until disposal.

AOC further recommends that two concurrent tracking systems be established for medical wastes. A new system

should be created to identify manufacturers, distributors, commercial purchasers of medical supplies and medical facilities, and to place identifying marks on medical products.

The system would resemble that which already exists for food and other over-the-counter items such as aspirin. A coded identification should be imprinted on medical products and be sufficiently resistent to exposure to sea water and other elements to prevent obscuring the product's identity.

The second tracking system should be a manifest system established to track hazardous waste from the point of generation to the point of disposal. The manifest system should apply to all medical wastes, irrespective, and should include waste treated at onsite incinerators. Additionally, those facilities with onsite incinators should be required to account for the disposal of their ash, which is also potentially toxic in nature. Only then can we insure that ash disposal requirements are followed, and medical wastes are not disposed with incinerator ash and other combustion residues.

AOC therefore recommends that ash be disposed of separately from other wastes, in order to reduce the leaching of toxic metals present in incinerator ash.

The illegal dumping of medical wastes, which in my view does result in wastes washing up on our beaches, is

something that needs to be dealt with, and again, this was commented on by City Attorney Hahn. In our view, illegal dumping should be a felony, and in addition there should be very heavy civil fines that go along with any illegal dumping, irrespective of whether the waste is categorized as infectious or not.

Conlusion: this summer of course, the environment appears to have reached and exceeded its carrying capacity threshold for absorbing pollution that late-20th century life is inflicting upon the planet. Each day the media seems to report on polluted waterways and beaches, fish kills, red tides, brown tides, ozone depletion, global warming, drought, record surface ozone levels, forests dying, and a variety of other signals from the planet that it can no longer absorb the pollution which we humans routinely inflict upon it.

The release of pollutants into the environment must therefore obviously be curbed if we are to proceed sensibly and rationally, compassionately, into the 21st century, and, changes made in the way that waste is being handled from the past has to be a part of any such procedure. Medical wastes is only one aspect of this much larger global problem, but it is a particularly sensitive and potentially dangerous one.

The State government therefore, in our view, has an important roll to play in moving us towards a solution which will protect both public health and the integrity of our

planet and of our oceans, and thank you for having us.

CHAIR DAVIS: Mr. Sulnick, what, in your experience -- who in your experience is the primary culprit? The primary depositor, if you will, of medical wastes into the ocean?

MR. SULNICK: This is a real hard question for me to answer, because I don't honestly know.

It seems to me that the sources are much more visible to me than who is generating the sources; obviously, the hospital communities, and the medical health care providers are generating the waste, but the question in my mind becomes how it is being disposed of, and how it is being monitored, and why it is going untreated into the environment, and that, in part, is something that I don't have an answer to.

From the research that we have done, it is clear to me that a lot of it does indeed get dumped into the sewage systems, and when they malfunction, it just comes into the water.

I also believe that there is probably a lot of illegal dumping going on, which finds its way into the storm drains, and into the ocean, because in our culture we view the ocean as the ultimately dumping ground. It is that 13th century mentality of dig a hole and dump, is now being translated into: we will dump it into the ocean, the ocean can absorb it.

But the fact of the matter is however, the ocean,

especially the coastal waters, can no longer absorb the toxics, and that the ocean is no longer in our coastal system scope of life that it once was, and it may never be again.

And, so I am not sure that I have an answer for you, but it seems to me that what is needed is some sort of investigatory body set up to pinpoint exactly where the medical wastes enter the system and the environment, and why it is not being treated, and/or detoxified before it reaches our shore, and I don't mean to be non-responsive, but that is the best I can do at the moment.

CHAIR DAVIS: What legal sources are available to say, small practitioners, medical practitioners with small medical facilities? What legal sources are available to them to dispose of their wastes?

MR. SULNICK: Well, I think that is a real problem.

I think what happens now, routinely, is the waste goes to land fills. I think one thing we could do, although I am not sure this is really anywhere near an ultimate solution, we could make sure that small practitioners take their medical wastes and that they go to toxic waste dumps, as opposed to just land fills. That would help a lot, although our capacity to deal with toxic land fills is rapidly coming to an end. I mean, the Casmalia Dump Site up in northern Santa Barbara County-- which I am intimately familiar with -- is vastly coming to the point where it can no longer tolerate

any other intrusion of new waste, and until we come up with an ultimate solution for how we deal with toxic waste, the idea of using toxic waste dumps is at best a stop gap, but it would be better than allowing the small practitioners' medical wastes to go into a land fill, because then at best it will just leach into the groundwater system, and while the debris itself may not wind up on the ocean beaches, on the Santa Monica Beach, our ground water will nevertheless become contaminated.

So, it seems for me that for the small practitioner -- if the small practitioner would just resolve not to use the sewage system by just flushing, and not to use the storm drain system, and to take the waste and categorize it as toxic and make sure it goes to a toxic waste dump, that would help a lot -- my assumption being that the toxic waste dump is appropriately constructed so as to keep the leaching out of the groundwater.

CHAIR DAVIS: Of the recommendations you made to us, and many of them were very good about the identifying marks for products, treating all illegal dumping as a felony regardless of the category of materials that is being dumped, and the others you made today, what would you suggest to this Commission as the highest priority? Which of those many recommendations is the one you think we should act on most urgently?

MR. SULNICK: My view would be this, two things: I think the first thing you should do is to insure that medical waste is characterized as hazardous, and that it be subject to strict monitoring from inception to disposal.

I think that the other would be to insure a recommendation that the dumping of medical wastes carry with it very heavy civil fines, and be classified as a felony, and I think that would communicate to the public at large, and to the industry that uses medical waste, that a new era has become public policy, and that we can no longer treat medical waste as garbage, but we must treat it as hazardous waste. It seems to me that in terms of a communication device that would be the most effective and the easiest to begin to implement.

CHAIR DAVIS: Leo?

COMMISSIONER MC CARTHY: No questions.

CHAIR DAVIS: Thank you very much.

MR. SULNICK: Thank you very much.

CHAIR DAVIS: Next we have representation from San Diego County that can speak to the numerous instances of the dumping of medical wastes in San Diego.

First is a representative of Supervisor Susan Golding's office, -- pardon me Myrna if I mispronounce this name, Myrna Zambrano -- is that correct -- who is a policy specialist for Supervisor Golding.

MS. ZIMBRANO: Thank you, Mr. Chairman and Lieutenant Governor McCarthy.

Supervisor Golding would have been here herself, however, today is the last session of the Board of Supervisors for the year, and of course, duty calls in San Diego.

San Diego has had a number of medical waste findings throughout its county, syringes, saline bags, blood filled vials, and vials filled with unidentified liquid, have been found along our beaches by life guards and other citizens, and some of that is right on the table before you, as well as a map showing how closely all of these findings have been throughout our beaches.

Untreated, and inappropriate medical waste has also been discovered at local land fills, next to dumpsters in residential areas, and behind physicians' offices. Supervisor Golding, along with most San Diegans, was shocked by these recent reports and was moved to do something about this critical situation.

The number of reported medical waste findings in San Diego County has increased dramatically in recent months. In 1987 the Hazardous Materials Management Division of the county responded to seven complaints. Between January 7, 1988 and October 28, 1988 they have responded to 24 complaints. Since October 28 they have responded to over 40. The source

or sources of this waste have yet to be identified.

When a source has been able to be identified, attempts to prosecute those who have inappropriately disposed of the medical wastes have not been successful. In 1986, San Diego County attempted to prosecute a local laboratory for disposing of urine-filled containers in their dumpster. Disposal of urine through the sewer system is considered an appropriate disposal method but the collection of urine-filled containers in a dumpster was not only displeasing to those who had to pick up the trash, but the spilling of the containers may have provided a good breeding ground for bacteria.

Because of the ambiguity of the definition of infectious waste, found in the California Health and Safety Code, the District Attorney was not convinced that this waste was unequivocally infectious, and therefore did not proceed with the case. The District Attorney is currently considering a case of untreated infectious waste disposed at the county sanitary land fill.

San Diego County is responsible for issuing permits for state licensed facilities, and facilities that generate more than 220 pounds of infectious waste per month, according to California Code of Regulations. The county charges a fee for this permit, and the fee is based on the type and quantity of infectious waste generated. In addition, if

fines are collected as the result of a court settlement, the county receives a portion of this; however, there is no funding for the county to respond to complaints at nonpermitted businesses, such as small medical offices, or to respond to complaints where there is no known responsible party. The medical waste washing up on our beaches is a good example of that.

On November 9, Supervisor Golding introduced and received unanimous support from the San Diego County Board of Supervisors for an emergency ordinance to better regulate medical waste. She asked that all generators of medical waste be required to dispose of it in a professional manner, thereby eliminating the less than 220 pound exemption for professional disposal of infectious waste. Infectious waste should be managed responsibly regardless of quantity.

Before the ordinance was enacted, current regulations required hospitals and large medical clinics to place their infectious wastes in red double walled plastic bags and autoclave the waste with steam heat, or as with body parts, incinerate to ash. Smaller facilities needed only to place untreated wastes in leak-proof bags with regular trash. Forty doctors may each dispose of ten pounds of wastes per month, equaling more than the amount required to be disposed of professionally, before the enactment of our ordinance, the present law would not effect them. The incongruity, of

course, is that infectious waste is no less infectious because it exists in smaller quantities. One pound of infectious and anatomical waste, is just as potentially dangerous as 100 pounds.

Redefined was the definition of infectious waste in the county regulations, to clarify the definition and distinguish between which wastes are truly infectious from those that are not harmful. Infectious waste should be defined so that the regulators may prosecute violators, that is, eliminate the requirement that enforcement agencies prove etiologic agents -- that is disease causing agents -- exist in the given sample.

In addition to her proposal that now strengthens our local regulations, Supervisor Golding believes that the entire issue of medical wastes should be examined to determine what other actions must be taken to protect the public health and our environment.

She proposed the formation of a local ad hoc medical waste review committee, which includes members of the Hospital Council, the San Diego County Medical Society, the Environmental Health Coalition, representation from cities that have experienced medical waste, The U.S. Navy, the State Department, and others. The committee's task is to improve the emergency ordinance that was passed, looking at the definition of medical waste to differentiate even further

between medical waste that is infectious from that which is simply aesthetically displeasing, from waste that needs to be confined and contained.

The committee plans on considering the options of allowing hospitals to receive and treat offsite infectious waste from small quantity generators, that is, doctors offices, and to require all generators of medical waste, including noninfectious medical waste, to contain this waste in locked dumpsters, and to provide written documentation of disposal practices.

From Supervisor Golding's investigation into existing guidelines on medical waste, it is apparent that a change in state law would enhance our local infectious waste management programs and provide consistency throughout the state.

Although San Diego County passed an ordinance, its jurisdiction is only within the unincorporated areas of the county, and to truly make the ordinance effective all 18 cities within our county must pass a similar ordinance. Should state law adopt stricker regulations, the need for 18 different ordinances within our county will not be necessary.

The federal government is expected to have regulations regarding medical wastes by February of 1989, and the state revisions should be coordinated with federal law as well.

Two other key areas that need study are the establishment of a mechanism to trace medical waste to its

source, and a tracking system for waste from generator to disposal. These will be beneficial to the future of our neighborhoods and beaches, no doubt.

With doctors using more disposable supplies than ever before, the volume of medical wastes is increasing. We need good advice from the health community, as well as the medical waste and solid waste disposal industries to gauge the adequacy of all aspects of disposal.

Infectious waste on our beaches is intolerable. None of us want the coast of San Diego to look like the coast of New Jersey. Closing loopholes in the law is a beginning to avert major health problems caused by infectious wastes, but there is more to do. In San Diego, we will continue to carefully review current waste disposal procedures to insure that all infectious substances are properly stored and treated and that fines and deterents are substantial enough to convince everyone to obey the law.

Thank you.

CHAIR DAVIS: Let me ask you a couple of questions.

MS. ZIMBRANO: All right.

CHAIR DAVIS: There has been probably more reported cases of wastes washing ashore in San Diego than anywhere else, at least in Southern California.

Do you have any idea as to -- I will ask the same question -- do you have any idea who the culprit is? What

the origin of this waste is? How it is coming to wash ashore?

MS. ZIMBRANO: Not at this point.

We have a hazardous waste task force that is made up of the District Attorney, the City Attorney, other agencies, and they are doing the investigating on all sightings of the medical wastes since, I believe, November 17, so they are collecting and doing the investigation and hopefully trying to find a source.

We do know that some of the needles that were found on the beach -- well, we don't know that unequivocally -- but that people who are rummaging through dumpsters, or picking up these needles -- drug addicts -- and then discarding them along the beaches, which is one of the reasons why we are asking that doctors offices use locked dumpsters, so that people cannot access the trash as easily.

CHAIR DAVIS: But, nothing has come to date --

MS. ZIMBRANO: Not of a particular source.

CHAIR DAVIS: -- nothing has come to light that would indicate the source.

MS. ZIMBRANO: Not at this time, no.

CHAIR DAVIS: Okay.

Leo.

COMMISSIONER MC CARTHY: Nothing.

CHAIR DAVIS: Thank you for coming up.

MS. ZIMBRANO: Thank you.

CHAIR DAVIS: Our next witness is also from San Diego, Gary Stephany, who is the Deputy Director of the Environmental Health Services Bureau of the Department of Health in San Diego.

MR. STEPHANY: Chairman Davis, and Lieutenant Governor McCarthy, I have just passed out some pictures of a land fill where we had a recent illegal dump of infectious waste from a hospital, which is in fact under permit.

The other item that I passed out is a copy of our recent ordinance that Supervisor Golding's aide, Myrna, described to you, that we just passed in San Diego County.

The reason that I am passing out the pictures on the land fill is because what we are really dealing with, it is not just a problem with the beaches -- as the gentleman from the Ocean's group talked about -- it is a problem of all infectious waste, medical or toxic waste. In whatever laws we talk about, we need to address the whole problem and not just at the beaches.

However, in getting to the beaches, itself, when you start looking through some of the laws, they are very vague as to who really has enforcement jurisdiction over when something is dumped into the ocean. You talk about the nuisance laws, you talk about the three-mile limit, you talk about the Clean Water Act, most of these types of things are

then related back to the federal government, which we get very little response from, as far as enforcement action goes -- at least at the local level.

So, when we are looking at some of these laws, some of the other areas that I think we need to look at, besides just changing the definition, and changing the exemption, is we need to look at the monitoring of our land fills, themselves. Every land fill in the State of California has a permit, but in some states now they are requiring ten percent of the loads to be dumped on a bed and then scattered around to make sure that there is no illegal dumping going, whether it is toxic waste, or infectious waste.

Those pictures that I showed you were just caught by accident. We had 14 big bags that were right in the middle of a large truck, and the only reason we found them is that we happen to be doing a recycling program on that particular day, at that particular land fill, and they were monitoring what was going in and out of the land fill. So, if this was just a fluke thing that we caught, we wonder how much of this is really going on, whether it is going on in the land, or whether it is going on in the ocean. So, we think that not only do we need to strengthen the laws in the ocean, but strengthen the laws in the monitoring.

As far as the exemption goes, and as far as infectious waste goes, I am sure you will hear later on from the medical

community. They will ask, "Where are the dead bodies? Where are the numbers getting sick?"

It is just like when we are dealing with raw sewage, every book -- any medical book you can pick up will tell you that people can get sick from raw sewage, but we don't have a lot of evidence that people have gotten sick from raw sewage, particularly in San Diego where we have the Tijuana problem, for instance, but we know it is happening.

So, here, although we don't have any statistics, the potential is there, and therefore we feel that the laws do need to be strengthened.

Any questions?

CHAIR DAVIS: Leo.

COMMISSIONER MC CARTHY: Yes, Mr. Stephany, have you been working with other counties to see which counties are stepping out and attempting to define the problems that seem to be emanating from disposal of medical infectious waste?

Are there other counties who have enacted similar ordinances? Is there anybody colating?

MR. STEPHANY: I don't know of any -- Lieutenant Governor Mc Carthy, I don't know of any county or city that has actually taken -- has taken the lead as San Diego did, as far as passing an ordinance.

I have talked to other counties, personally, and their County Counsel was very reluctant to do this because of the

fact that there is a debate whether we have the right to do this under -- because of preemption laws at the state level, or because of preemption laws at the federal level.

Our County Counsel said it would be a debatable issue; however, they felt that rather than a lot of doctors offices, et cetera, going to court on something like this, they would probably go ahead and comply anyway, but it would be a debatable issue, once we got to court, therefore some cities and counties are reluctant to do this, and that is why we are pressing so hard to get state legislation through.

I attended a conference two weeks ago in Washington D.C. for two days on infectious waste, and this is not a problem only in California, it is a problem across the United States. The federal government, as you are probably aware of, is coming out with some new regulations in February, but they are only going to go down to 50 pounds. We feel there should be a zero, just like we have in hazardous waste.

We do have a Directors Conference Committee on hazardous waste -- which you will be hearing about from Bob Merryman later on, who does serve on the state task force right now, through the Health Department -- that is looking at this very issue.

COMMISSIONER MC CARTHY: How long has that task force been functioning?

MR. STEPHANY: I think it has only been a couple of

months --

[Remark from audience.]

-- two weeks.

COMMISSIONER MC CARTHY: Two weeks?

You have listed in the county ordinance that you enacted some of the most likely sources of higher volumes of medical and infectious wastes. Do you have a system set up now to try to help you identify how those sources get rid of the medical and infectious wastes that are generated by the nature of their business, medical labs, industrial labs, and so on?

MR. STEPHANY: Well, at the present time what is happening is that the ad hoc committee -- that Myrna referred to -- we are meeting and hope to have by mid-January everything outlined by definition: what is infectious? What is a safety hazard? And, what is -- just a blight on the community?

COMMISSIONER MC CARTHY: When you started, did you just take the most obvious sources, where there would be volumes of medical and infectious wastes, and include them in the ordinance? Or, did you have some antecdotal information to indicate to you that they were likely sources of the different debris that had been washing up on shore, or that

you found at different sites in San Diego, and we see this board here that indicates there are many places all over San Diego County, inland as well as a long the coast, that you found medical infectious waste?

MR. STEPHANY: Well, it is my understanding --

COMMISSIONER MC CARTHY: Were you able to tie what you found to particular sources once in a while?

MR. STEPHANY: -- okay, as Myrna stated earlier, we actually started keeping records back in 1987. We felt there was a problem some time ago, however, nobody was listening.

Up until just in the last month, most of our finds were on the inland areas, around dumpsters, around clinics, around doctors offices, so it was very obvious to us what was happening.

However, when we would try to take these cases to court, since there was an exemption, even if we could say that it came from that doctor's office, we were not getting anywhere. And, then in -- even though, the gentleman from the Oceans group, again -- I am not sure he is aware of it -- actually infectious waste is defined as a hazardous waste in the State of California. It is the only state in the United States that has it that way.

COMMISSIONER MC CARTHY: Have you sent -- let me just get to the point of it.

Have you sent questionnaires to doctors offices,

medical labs, and industrial labs, other likely sources of generation of the kind of waste we are dealing with here? Have you sent any questionnaires to them to ask them some obvious questions, like, how do they dispose -- how much waste do they generate of this type? How do they dispose of it? Do they categorize any kind of waste?

Have you attempted to do that in San Diego County?

MR. STEPHANY: No, we have not, and only for this reason: because of what was happening on our beaches our Board wanted some quick action, and we had a lot of information on our own --

COMMISSIONER MC CARTHY: I appreciate and applaud what you are doing --

MR. STEPHANY: -- but, then -- and so --

COMMISSIONER MC CARTHY: -- but, what is in the process --

MR. STEPHANY: -- okay, what is in the process? I figure we will do just exactly what we did when we got into the hazardous waste business.

What we did was to send out the questionnaires you are talking about. We started out with saying: Do you do this? Do this? And, do this?

First we asked, did you handle hazardous wastes? And, 55 percent of them said, "No". And, then as we got down and had them answer other questions, and then we asked that

question again, and it then turned out that most of them, in fact, did.

We plan on doing the same thing with the doctors, although we have sent out a physicians' bulletin to every physician in San Diego County explaining this new ordinance.

COMMISSIONER MC CARTHY: Yes, and are you also searching for -- it is often not easy for a doctor's office to disposal of certain kinds of wastes, or perhaps it is in San Diego County -- are you searching for ways to deal with medical or infectious wastes.

MR. STEPHANY: Yes, we are.

We are meeting -- as the ad hoc committee entails -- with the medical community, and the solid waste, and the hazardous waste haulers, we don't agree with the gentleman from the Oceans group that this stuff cannot go into a land fill if it is properly handled.

The problem right now for a small doctor's office though, is they don't have the wherewithal to autoclave, or incinerate, or even dispose of it properly, except to throw it into the local trash can.

And, one of the problems that we are having with the State Health Department is the fact that would like to -- most doctors are associated with hospitals, and hospitals have permits. Hospitals can take care of this kind of thing, but they are not willing to take a doctor's office material

because they would have to go through what they call a TSD permit, which takes years and sometimes gets rejected by the State Health Department. If, in fact, they could take this back to the hospitals that would work as that would take care of probably 90 percent of the problem, and then we could track it from there.

COMMISSIONER MC CARTHY: Okay.

One final question: in trying to gauge the degree of risk to the public in all of this, when you found medical and infactious waste in San Diego, and I think with each month that passes by, everyone is more alert to gathering whatever evidence there is there, would you care to inform us as to what kinds of research was done to determine any dangerous elements in the medical and infectious waste that you found, that if members of the public were exposed to it they might contract serious illnesses?

MR. STEPHANY: Well, as the City Attorney from Los Angeles stated earlier, one of the reasons why we have trouble prosecuting cases under the present law is a lot of times by the time we find a needle or a syringe, for instance, it may have been infectious when it was dumped, but after being exposed to the elements for two weeks, we are not going to find anything, so from that point it is really nothing more than the safety hazard.

COMMISSIONER MC CARTHY: I understand.

MR. STEPHANY: Now, you see a vial of blood up there, if in fact that has hepatitis in it and you are jogging on the beach with bare feet, you step on that, and it cuts your foot, and the blood intermixes, you have a very good chance of getting hepatitis.

Now, what is the risk of that to the public? It is very small. I mean, it is more of a safety issue than anything else, but if you are that one person, it is very significant --

COMMISSIONER MC CARTHY: Well, that is the --

MR. STEPHANY: -- but, to the community at large, it is not significant.

COMMISSIONER MC CARTHY: -- second part of my question.

The first part was, in the various examples you have found -- and I appreciate that with the passage of time, infectious elements may well be washed away or gone, but were you able to find any continuing infectious materials in what you have presented to us, and what you have gathered over recent months?

MR. STEPHANY: Well, we were advised that it would be just a waste of time and money to even test most this, and so we have not tested it.

As far as a vial of something, when it has blood in it, and we know it is blood, we are just assuming the worst.

COMMISSIONER MC CARTHY: Is it your plan now to begin testing these materials?

MR. STEPHANY: No, it is not. There is no reason to do any testing.

Again, it is like testing an open well, it may show good today, but if something gets in there it could be bad tomorrow. The same way, if you have a needle out on the beach, and if it sticks you in the foot, if there is nothing on it today, you may be a carrier, and the next person who sticks their foot may get stuck --

COMMISSIONER MC CARTHY: I understand.

MR. STEPHANY: -- so it is just a waste of time and money to do the testing.

COMMISSIONER MC CARTHY: I mean anything contained, like vials of blood, or --

MR. STEPHANY: You see in the pictures --

COMMISSIONER MC CARTHY: -- wrapped fetal tissue, the other things that you might see.

MR. STEPHANY: -- in the body parts, that is easy, because under state law that cannot even go into the land fill. It has to be incinerated, so that is an easy one to prosecute, and this other -- again, AIDS generally will disappear within anywhere from three to nine hours, hepatitis is generally a couple of weeks. It is just really one of those things that it is just not worth the time and effort to

test.

I know they did this, some of this, back east in New Jersey, and they found some things, so we just assume that the potential is there, and as long as the potential is there, we are going from that angle.

COMMISSIONER MC CARTHY: Okay.

CHAIR DAVIS: Just one question: do you have any notion, from your experience in San Diego County, as to the sources of this contamination?

MR. STEPHANY: Well, as Myrna stated, we have a lot of theories. We think that some it came from -- we have a lot of facilities along the beach that any street person -- and we have a lot of people who like to live on the beach, especially during the summer -- that rummage through the trash, and this could end up very easily that way. There are some things that we really feel that come off of ships, whether they are cruise ships, freighters, tuna boats, Navy ships, we don't know. We just feel that some came directly from the ocean.

You heard earlier about this big swath that somebody saw off of Catalina that may have drifted towards San Diego, and we sent out helicopters and couldn't find anything.

But, at this point in time, this task force is continuing in its investigation, but other than a lot of theories, no.

CHAIR DAVIS: But, there is nothing about the waste and its marking, how it is --

MR. STEPHANY: Well, we know that some of it was military, because it had military markings on it, but again, we don't know that it -- it could have come through a surplus, or through -- it my understanding that anybody that has a grant, or is getting funds from the federal government, can purchase these things through the Defense Department, so any agency -- it could be a veterans hospital, a university that has a grant -- any of these people have access to this type of material.

Yes, there were military numbers. We did trace it back to the Department of Defense, but that is as far as we could get.

CHAIR DAVIS: Thank you.

Our next witnesses will be one from Orange County and one from Ventura, and then we are going to call upon the Navy, and I would like to get at least that far before our noon break, so with that in mind, let me call Mr. Merryman from Orange County, who is the Director of the Environmental Health Division of the Department of Health for Orange County.

MR. MERRYMAN: Chairman Davis, Lieutenant Governor McCarthy, I appreciate the opportunity of addressing your group here today.

I have given you a package of materials that I would like you to walk through. My comments are divided into two parts: one, is a scenario of the incidents which we will walk through with the pictures; and, then I would like to make some comments on some of the things that have been discussed earlier this morning.

Beginning on Monday morning, November 14, and continuing for several days, medical wastes washed ashore on the beaches in Orange County. This incident was initiated by the finding of two vials found in photo Number One, which you may find in your blue booklet. Because of their unusual packaging and lack of identifying labeling, these four-inch long vials raised considerable concern. This concern grew as additional sightings were reported on beaches throughout Orange County.

The Orange County Health Care Agency, Division of Environmental Health, maintains an emergency incident team which responds to chemical and infectious waste releases. The Environmental Health also enforces the provision of the state's hazardous waste control laws, relating to illegal disposals of both hazardous, and infectious waste.

Because of our role in hazardous and infectious waste regulations, cities receiving complaints regarding the vials requested Environmental Health's assistance in investigation the incident. Due to the fact that the vials were originally

from the ocean, Environmental Health notified the United States Coast Guard and required that a representative be present at the incident command post that was set up in Huntington Beach.

After determining that the vials found were sealed, and could be safely picked up by the local Fire Department and the life guards, Environmental Health issued a request for periodic beach patrols. Any vials or other suspicious materials found were to be investigated by Environmental Health staff upon request.

Orange County efforts were then directed to identifying the containers. Thanks to public assistance, Coast Guard personnel were able to identify the vials and their contents the following day. The containers were identified as containing concentrated germicidal chemicals used to decontaminate military personnel exposed to biological agents -- and that's in Picture No. 1 that you have in your blue folder.

Other items recovered on Orange County beaches also suggested a military source. An aircraft surface cleaning compound and a life vest flashlight shown in Photo No. 3, a bottle of antibiotics with military stock numbers, which is in the middle of item No. 2, a chemical identified as acromycin.

On the next page we found a -- no, I am sorry.

There was an expended phosphorus flare that was collected, but this was taken by the Coast Guard, and we did not maintain possession of that.

There was a plastic bag labeled bag, waterproofing chemical biological M-1 and that is in Photograph No. 4.

A Lewis light indicator in Photos 5 and 6. Lewis light is a highly toxic blister gas.

A Navy Technical Manual cover for the flank ship defense system, is identified in Photo No. 7.

A prescription vial issued from the Naval Medical Clinic in San Diego is identified in picture No. 8.

Other items found included vials of antibiotics and medicines, syringes, and needle assemblies typically used to draw blood, swabs in a variety of empty medical solution vials, shown with other items collected are shown in a grouping on Photograph No. 11.

On Tuesday afternoon, November 15, Coast Guard officials informed our agency that they would not be able to assume legal status of the investigation to the incident. The Coast Guard indicated that their authority to operate was provided under CERCLA, which did not include the regulation of medical wastes.

Since it appeared that these wastes were disposed of at sea, we've been informed by our local District Attorney in Orange County that it will be difficult for our agency to

investigate and prosecute. In light of this, we called upon the federal Environmental Protection Agency. EPA staff indicated that federal ocean dumping laws regulate all wastes disposed at sea. Because EPA has statutory authority to enforce these laws, our agency requested EPA to investigate this incident. All information collected has been referred to the Environmental Protection Agency. EPA.

In addition to EPA, Environmental Health also notified the U.S. Navy officials regarding our findings. Naval investigators have examined the collected materials on three occasions, and have offered to handle the disposal of these items. The Navy has indicated to our agency that Navy regulations require the medical wastes be disposed of in weighted containers at distances of at least 50 miles offshore.

The Navy appears to be very interested in determining if Naval regulations were violated. To date they have not accepted responsibility for the incident. The Navy has indicated to our agency that Naval regulations, and not the the ocean dumping laws, would apply if a Navy ship was at fault.

We have chosen not to release the material to the Navy, at this time. EPA agrees with that, and we are working with EPA, primarily to obtain information and pass it on to EPA.

The material that washed ashore in Orange County starting on November 14, exhibited flammable, toxic, and corrosive properties. This was not done by any type of chemical test, because of the fact that we were not going to be the lead agency, so we did not feel it appropriate to start doing chemical testing on these materials, so we evaluated the materials, and using medical references made these determinations.

While public injury was avoided in this incident, it is clear that these types of materials do not have a place on public beaches.

At this time, it is not known by our agency if the information provided to EPA regarding the materials collected on our beaches, has assisted their investigation. Since EPA is responsible for the enforcement of the federal ocean dumping laws, we are deferring this whole matter to EPA.

Now, I would like to make some comments about infectious wastes. In 1982, both Los Angeles and Orange Counties, had some problems with some infectious waste, and it became quite a high profile item, and Orange County implemented a program with just some very loose authority, general authority that the local health officer has, and set up some criteria for the disposal of infectious wastes.

Later, these guidelines and other guidelines, were adopted into regulations. In the last year and a half, we

have prosecuted successfully three illegal disposal incidents of infectious waste in Orange County.

One of the big problems that has been mentioned before -- without being too redundant -- infectious waste has to be proven to have etilogical agents, in other words pathogens, or organisms that will cause disease. And, this is extremely difficult to detect.

It would be our recommendation that the definition of infectious waste include blood contaminated materials. Presently, it is just -- the definition only includes the proof that etilogical agents are present.

There is another problem in Orange County, we've had this, the oversight of infectious waste, and we haven't had a problem with the major generators of infectious waste in Orange County, and we do have an infectious waste treatment facility, but there is a problem, and I would like to re-emphasize that, because to me this is one of our major problems, at least in Orange County, and that is the problem that leads to what we refer to as the bleeding refuse dumpster. And, that is the issue where a laboratory or physician's office who generates less than 220 pounds, or 100 kilograms a morth, does not come under any regulatory authority, and is basically exempt from any type of practices required for the proper disposal of infectious wastes.

Without any type of regulatory authority, they have no

other option but to dump it in the dumpster, and we do get called out periodically from dumpster that are literally bleeding, and this creates a great deal of concern. In some cases, people will be going through dumpsters, people that would not be -- rummaging for other things, and they come across these things, and they are exposed to all types of toxic wastes, as well as sharps.

Sharps are needles and blades, and things of this sort. They do have to be handled in a very special way, so the regulation -- the weak part of the regulations is really with the limitation of the 100 kilograms.

Now, Mr. Stephany, in his program in San Diego, said something that I think is really worth while, but I don't think it should be done locally from county to county. I think it should be done statewide, and statewide we have uniformity. One of the problems with county to county is that we have different interpretations, we have different interests, and it leads to really a lack of uniformity, which really is not the best way to handle the disposal of infectious waste.

Another problem that was brought up, which I would like to re-emphasize, is the problem of dealing with treatment facilities. Right now, the way the hazardous laws are worded, if a facility treats hazardous waste -- and in California hazard waste is an infectious waste -- if a

facility treats hazardous waste, it must obtain a TSD facility permit -- this is a treatment storage and disposal facility permit.

There is an exemption for the treatment of infectious waste -- where infectious wastes are generated. Hospitals can treat their infectious wastes by autoclaving.

There was a question about the efficiency of the autoclaving. We have had this in our program for a number of years, and we have vials of bacillus organisms that are placed in the center of the autoclaves on an annual basis, and we check the autoclaves and check the procedures, and we feel quite comfortable that the autoclaving that is done for the treatment of infectious waste is done in a very satisfactory manner; however, with this exception, the hospital cannot receive infectious waste from physicians' offices. We have an incident right now where a physician's office is located across the parking lot from a hospital. He used to take his infectious waste to the hospital, and they would throw it in their autoclave, he was on their staff, there was no problem.

But, with all of the requirements for the TSD facility permit, the hospital would now have to obtain a TSD facility permit, because they are not treating just their waste. This is kind of a key issue that Mr. Stephany raised.

If the hospitals could treat these wastes, many

physicians would be glad to get rid of their infectious waste through a very safe channel -- physicians that generate less than 220 pounds a month.

Right now the hospitals will say, "No, we can't take your infectious waste. We cannot go through the time-consuming process of geting a permit, so you will just have to do it any way you can."

Another way that we have suggested to the medical community in dealing with infectious waste, is grouping, grouping their infectious wastes. There are service companies that will, and will go on a milk run, and will pick up medical and infectious wastes from physicians' offices, even though they be small generators; but, now we have a financial burden on the physician, and there may be the question of whether he wants to follow through with that type of burden.

With that, I will be happy to answer any questions.

CHAIR DAVIS: I have got a couple of questions.

You said that some of the waste you have discovered recently in Orange County exhibited flammable and toxic properties, can you describe the nature of that waste and why you came to that conclusion?

MR. MERRYMAN: Going through the research as well, we had ethenol which is a flammable material. and one of the vials contained an amount of ethenol that appeared that it would flammable. We have not done a flammable test on it, so

that has not been verified by a laboratory analysis. It was done as -- as some people say, we dry labbed it. We looked at the material, and then looked in our references.

There was material that had a pH of 13. In California law, a pH of 13 would be a corrosive material which would make it a toxic material.

CHAIR DAVIS: Another point you brought up, is this permit a TSD permit?

MR. MERRYMAN: Yes, issued by the Toxic Substance Control Division of the Department of Health Services.

CHAIR DAVIS: And, give me -- I understand the obvious advantages of either eliminating that requirement to obtain that permit or streamlining the issuance of the permit, and what is the argument against changing that -- be the devil's advocate for me and explain public policy reasons for not changing with the permit issuing process as it now stands at the Department of Health.

MR. MERRYMAN: Well, I hate to --

CHAIR DAVIS: If you can make such a --

MR. MERRYMAN: -- debate the policy of DHS without having them be here, but they will be following me, so maybe they can contradict me if they disagree with me.

Infectious wastes are hazardous waste in California, so a facility that treats hazardous waste is classified as a treatment, storage, and disposal facility, and they must

obtain a permit. The method to obtain a permit is very time consuming, and very burdensome.

With infectious waste there is an exception. If the generator generates infectious wastes he can treat it on his own premises, i.e. hospitals can autoclave it, but if a hospital takes the material, the infectious waste, from the doctor's office, or from another acute care facility, or convalescence home, and brings it in, they are now receiving a hazardous waste (infectious waste) so therefore they would be classified by state law as a treatment, storage and disposal facility and they would be required to go through the permitting process.

CHAIR DAVIS: But, apart from -- I understand that bureaucratic requirement, but are there any public policy arguments against allowing hospitals to accept this waste from doctors that serve on their staff?

I mean, it would seem at first blush that that is a strong public policy reason to encourage them to do that, because in your opinion, at least, this autoclaving process works and is an effective way of treating medical wastes, so it would seem on first blush, that good public policy would encourage doctors to transfer that waste to a hospital that can dispose of it effectively.

MR. MERRYMAN: But, the hospitals are not going to accept it, because then they would be violating state law

because they do not have a TSD facility permit.

I am serving on the committee that -- the task force that Dr. Kaiser has set up -- dealing with the safe management of infectious wastes, a task force, and we are having a meeting -- as a matter of fact tomorrow -- and this is one of the issues that I am hoping to get feed back from, and my feeling is that the hospitals should be allowed to do this, but they should be required to have a permit, and the permit should be issued by the local enforcement agency, because right now in California the infectious waste regulations are enforced by the local enforcement agencies, and I think that is where the permit should be issued.

CHAIR DAVIS: Let me try this one more time.

I know you need to have the permit -- but, you are really begging the question.

The question is why do we make you have the permit? What public policy argument or reason necessitates you having to get the permit? What are the hazards of accepting the waste?

MR. MERRYMAN: This is an interpretation of the Toxic Substance Control Division of the State Department of Health Services.

CHAIR DAVIS: Oh, you are not really answering my question, but I --

MR. MERRYMAN: I am sorry.

CHAIR DAVIS: -- have asked it four times, so I am going to give up.

MR. MERRYMAN: You asked me about public policy --

CHAIR DAVIS: Yes, the public policy argument, what is the reason? We don't just do things in government for just no reason -- we aren't supposed to --

COMMISSIONER MC CARTHY: Oh, we don't?

CHAIR DAVIS: What is the reason for requiring hospitals to get this permit? What is the health reason? The public policy reason for requiring them to have to get this permit to accept wastes from doctors that serve on their staffs.

MR. MERRYMAN: Well, the policy, basically, deals with -- it goes back to RCRA -- the Resource Conservation Recovery Act -- and the state enforcing all of the RCRA regulations, and one of the things that is in RCRA regulations is the requirements for a treatment, storage, and disposal facility; however, in California they have added on infectious wastes. So, since that is all tacked in, the Department of Health Services has interpreted that they are required to have this permit as a matter of state law.

CHAIR DAVIS: Okay, fine, I am raising the white flag.

COMMISSIONER MC CARTHY: I think it unfair of the Chairman to insist that you give reasons for the existence of state laws.

CHAIR DAVIS: I don't -- I am happy to acknowledge that there may not be a reason, but that has not been associated --

MR. MERRYMAN: Our position at the local level --

COMMISSIONER MC CARTHY: You have done it, and don't go into it a deeper.

CHAIR DAVIS: -- I know, yes, you got it.

Thank you very much.

COMMISSIONER MC CARTHY: No, no, wait a minute, can I ask a question?

CHAIR DAVIS: Oh, you are going to ask a question.

COMMISSIONER MC CARTHY: Thank you.

We could eliminate half of the laws in the state if we insisted on giving good reasons for creating them in the first place.

I notice in your photos that 10 out of 11 of them deal with military sources of medical wastes --

MR. MERRYMAN: I think they all did.

COMMISSIONER MC CARTHY: -- well, Photo 1 is vials of decontamination solutions for use to counteract military biological chemical warfare agents.

And, then as I proceed through, military items found among the medical waste collected, a water proofing bag from military issue, chemical, biological warfare personnel face mask, and so on.

So, 10 out of the 11 deal with military sources for this, and 4 out of the 11 deal with chemical, biological warfare.

MR. MERRYMAN: Yes.

COMMISSIONER MC CARTHY: Are you trying to tell us something in selecting these photos? Is the evidence you are gathering indicative that there is a special, or peculiar, problem with military installations in Orange County? Or, is that something not to be read into this, that this is just some examples -- photographic examples that you are giving us here?

MR. MERRYMAN: No, all of the examples that were pictured all occurred during a series of incidents from November 14 to the November 17, and was -- what we felt was one incident that lasted over four days --

COMMISSIONER MC CARTHY: Okay.

MR. MERRYMAN: -- and these were all materials gathered from Huntington Beach down to San Clemente --

COMMISSIONER MC CARTHY: Okay, all right.

MR. MERRYMAN: -- so we feel that all of these are --

COMMISSIONER MC CARTHY: So, they are not intended to be representative of a two-year sample of --

MR. MERRYMAN: No, no, it was the one incident.

COMMISSIONER MC CARTHY: All right.

Second question: if there is talk of chemical or

biological warfare agents, this causes great controversy. We read about Iraq and what they are doing to the Kurds. Our national leadership tells us that the Soviets are doing research in this area, and have the capability of using chemical or biological weapons against us, and this information here seems to be some training program to teach our personnel how to protect themselves against the use of chemical or biological warfare.

Is this an area that you are looking at, without unduly alarming anybody, but just to have knowledge so that we know what it is we are dealing with? Are you working with the military installations in your county to try to determine what it is, what programs exist for chemical, biological warfare, and what consequences, if any, this has to the civilian population in the area?

MR. MERRYMAN: No, we have not pursued that avenue with the military. We have only pursued the results of the incident that occurred from November 14 to the 17.

As far as how these chemicals are used, or where they are used, we have not pursued that at all.

COMMISSIONER MC CARTHY: Yes, there is no evidence from the photos you've got here that there are, in fact, a lot of chemical or biology ingredients on any military base.

These seem to be defensive procedures, and I am wondering if you are, just for the sake of enlightenment, if

you are pursuing that as one area of knowledge here that you are trying to gain?

MR. MERRYMAN: Well, the only thing we have pursued is to identify them, and it appears they are definitely part of -- or they originated from one part of the military, and with the materials that came along with them that identified the Navy, it appears very much that it came from the Navy, and that has been basically our involvement, to refer it to the Navy for their follow-up and the EPA.

COMMISSIONER MC CARTHY: Thank you.

CHAIR DAVIS: Let me ask one question, and I think you mentioned this in your prepared remarks.

You have been working with the Navy to try and identify the reasons that these materials found their way onto the beaches?

MR. MERRYMAN: Primarily the Navy has been trying to find avenues of information that would show that it actually came from the Navy.

Now, how they got onto the beach, we have not received any information from the Navy as to what conclusions they have, or what they have been able to deduce from the information we've given them. We've given them all the information, and showed them the material, some of which I brought today.

CHAIR DAVIS: All right, thank you very much for

coming up here. We appreciate it.

MR. MERRYMAN: Thank you.

CHAIR DAVIS: The Chair, with the indulgence of Mr. Brose of the Ventura County D. A.'s office, would like to call the Navy representation to testify at this point, and then I promise Mr. Brose that we will hear him before we adjourn for lunch.

So, with that, if I could ask Commander Ron Wildermuth, if he could come forward.

MR. WILDERMUTH: Good morning, Mr. Chairman, Lieutenant Governor, Commissioners, on behalf of the United States Navy I would like to thank you for inviting us to participate today.

I would like to --

CHAIR DAVIS: Excuse me Commander, I might ask Commander Porter, after you finish, if he could make some comments, and then we would address questions to both the Navy and the Coast Guard, if that is sufficient with you.

MR. WILDERMUTH: Yes, sir.

CHAIR DAVIS: Thank you.

MR. WILDERMUTH: I would like to assure this committee that the United States Navy is strongly committed to protecting the ocean environment. Since the late 1970s the Navy has been using shipboard trash compactors and incinerators to reduce the amount of materials discharged

into the ocean. The Navy is also working on developing improved trash compactors, mulchers, and plastic waste processors as future trash facilities on Navy ships.

Recently we have begun various training and supply initiatives trying to eliminate plastics at the source, i.e. before they go aboard our ships. Other initiatives include trash separation, specific medical waste compactors, and transferring as much shipboard packaging as possible from -- to biodegradable cardboards and other non-plastic packaging.

Recently Secretary of the Navy Ball asked that we redouble our efforts to insure that we comply with the environmental regulations aimed at protecting our oceans.

The recent medical debris that washed ashore in Southern California concerns the Navy as much as it does anyone because we are also California residents. Beside being a concerned community minded organization, the Navy dependents also enjoy these same wonderful beaches.

We believe the Navy has a very safe, effective program to deal with medical wastes, both afloat and ashore.

Let me briefly highlight the Navy's program for control of medical wastes at sea. Since 1985, Navy policy has only allowed medical wastes to be carefully disposed of at sea at least 50 miles from shore, and only when necessary. Infectious waste had to be autoclaved, steamed sterilized, and only then could it be discharged into the ocean, and

again at least 50 miles from shore.

In actuality, in the areas immediately off of the California coast, medical waste has for many years been retained on board Navy ships for disposal at shore. Since our ships generally train off the coast for short periods of time -- one, two, three weeks -- they can easily retain any infectious or other medical wastes on board, and in fact do do so routinely.

In October of this year, the Chief of Naval Operations reaffirmed this existing practice in a message to Navy Commanders. I have provided you a copy of that message, and will briefly summarize it and its important points at this time.

Medical waste is divided into two categories: potentially infectious waste, and other wastes. Potentially infectious waste is that waste which could result in an infectious disease and includes the following examples: isolation wastes, waste generated by patients isolated to protect them from other communicable diseases; cultures and stocks of infectious agents, and associated biologicals; discarded live and attenuated vaccines; human blood and blood products; pathological waste such as tissues; sharps, such as needles, syringes, scalpel blades; surgical wastes such as soiled dressings, sponges, and surgical gloves.

Other waste is defined as disposable medical equipment

and material, which do not fall into the categories I have just mentioned, for example: ace bandages, medical packaging, et cetera.

Potentially infectious waste shall be managed as follows: potentially infectious waste shall be suitably packaged, sterilized, and stored until disposal shore. After sterilization, potentially infectious paper and cloth-based medical wastes may be incinerated aboard ship if the ship has that capability, or else it will be brought ashore.

All sharps are collected in plastic autoclavable sterilized containers, retained onboard and disposed of ashore. The only allowable deviation from this policy is when potentially infectious waste would endanger the health or safety of personnel on board, or create an unacceptable nuisance or compromise combat readiness. Only then is overboard discharge authorized, under the following restrict guidelines: ships must be beyond 50 miles from shore, waste must be sterilized and properly packaged, and weighted to insure that it will sink.

Additionally, an administrative record must be made of this discharge; however, we do not envision this type of discharge in the peace time Navy off of the California coast.

Liquid waste, once properly treated, may be disposed of by discharging through the ship's sanitary system, which chemically treats waste before going into the ocean.

Other medical waste does not require autoclaving or special handling, but still must be weighted to insure it will sink.

I would like to further point out that senior flag officers in the San Diego and Long Beach area have recently addressed this issue, stressing the importance of rigidly adhering to the CNO's policy. Vice Admiral Kihune, Commander of the Naval Surface Force, U.S. Pacific Fleet, who owns all of the surface ships except for carriers, has direct operational control over vast majority of surface ships, and went so far as to point out that: "Unless there is a compelling requirement, anything resembling medical wastes should be properly disposed of ashore."

Medical waste ashore is disposed of by a bonafide civilian contractor, who is licensed by the State of California Health Department. In San Diego, our medical facilities are serviced by Browning Ferris Industries of Los Angeles, and in Long Beach we are serviced by Perdoma and Sons of Los Angeles.

Standard procedures at most Naval medical facilities require medical wastes to be double red bagged by the generating department and hand carried to a secured on-base infectious waste holding area. Then it is deposited in heavy gauge plastic barrels which are collected with varying frequency by designated contractors. Contractors dispose of

the materials by incineration or autoclaving. Autoclave material is not infectious and can be disposed of in sanitary landfills. We know of no instance where one of our contractors has been cited for improper disposal. There are few Navy medical facilities that do not use civilian contractors. Those units incinerate or autoclave materials, and then dispose of the material -- medical waste by-products with the general refuse on the base.

For the record, I would like to point out that to date no hazardous medical waste has been linked to the Navy on the west coast. The Chief of Naval Operations has stated that it is the responsibility of all Commanders to insure that no medical materials are disposed of in a manner that may pose a risk to the public health and welfare, or marine environment.

Thank you.

CHAIR DAVIS: Commander, let me just ask a couple of questions.

You say in your statement that you don't envision a discharge of infectious waste during peace time.

MR. WILDERMUTH: I don't envision any medical waste being dumped off of the coast of California -- or needed to be dumped. Based on the CNO guidelines, which are -- because it would -- the medical stuff onboard would create an unacceptable nuisance, compromise combat readiness, or endanger the health of the people onboard. In other words, I

think those are more or less situations that would arise under extended war time operations.

CHAIR DAVIS: Let me ask you this question: has there been any disposal of waste, to your knowledge, by the Navy along the California coast, beyond the 50-mile limit?

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MR. WILDERMUTH: We have asked the Commanders involved when the medical wastes first came ashore, and they assured us that the standard operating procedure was that they bring the stuff ashore.

I might add that when we did trace down the two prescription bottles to the COs of the ships, we asked them that question in writing and they responded that, "No, they had not dumped medical wastes."

CHAIR DAVIS: Is it possible that some personnel onboard the ship could have disposed of waste without authorization from the Commander of the vessel?

MR. WILDERMUTH: Anything is possible, sir.

CHAIR DAVIS: Are -- are you working with Orange County -- Mr. Merryman?

MR. WILDERMUTH: Yes, sir, we are -- both with Mr. Merryman, and Gary Stephany's office, in fact we are, ourselves, trying to identify the source of some of this material, based on the federal stock numbers.

To date, the federal stock numbers have led our researchers to defense depots, which means that the material

could have gone to VA Hospitals, to civilian hospitals with government contracts, and to the military. Unfortunately, the lot numbers are not tracked, you know, from that defense depot onward, and that is where we have had a problem.

CHAIR DAVIS: But, you are satisfied that there has been no authorized dumping off the coast of California, even of material that is not classified as infectious waste, but simply medical wastes?

MR. WILDERMUTH: Yes, sir.

The only thing that I think that has been authorized to be dumped is at 50 miles, and that is trash. Now, whether there was a plastic, or a rubber glove, in that trash, you know, that is entirely feasible, but after the Commander's recent flurry of messages, I guarantee you that even that will not happen, or at least will be watched for.

CHAIR DAVIS: Well, under the existing guidelines, which Lieutenant Governor reminded me is now federal law, I don't know if these guidelines predated the passage of the law or the result there of, but legislation was passed by the Congress on this subject before they adjourned this fall.

At least under your guidelines, and I believe under the law, certain forms of medical wastes can be deposited 50 miles offshore --

MR. WILDERMUTH: Yes, sir, packaging, ace bandages --

CHAIR DAVIS: -- it is that kind of waste that I am

talking about when I ask you whether or not there was any -- to your knowledge whether there has been any disposals of that form of wastes, to your knowledge, off of the California coastline?

MR. WILDERMUTH: You know, not being out on the ships I cannot, you know, delineate where they drew the line. No, sir, I cannot tell you.

CHAIR DAVIS: Is it -- is this the kind of activity that would be recorded on a ship's log? Would there be any record of this type of disposal?

MR. WILDERMUTH: Not as to specifically what is in the trash. The fact that trash was dumped would be logged, except for now if medical trash were ever dumped it would be logged.

I think you --

CHAIR DAVIS: But, that is a new requirement. That did not exist --

MR. WILDERMUTH: -- yes, sir.

CHAIR DAVIS: -- prior to the adoption of these regulations.

MR. WILDERMUTH: That is correct.

CHAIR DAVIS: And, they were adopted?

MR. WILDERMUTH: In October.

CHAIR DAVIS: Was that pursuant to Congressional action?

MR. WILDERMUTH: I have no knowledge. I assume so.

I would add that we would probably err on the side of being -- of putting this stuff into a container rather than putting it over the side, even if it is packaging or medical related.

CHAIR DAVIS: Putting it in a container which would be disposed of onshore?

MR. WILDERMUTH: Yes, sir.

CHAIR DAVIS: Or at sea?

MR. WILDERMUTH: Taken ashore.

CHAIR DAVIS: I see.

Leo.

COMMISSIONER MC CARTHY: No.

MR. WILDERMUTH: I would like to also, if I could, Lieutenant Governor, sir, address those CVR materials a little bit.

Those CVR materials are a decontamination material that people put on their face or on their hands and arms, in the event they get into that type of environment. It is a defensive type thing. In addition to the material they put on their face, there is a kit that they use that tells what kind of agent that they are being threatened with, and other than that there are no chemical materials on the ships -- strictly defensive.

COMMISSIONER MC CARTHY: Okay, there are no training

procedures at any military installations that you aware of, Commander, that use chemical or biological warfare germs or ingredients in the training of the men.

MR. WILDERMUTH: No, sir.

In fact --

COMMISSIONER MC CARTHY: This is simply to say that should you be in an area where such chemical or biological agents might be used against you, this is the defensive mode that you will employ.

MR. WILDERMUTH: Yes, sir, and only then would we break open those packages.

COMMISSIONER MC CARTHY: Thank you.

CHAIR DAVIS: So that there is no actual -- no real training of that process, because that would necessitate opening these materials.

MR. WILDERMUTH: Right, and we have training versions of these same wipes that are nothing but alcohol and water, so that the people know where to put them, but that's the only aspect of that.

CHAIR DAVIS: Thank you very much for coming here today.

MR. WILDERMUTH: Yes, sir, thank you.

CHAIR DAVIS: Could I ask Commander Porter to come forward and speak on behalf of the Coast Guard.

MR. PORTER: Good morning Mr. Chairman, Lieutenant

Governor, my name is Scott Porter. I am a Commander in the U.S. Coast Guard, and I am stationed at the 11th Coast Guard District headquartered in Long Beach, where I am presently assigned as the Chief of the Marine Environmental Protection and Port Safety Branch. Our office oversees the operations of the Coast Guard within the State of California, and in particular, the branch that I am in charge of has the responsibility for overseeing the Marine Environmental Protection Program within the State of California -- Coast Guard's Marine Environmental Protection Program.

I would like to discuss with you this morning the federal regulations that the Coast Guard has responsibility for enforcing, which are applicable, or may be applicable to the discharge of medical wastes at sea, discuss the role of the Coast Guard with response to reports of medical waste spills, and outline the Coast Guard's policy for discharge of medical wastes from our own ships.

CHAIR DAVIS: Commander, if I could just interject, are these regulations substantially similar to the ones the Navy has promulgated pursuant to recent Congressional action?

MR. PORTER: The policies that were discussed with regard to discharge from our own ships is exactly the same.

The laws that I was going to discuss are the federal statutes which we, the Coast Guard, get involved with in enforcing the Ocean Dumping Act, the Refuse Act, and a new

set of regulations that will be coming out on the first of January. It is an international law, MARPOL, 1978, Annex 5 has to do with the dumping of garbage at sea, a new regulation, again will be out 1 January, and the Coast Guard will be involved with the enforcement of those regulations.

CHAIR DAVIS: Well, if you wouldn't mind, if you could skip the portion of your testimony that referred to the regulations, since we've covered those, if they are identical with the ones the Commander gave us.

MR. PORTER: The policies with regard to the handling of the waste on board ships?

CHAIR DAVIS: Yes.

MR. PORTER: Yes, sir.

As I mentioned, there are two federal statutes with application to the medical waste problem, that the Coast Guard is involved with, enforcing -- one, is the Ocean Dumping Act, which is codified in Title 33 of the U.S. Code, 1401, and the Refuse Act, codified in 33 U.S.E. Section 407.

The Ocean Dumping Act prohibits the transportation of any materials from shore to sea for the purpose of ocean disposal, unless such is permitted by the EPA. The keys there are the transportation from shore to sea for the purpose of dumping. It primarily regulates U.S. citizens and vessels, but does also prohibit foreign vessels from transporting materials from foreign sources for disposal into the U. S.

territorial sea or contiguous zone.

This law provides for a $50,000 civil penalty, and also provides for $50,000 and one-year criminal penalty.

EPA administers this law. The Coast Guard is active in its enforcement at sea.

The second Act is the Refuse Act, unfortunately a very old act, 1899, basically prohibits the discard of any materials, with a few exceptions, such as street water runoff and sewage. It prohibits the discard of these materials into U.S. navigable waters, which would take it only out to three miles from the teritorial sea baseline.

The Act provides only for criminal sanctions, $2500 maximum penalty, and 30 days in jail. It is a misdemeanor. the Corps of Engineers is the primary federal agency for enforcement of the Refuse Act, and again, the Coast Guard participates as a maritime federal agency in its enforcement.

I mentioned that on the 1st of January there will be a new set of regulations that will have some application in the medical waste arena. These regulations will govern the discharge of garbage into U. S. waters. They were developed pursuant to an international agreement on maritime pollution, and although the final regs are not yet published, they are required to prohibit the following:

- The discharg of plastics into the seas of the world.

- The discharge of dunnage, lining, package materials, which float, within 25 miles of land.

- The discharge of food wastes, paper, rags, glass, metals, and similar materials within 12 mile of land, unless they are ground up, in which case they can be discharged outside of three miles.

- The regulations will also -- are also required to prohibit the discharge of any garbage from fixed or floating platforms engaged in the exploration of mineral resources, and the only exception for those types of sources is ground food wastes, which can be discharged outside of 12 miles.

- The regulations will also provide for special areas where discharge may be prohibited in total, except for food wastes, again outside of 12 miles. Special areas, at the present time, that have been identified in the international arena do not include any U. S. waters, however, the Gulf of Mexico is being pursued at this time for designation as a special area. Most of the special areas are enclosed seas, like the Mediterranean, Red Sea, Black Sea.

Again, those regulations have not been finalized yet.

The proposed rules came out in November. We expect final rules within the next few weeks, so that the 1 January enforcement date can begin.

As far as the Coast Guard's policy with regard to response to medical wastes, the Coast Guard considers medical wastes to be a solid waste, which is regulated at the state or local level, and considers lead response agencies to be state or local health agencies.

These wastes can also be considered pollutants or contaminants, within the meaning of CERCLA. Response actions, all Coast Guard units have been tasked to receive reports of medical wastes washing ashore, and pass the reports on to the federally predesignated Coast Guard on-scene coordinator for the area where the wastes are washing ashore. In California, those predesignated on-scene coordinators are the Coast Guard Captain of the Port Offices in Alameda, Long Beach, and San Diego.

The on-scene coordinator is tasked with passing that report to the appropriate federal, state, and local agencies, and to provide assistance as available on scene, and that may be providing transportation, surveillance, site security, or any of the other special needs that the Coast Guard has capabilities to assist with.

The Coast Guard will conduct cleanup actions only if the responsible party cannot be identified, and the state and

local agencies who we believe have the responsibility are not taking appropriate action, and then again, only if the waste presents an imminent and substantial danger to the public health and welfare.

Our actions, in that case, would be funded with super-fund moneys, and would consist of only the emergency removal to eliminate the immediate danger to the public health. That may amount to nothing more than collecting materials from the beach and getting them to a safe location, at which point in time the immediate danger to the public health is eliminated, and then it becomes a state or local, or possibly even an EPA, responsibility from that point on. This is our standard procedure with regard to chemical discharges.

The rest of the statement that I had has to do with our policy with regard to our own ships.

CHAIR DAVIS: Let me ask you a couple of questions.

This report that we had from a San Diego citizen who noticed medical debris, approximately one square mile, even though I guess that was not confirmed by at least one governmental agency that has helicopters to go up and try to inspect it, but should you see such a barge-like material of medical debris, you would not view your role as cleaning that up, or escorting that off of the sea, but simply reporting that to your designated people in Long Beach, San Diego and

Alameda?

MR. PORTER: If we were to sight a slick, such as was reported? We would monitor the movement of the slick at most, and report to the designated agencies that we believe have primary responsibility.

CHAIR DAVIS: And, you only view your clean up responsibilities as occurring in those cases when there is an emergency, or an immediate health threat?

MR. PORTER: Yes, sir.

And, again, that is consistent with the way we handle hazardous chemical releases under CERCLA as well.

CHAIR DAVIS: Have you -- are you aware of any instances in the last 12 to 18 months of medical debris floating at sea?

MR. PORTER: Not other than the report in November, but that has already been discussed here this morning.

CHAIR DAVIS: That is where the debris washed ashore in Orange County?

MR. PORTER: Oh, I am familiar with the incident of the materials washing ashore. We have received reports from our field commanders, the Captain of the Port in San Diego, the captain of the Port in Long Beach, describing their actions with regard to those specific incidents, and also have received one message report from the field about the slick offshore, the reported slick of materials offshore,

which was investigated by the county and there were no further sightings.

CHAIR DAVIS: From your perspective, is there sufficient coordination between the Coast Guard and the local and state agencies?

MR. PORTER: Well, this is -- as far as I know this is the first -- this recent incident in November was the first time we've really gotten into it on a joint response effort, and from what I gather from our field commanders, things went well in the field.

CHAIR DAVIS: Leo?

COMMISSIONER MC CARTHY: No.

CHAIR DAVIS: Thank you very much.

I want to go back and I want to just acknowledge two things.

I guess Dr. Cottrell from the California Medical Association has to leave, and I would just ask him if he could -- if he has any written testimony that we could enter into the record so we have the benefit of his testimony. I am sorry he won't be available to testify after lunch.

And, then I want to go back and pick up Greg Brose from the Ventura County's District Attorney's office. After his testimony we will adjourn for lunch, and reconvene at 2:00 p.m.

MR. BROSE: Good morning, Mr. Chairman. My name is

Greg Brose. I am a Deputy District Attorney with Ventura County. I also serve as the state chair for the Environmental Subcommittee of the Consumer and Environmental Protection Council, standing subcommittee of the California District Attorney's office.

I brought some written material with me this morning. First, the formal report and recommendations on the regulation of infectious waste that was prepared by the Minnesota's Attorney General's office, and also an overview article that appeared in the National Environmental Enforcement Journal, a journal that is published by the National Association of Attorney Generals.

That report indicates that there are a number of different classifications of infectious waste -- as has already been covered by a number of the persons who have testified this morning -- and they focused on the fact that it would be important to determine which categories require the more significant regulation, as opposed to those that are not of such a degree of hazard as would pose a significant hazard to the public and should be present outside of a regulated area.

The Primary point that I would like to make this morning -- and it has already been made by a number of speakers -- the existing law in California, under the Hazardous Waste Control Law, covers infectious wastes, but

there is a real problem there with the definition. If we go into court and we have got to prosecute one of these cases, we have to prove beyond a reasonable doubt that that particular sample of material that we are dealing with, that was disposed of at a nonauthorized point into the ocean, in fact, carried disease-causing agents in the sample.

Because of the very type of agents we are talking about, they have a very short life in some instances, that may be impossible to prove, but the actual danger to the public who could have been exposed any time those agents were present, and could be very real and very significant.

I think that what we need to focus on in the law, is to have some easily identifiable categories of materials that, in fact, the medical community and the scientific community agree is material that is, in fact, something that poses as a significant hazard and harm to the public. We need to have categories that are defined per se as being infectious wastes under those circumstances.

The second main point that I would make would be to the extent that there are other categories that are not as critical to the health, but pose a substantial concern to the public, and something that we definitely don't want to see on the beaches of our state, there should be a separate provision of law, perhaps similar to existing law in the Fish and Game Code, one that we've used quite a bit in our office,

Section 5650 of the Fish and Game Code, prohibits the placing or causing to be placed where it can be passed into the waters of the State of California petroleum products or other industrial wastes.

A similar provision that would deal with those medical wastes that are not infectious wastes, but nevertheless are ones that you don't want in the waters of the State of California, will give prosecutors a tool to address those types of violations as well.

As part of that legislation I would suggest that the definition for the responsible party be as broad as the existing definition for the responsible party in the hazardous waste control law, so that a person who would cause this could include political subdivision or other governmental agencies, as well as an individual or a corporation.

In summary the existing law that deals with the illegal disposal of infectious wastes carries very significant penalties, allows a prosecuting attorney to prosecute that case potentially as a felony, but we need to have a very secure and certain way of proving that that material was, in fact, infectious, and a standardized category of wastes, I believe, would be the best way of doing that.

Thank you.

CHAIR DAVIS: I just want to ask you a couple of questions.

I understand the distinction you want to make between basically waste that poses, as you say, a significant hazard, and waste that is deemed not to be infectious, but let me be the devil's advocate for a second.

Do you -- from the perspective of the fishing industry, which is more than a $1 billion industry in California -- is that distinction actually necessary? I mean, you've got -- as I mentioned earlier this morning -- the fish in Santa Monica Bay are too toxic to eat, and I have got figures here that indicate that about a third of the nation's shell fish beds have been closed because of contamination. I wonder if we would look at it from a larger perspective, not just simply confine our thoughts to the threat to the health of the people using the ocean, but to the problems of insuring that the ocean survives, and also the problems that the fishing industries encounter, whether or not we need to make that distinction?

MR. BROSE: Mr. Chairman, I agree with that philosophy.

Let me add that I think that any impact on the environment that causes degradation or harm to that extent should be vigorously prosecuted with a felony prosecution.

What I am suggesting is that there are some materials

that are, in fact, classified as medical wastes that are more in the realm of standard refuse, where still a criminal prosecution may in deed be highly appropriate, and I think it would be appropriate to draw the distinction so that those areas that, in fact, are ones that degrade the environment, should carry even higher penalties than a standard refuse.

CHAIR DAVIS: What about -- do you have any suggestions about increased civil penalties?

MR. BROSE: I think increased civil penalties would be appropriate under the second area.

Under the existing law as it stands right now, the Hazardous Waste Control Law, we have the option of bringing the strict liability action, and that carries a penalty of $10,000 for each violation, or $10,000 a day.

For those where we can show intent, the penalties go up to $25,000 for each violation. Where there is a very limited ability to prosecute is in the more generalized area of ways that would not pose an infectious threat, and that is quite limited at this point.

CHAIR DAVIS: Okay, thank you very much.

MR. BROSE: Thank you, Mr. Chairman.

CHAIR DAVIS: We will recess until 2:00 o'clock, and again I would invite Dr. Cottrell, if he is still here, to provide the staff with whatever written testimony he might have, so we could have the benefit of that in our review of

these materials.

We will recess until 2:00 o'clock.

[Recess: 12:20 p.m. to 2:05 p.m.]

VICE CHAIR MC CARTHY: Ladies and gentlemen, if we may resume the meeting of the Commission.

I would like to ask Dr. Joe Devinny to please step forward and give his testimony.

Dr. Devinny, how are you?

DR. DEVINNY: Fine.

VICE CHAIR MC CARTHY: Welcome.

DR. DEVINNY: Thank you.

VICE CHAIR MC CARTHY: Thanks for coming and we know you are under your own time pressures --

DR. DEVINNY: Yes.

VICE CHAIR MC CARTHY: -- so, we'd love to hear your testimony.

DR. DEVINNY: Thank you.

I would like to thank the Commission for inviting me to come here, and I am happy to represent the University of Southern California, and its Environmental Engineering Program at this hearing.

I have been asked to give a brief but more general overview, I think, than some of the things we have heard already today. We do have to be aware that pollution comes to the ocean by a great many routes. We have to look carefully at all of those possible routes to have some hope of being able to control the problem of medical wastes in the ocean.

I heard some comments on sewage discharges this morning which I have to disagree with, to some degree. The Southern California bight does receive over one billion gallons a day of sewage discharges, but I believe that the traditional methods that we have for sewage treatment and disposal, if they are properly followed, are adequate to protect the ocean environment, and particularly to prevent that route from being a source of medical waste in the ocean.

By "properly done" I mean to include secondary treatment for all facilities discharging into the ocean, and grudgingly, I think the municipalities are generally coming in line with that, and that will happen before long.

It should include the sludge ban, that is the sewage sludge which is generated during the treatment process, and should not go in the ocean. And, it must include a vigorous program of what is called "source control," that is where each municipality is responsible for monitoring sewage discharges -- or discharges to the sewage system within its

area of service, and making sure that hazardous and toxic waste discharges to the sewage system are minimized.

All three of these things put together will mean that we are discharging sewage to the ocean, I think, in a way which is not incompatible with the protection of public health.

We should remember that sewage itself is a highly infectious waste. The primarily -- at least the number one rationale for proper sewage treatment is to prevent that infectious waste from becoming a threat to public health, and as long as things are done well, it can be done that way.

A final concern there is, that we must maintain a program in these municipalities of appropriate routine maintenance. We have all seen several times in the news lately about breaks in lines, and clogged lines, which have caused the discharge of raw sewage to wetlands, and eventually to the ocean. Of course, that constitutes a serious infectious waste problem. It could be anything is getting into the ocean during those periods of time, and so we have to exercise some serious diligence to make sure that those things don't happen again.

Again, that technology is well in hand. It is primarily a matter of having the appropriate funding, and the appropriate will, to make sure that proper maintenance is done.

A second major source of waste to the ocean, and one which is much more difficult to deal with is the storm drains. Just an important thing to note, of course, storm drains are those pipes and channels and rivers and collection systems which collect the water which falls directly onto the streets and buildings, and washes into the gutters on the sides of the streets, and eventually ends up in the ocean.

On its way that water can pick up anything which is on the ground, and that includes oil and other petroleum products which may be present on the streets. It includes all sorts of trash -- and I would emphasize that that storm drain system is a major source of litter, including paper, and plastic, and styrofoam, and no doubt including sometimes medical wastes, which may be left anywhere that the rain water can wash it away.

I say this is much more difficult to deal with. The amounts of water are very large. The flows are extremely irregular, that is, they are very large for short periods of time, and zero for most of the rest of the time. There are no treatment systems which handle this waste. Our only effective hope for dealing with that waste, once again, is the source control. In order to keep the medical wastes, and other toxic wastes, out of the storm drain system, we have to prevent people from dumping them on the ground, from surreptitiously putting them into the storm drains and

channels, and so on.

And, so that is going to be a harder job. We are dealing with a great many small illegal disposals instead of a few point sources, which are easier to handle.

Agricultural run off in agricultural areas which may contribute pesticides, petroleum products, and fertilizers, to the ocean are a similar difficult problem, because there are many small souces which add up to a single large problem, and which are therefore quite difficult to deal with.

Perhaps a little bit away from the medical waste problem, I think one thing that can be done about that, and perhaps the time is finally coming for this, is to begin to insist on the manufactures of litter-causing materials -- like styrofoam cups, and styrofoam fast food containers -- to begin to make materials which are biodegradable, or at least photo-degradable, because it is very difficult -- it is going to be very difficult for us to control the litter problem.

The litter problem is a major threat to the aesthetic character of the ocean, to many individual species, birds, and seals, which can become tangled in the litter, and also to the wetlands. It is a very unfortunate experience to vist, for instance, Ballona Creek, and see the chain link fences that surround the area have become windbreaks which collect huge windrows of various kinds of styrofoam and paper and all sorts of things which have blown up against the

fences. So, I believe the storm drains are a serious problem.

Probably a major source --and I am sure we have all come to suspect this, in what we have heard so far -- special kinds of trash and pollutants, and including medical wastes for the ocean, are boats and ships. The regulatory problem is particularly severe here because you can't put an enforcement officer on every boat. It is very difficult to follow them. And, given that ships and boats have problems with storage, not much space to work with, it is very easy for someone to just solve their waste disposal problem by throwing it over the side. I think this has to be a target for improved enforcement in the future, but I see that as a very serious -- very difficult job to deal with.

I think one step, if we -- if I can talk more specifically again, about hazardous wastes and medical wastes -- one step which I haven't heard specifically suggested here today, but I would like to make, is that waste disposal requirements for medical facilities should include the requirement to label the waste with the name of the facility it comes from. I think this could be done very easily. We could simply require that any time a facility puts together a red bag of medical wastes, that this bag should include a label inside the bag with the name of the facility on it, and then later on when some of this material

is discovered in the environment we will know where to begin the search. Of course, it may not be the facility itself who is at fault, but we are going to know who they are paying to handle their wastes, so we can trace back and find out who it is who is doing the illegal dumping. I think that could be done without great difficulty.

I would emphasize a few points that have been made here earlier on about providing a good method for disposal, as well as regulating against poor methods of disposal. I was a little disturbed at one of the early morning speakers who vigorously opposed every possible method for disposing of medical wastes. You can't do that. There has to be some approved method, and the system will be far more effective if that approved method is reasonably economical and reasonably convenient for people to use.

I think there have been several good suggestions about allowing hospitals to get into this business for more than just their own waste. I would encourage the regulations to allow that, and to allow the hospitals to make money at it, that is, to charge fees for the waste disposal services they are providing, so that they will have the incentive to do it well, and the incentive to encourage customers to use that service, and so that they can have the money necessary to comply with regulations to enter that business vigorously and with the proper initiative, rather than being forced

reluctantly into it.

I might also want to emphasize that among the possible ways of disposal of medical wastes, I think far and away the best one, in terms of fundmental environmental protection, is incineration. This is preferable to land disposal where the material, although it may be safe for a long time, is going to be there forever, and we have to be concerned about it in that sense.

Incineration is a final solution to the problem. The high temperatures are generally very effective at destroying the infectious nature of the waste, and the ash, although it may still be a disposal problem, is a relatively small disposal problem in comparison to the very large amounts of ash we have to get rid of anyway, so I think incineration is the way we may eventually want to go.

To get back to perhaps the more general things, just on a final note, I think with our concern for toxic and hazardous wastes in the ocean environment, we have to be careful we don't move away from some of the traditional problems which are less in the headlines these days, but which remain important as ever, and I am thinking in terms of things like coastal wildlife protection, rocky shore ecosystem protection, wetlands protection, fisheries control, the wildlife in the ocean off Southern California is still in decline, and the primary reasons -- or perhaps the most

important reasons for that decline -- remain over use, over fishing, too much removal, too much damage by too many people at the shoreline.

With respect to wetlands, about 90 percent of the wetlands which existed in California before civilization has been lost, so if anyone suggests to you that we can compromise on the remaining wetlands, I hope you will not accept that compromise. It has already been made, and we have lost a great deal.

Well, I think you for this opportunity the speak.

VICE CHAIR MC CARTHY: Thank you.

When do you have to be back at USC for your -- what is your time frame? Do you have time for a couple of questions?

DR. DEVINNY: Sure, please do.

VICE CHAIR MC CARTHY: You opened up by mentioning that the main answer to the sewage disposal -- and a lot of what we are talking about here, medical waste and infectious waste materials, would go into the sewer system -- you were assuming in your opening statement, I believe --

DR. DEVINNY: Well, I think, if I could say --

VICE CHAIR MC CARTHY: -- are you assuming that? Do a lot of medical wastes and infectious waste materials --

DR. DEVINNY: I am sure that some does.

VICE CHAIR MC CARTHY: -- go into the sewer system?

DR. DEVINNY: Probably not the solid materials, like

syringes or bandages or that sort of thing, but perhaps some liquid materials do, yes.

VICE CHAIR MC CARTHY: What kinds of materials?

DR. DEVINNY: I am not sure. I am not very familiar with, specifically, hospital procedures.

VICE CHAIR MC CARTHY: Okay, if a fair amount of medical or infectious waste materials goes into the sewer system, you mentioned that secondary treatment systems are the main answer.

DR. DEVINNY: Yes, I believe so.

VICE CHAIR MC CARTHY: All right.

You know that the federal government has repealed its financing mechanism?

DR. DEVINNY: Yes.

VICE CHAIR MC CARTHY: And, that the state, which was picking up 12.5 percent is not really going to be in a position to replace the federal share.

DR. DEVINNY: Yes.

VICE CHAIR MC CARTHY: In other words now, virtually all of the funding costs for creating secondary treatment systems would fall on local government --

DR. DEVINNY: Yes.

VICE CHAIR MC CARTHY: -- and as a realistic matter, the likelihood of secondary treatment systems being constructed in major urban areas is diminishing rapidly.

I will give you an example: In San Diego, had it opted to go forward with constructing a secondary treatment system 10 or 11 years ago, it would have cost a total of $347 million, only one/eighth of which would have been paid for by local government. Today, the same system would cost $1.5 billion, and the total cost would fall on the City of San Diego. How they resolve that problem is unknown to anyone, because what you are talking about is probably an increase in sewage treatment fees to every household that is five to ten fold.

Now, how do cities in America cope with this kind of problem if they failed to apply to the federal government at an early enough stage, and of course, coastal areas and cities -- that are shoreline cities, have some pretty sizeable problems, and somewhat connected with what we are -- how do we get at that problem? The financing is gone for secondary treatment systems.

Got any good ideas?

DR. DEVINNY: No, that is obviously a very difficult problem.

VICE CHAIR MC CARTHY: So the idea of a secondary treatment center now is becoming more and more theoretical and less and less real, because the federal government has withdrawn from funding those programs, and the state is in the process of doing the same thing unless there is some

public policy outcry.

How do you -- when you were talking about labeling medical wastes, did you mean at the site? Where the medical waste are generated, of course, you were talking about segregation of the medical wastes at the site?

DR. DEVINNY: Yes, that is right.

VICE CHAIR MC CARTHY: At the source.

DR. DEVINNY: Typically in a hospital, you can see in the rooms or in the hallways, holders which have red containers, where they put --

VICE CHAIR MC CARTHY: Do you see any reason for medical waste disposal to be treated differently than other kinds of toxic wastes? Wouldn't they go to a common incinerator? Are they more dangerous to be treated differently than many other kinds of toxic wastes?

DR. DEVINNY: No, I wouldn't think so, and if the incineration, which is adequate for toxic wastes, would also be adequate for medical wastes, certainly.

VICE CHAIR MC CARTHY: Okay.

Any questions?

Jim, did you have a question?

COMMISSIONER TUCKER: Just briefly, what is the impact of the untreated sewage now if it gets into the ocean in California, in your opinion?

DR. DEVINNY: Well, in most cases we are not talking

about untreated sewage -- or excuse me --

COMMISSIONER TUCKER: I am talking about in the instances of the spills that we've had, like in the Santa Monica Bay and other places, and to the extent that there isn't going to be the secondary treatment available? You know, I am wondering why the experience has shown so far as to the impact of these kinds of spills --

DR. DEVINNY: Well, the spills are a particular problem because in general they are releasing completely untreated sewage and it goes in right at the shoreline, in comparison to proper outfalls where it is disposed of 200 feet deep several miles offshore.

So, you have this infectious material, sewage, which is right in the shoreline, and the most immediate effect is that the beach has to be closed for public health reasons. Various indicators of possible disease transmission goes up, so people can't be allowed out there.

At the same time, that sewage will contain all sorts of trash, conceivably some of it medical materials that have been improperly disposed of, There may be some ecological effects, although those are usually fairly small, I think, because a spill usually only occurs for a short time.

So, the most immediate effect, I think, is the threat to public health, and then this has the necessity for closing the beach, which is an inconvenience for its user and a

financial threat to the people who have beach-side businesses, and so on.

In the greater case of disposing of sewage with only primary treatment, that is worse because it is a chronic discharge. It is not so bad that it is going to be discharged from an outfall which is away from the shoreline. The effects are that you may have severe contamination of the ocean floor in the area of the discharge, and contamination may easily include toxic materials, because there are some toxic substances inevitably in sewage, which will not be removed by the treatment process in the absence of secondary treatment. And, so you will end up with a probably fairly localized -- by which I mean a few miles in extent -- region of seriously contaminated ocean floor, and that is the kind of thing that contributes to problems like the crokers being unfit for human consumption.

COMMISSIONER TUCKER: How good is the research, so far, in terms of what the impact -- long term impact of those outfalls is?

DR. DEVINNY: I think I would have to say it is at least reasonably good.

People have been working on those problems for a long time. I think it is good enough to the point where we can say we have a general feel for the extent of the problem. We have a pretty good idea that secondary treatment and the

sludge ban would be an answer. We are finding out that is financially very difficult to do.

COMMISSIONER TUCKER: Okay, thank you.

VICE CHAIR MC CARTHY: Thank you very much, Dr. Devinny.

Mr. Wesley Marx, member of the National Academy of Sciences Panel on Marine Monitoring in the Southern California Bight.

Welcome, glad to have you.

MR. MARX: Thank you. I appreciate being here, and I appreciate the opportunity to testify before the State Lands Commission, one of the bright spots in our coastal protection has been the work of this Commission with other state agencies on protecting and restoring our wetland heritage, particularly in the San Francisco Bay area.

Getting groups like this together for a comprehensive look at our coastal problems is also laudatory. Pollution on a watery planet has a way of mocking those who would abide by arbitrary, political boundaries.

Despite major investments in pollution control and some major reductions in certain pollutant loads, our coastal waters continue to be haunted by beach closure signs, seafood health warnings, periodic closure of mariculture projects in Carlsbad, and in the Santa Barbara Channel, plastics that can maime and kill marine life, chemical hotspots, and the wash

up of medical debris including these antiseptic agents for biological and chemical warfare.

Effective protection of our coastal environment, from the competition to use it as an all-purpose dump, either by intent, or by accident, would imply a comprehensive system able to sort out multiple impacts, transcend arbitrary political boundaries, and coordinate sometimes conflicting or overlapping legislative mandates; however, our ability to predict and monitor, much less control, this waste onslaught can have serious gaps and shortcomings.

I think, as a previous speaker has mentioned, controls can vary greatly from the various sources that are coming into the marine environment, and also the effectiveness of controls that do exist can also vary. For instance, controls on municipal and industrial sewage discharges have focused on contaminant concentration within the water column, but these contaminants can settle out and accumulate at much higher levels in the sediments below, and at the sea surface above. These contaminants are the toxic materials that can be taken up in the marine food chain where they can present potential risks to marine life and seafood consumers.

Chairman Davis was mentioning about the possible application of the public trust doctrine to this problem of where the tidelands, and the submerged lands, are becoming virtually toxic warehouses, in certain areas, and possibly

looking at the public trust doctrine to see if there is applicability.

In the Santa Monica Bay area alone, there are five chemical hotspots that have been identified, and three of them are located at the terminuses of outfalls. I think this would be very interesting to try to pursue something in this vein, because certainly our tidelands and submerged lands -- and this involves lake beds as well as the sea bed -- are being impacted in a very long term manner by this problem of toxic in the marine environment.

You have heard testimony about this Annex 5 MARPOL that will be coming into effect. One of the provisions of MARPOL is that the plastics are not to be dumped at sea by ships, and this is through the entire ocean and not just coastal waters. This international convention exempts one major source, government owned vessels, including warships, a major generator of plastic debris.

When our Congress, the U.S. Congress, ratified this international convention, Congress went beyond the international convention, and it is requiring that government vessels, including the Navy, come into compliance by 1992. Given the extent of the oceans, this ban will require extensive public education, provision of waste facilities in our ports, and more patrol resources for an already over extended Coast Guard.

The National Association of Attorneys General is considering a recommendation that state officials share concurrent jurisdiction with federal officials to at least 12 miles out to better enforce anti-dumping regulations. State enforcement powers generally end at the three-mile territorial sea. Hearing some of the testimony on the infectious medical wastes, I think this is something that the state should perhaps be seriously considering, trying to get some concurrent jurisdiction with the federal agencies.

Major shortcomings also are cropping up in another vital policy area, and that is the protection and restoration of critical wetland habitats that help sustain our fish stocks, and our water foul. The previous speaker has again alluded to the importance of these wetland habitats. As you are aware, the Corps of Engineer in the Section 404 Program, must issue permits for wetland alterations subject to review and recommendation by resource agencies like EPA, and resource agencies like your agency. However, a major cause of wetland loss, normal farming and draining that occur in wetlands, in not regulated. What is left to regulate faces inconsistent reviews.

The GAO found -- the General Accounting Office found in certain project sites, the Corps of Engineers would determine that wetlands cover 20 percent of the site, the resource agencies, 80 percent. Besides this split vision,

General Accounting Office found a lack of monitoring to insure compliance with permit conditions. Where illegal or unpermitted wetland activity did occur resource agencies would recommend penalties and restoration of the wetlands, the Corps instead would issue after-the-fact permits.

Today Orange County proposes to build a hillside-hugging tollway 10-lanes wide, through the coastal San Joaquin hills. The up and down roller coaster right-of-way will impact not one, not two, but three wetland areas, while generating some eight million cubic yards of excess excavated spoil.

Clearly, we need a before-the-fact process here and elsewhere, if we truly want to protect what coast land wetlands heritage we have and we can keep.

Environmental groups, researchers, and regulators, differ over the severity and scope of coastal pollution, and proper levels of habitat protection. However, there is a growing consensus on the need for improved monitoring that could serve as an early warning sign of environmental stress. An estimated $18 million is spent by public and private agencies on marine monitoring in the Southern California region. However, much of this monitoring has been conducted on a piece-meal basic, in response to specific legislative or regulatory mandates. There is no integrated regional perspective that cuts across agency lines.

The voluminous data generated by some dischargers receives limited analysis and interpretation. Regulators like the State Water Resources Control Board, have limited budget resources to do such tasks. The dumping of dredge spoils has no post-sampling to monitor fate of any toxins in the spoil and the degree to which they may leach out into the surrounding environment.

Lines of communications can be ragged. One member of a local resource agency told me that he had to file a freedom of information request to obtain sampling data from another agency. The agency later informed him that the sampling data had been lost. There is now greater interest among many agencies that do monitorng to share resources, avoid duplication, and work towards an integrated regional perspective.

The state Water Resources Control Board has created a Southern California wide review committee to help accomplish this. California Fish and Game Department, and the State Water Resources Control Board, work together on the State Mussel Watch Program. The State Water Resources Control Board is also investigating the possibility of sediment controlled toxicity mechanisms to try and control this toxic deposition in our sea beds.

The Southern California Coastal Water Research Project, under contract with the National Research Council,

has developed a review of monitoring activities in the Southern California bight area. The Marine Board of the National Research Council is performing a comprehensive study of marine programs, including a report, as I mentioned, on the bight.

There is also the opportunity for citizens to participate in monitoring efforts. The U.S. Fish and Wildlife Service uses volunteer groups to monitor distribution and abundance of birds in San Francisco Bay, and to watch for signs of illegal or unpermitted wetland alterations.

The Puget Sound and Chesapeake Bay regions also rely on citizen monitoring. In the 1987 Marine Plastics Pollution Control Act, Congress directed the Secretary of Commerce, in cooperation with EPA, to encourage the formation of volunteer groups to be designation as citizen pollution patrols, to assist in monitoring, reporting, clean up, and prevention of ocean and shoreline pollution. This type of citizen involvement will really be critical in addressing this problem of non-point source pollution because of the vast extent and area that has to be covered in inventorying where these non-point sources are evolving.

The Center for Environmental Education is also working with the California Coastal Commission to develop data cards. When they are doing these beach clean ups, there is now

enough scientific information that has been developed that the waste can be categorized by possible sources, including whether it is offshore or land based. The Center for Environmental Education, being involved in these beach clean up campaigns throughout the American shoreline, is going to use these data cards to begin to assess how our controls are working in this beach litter problem, including plastics, and I think this could be a very important program, in that, for the state to be able to find out what is being cast up on the beach each year, and what sort of trends are occurring, and whether certain laws are relating to degradable plastics, the degradable beverage yokes, whether this type of approach is working, and where we may have gaps.

In listening to the testimony on infectious medical wastes, certainly this would be one aspect now to be looked at closely from year to year, seeing what type of medical debris, what sorts of waste are continuing to be cast up on our beaches.

One of the points bought up on the infectious medical wastes -- and I noticed Chairman Davis was questioning Mr. Merryman rather closely on what is the basis for not having the hospitals accept wastes off site, even though the medical clinic may be only a block away -- the Office of Technology Assessment did a national review on issues in medical wastes, and they felt that one of the problems for hospitals

accepting waste off site is a liability problem.

I was talking with this Professor Devinny and Jim Rote during lunch, and if there is a liability problem this may be something that could be addressed at the state level.

I certainly enjoyed the chance to talk with you, and touch in on some of the issues that have been raised here, rather than do a formal type of presentation or statement. I wanted to tie-in with the testimony you have been receiving and I look forward to the other hearings that will be going on throughout the year in addressing this issue. It has to be addressed at the state level in a comprehensive manner and in a cooperative manner throughout the many agencies that are involved in this area.

Thank you.

CHAIR DAVIS: Thank you, Mr. Marx.

Do you have any questions?

[No response.]

Jewel Sikes is the next witness, representing BFI Medical Wastes.

MS. SIKES: Thank you.

Mr. Chairman and members of the committee, thank you for inviting us.

CHAIR DAVIS: Thank you for being here.

MS. SIKES: You bet.

There has been a lot of testimony today, and I am

going to kind of pass over a lot of the written testimony that I have given you, since I don't want to be redundant and take all afternoon.

BFI Medical Waste is a an offsite treatment for the management and treatment of medical waste. We currently are the largest company doing this throughout the United States. We currently are servicing over 8000 medical facilities throughout the country in 44 states.

Browning Ferris Industries is our parent company who is primarily involved in solid waste collection and disposal. When they made the decision to get into the medical waste business, they felt it was appropriate to create a separate division for this, due to the unique handling and treatment technologies necessary for this type of waste stream. Our roots are in California, however.

We are a California based company. We started here in the early '70s as the result of the medical community having a lot of needs for offsite treatment. Air quality standards were increasing, and our first treatment facility was built in 1974 in Huntington Beach. We have expanded those throughout California. We now have treatment facilities in San Diego, Los Angeles, and Fresno.

I guess, with respect to our specific practices in Los Angeles and Orange Counties, our permitted treatment facilities handle the infectious waste, which is defined by

statute in the Health and Safety Code. We currently are servicing, just in those two counties, over 1000 medical facilities, and they range anywhere from the large acute care hospital generator, to the small physician's office.

The wastes we primarily are receiving are the disposal patient waste items, which includes needles and syringes, laboratory cultures, and other contaminated items with either blood or body fluids.

In Los Angeles and Orange Counties, and some of the surrounding areas, we process out of our Vernon facility 1.3 million pounds of medical wastes per month. As you can see, there is a great amount of this waste that is coming out of the medical community currently.

Due to the increasing concerns for the air quality, we do have both treatment technologies, of autoclaving or steam sterilization and incineration; however, in our California operations, autoclaving is our primary treatment method. About five percent of the medical waste stream currently is mandatorily incinerated by California State Statutes, as well as those recommended by the EPA.

What we do with our customers, in terms of the services that we provide, is we provide containerization of the waste on site. We provide a collection service, where we go and collect the waste, giving and replacing the containers that we remove with the clean, sterilized, reusable

containers. Those are packaged onto our vehicles. They are transported to one of our local treatment sites where they are then treated and ultimately disposed of.

One of -- and maybe this is an appropriate time as well to talk about the issue of tracking, which is something we provide for all of our clients -- from the time of collection we have a computerized system with bar coding where we actually can track that customer's waste from the point of collection through the disposal that we provide for them.

When you -- when it has been mentioned a couple of times, why a lot of hospitals do not currently accept waste from other facilities, possibly in California it is true that they don't do it because it is not within the law; however, throughout the rest of the United States, they don't do it, not because the law does not require them not to do it, but for the mere reason that they get themselves into a very libelous position when they start assuming that another hospital's policies and procedures, definitions, and packaging requirements are the same as theirs.

As I have gone to hospital to hospital throughout California, and some of the other parts of the country, every hospital has some uniqueness to their unique needs and definitions of infectious waste. One hospital may call a certain chemical a solid waste, and frankly put it in with

their medical wastes, another one might consider it a hazardous waste, and some people may sewer it. And, I guess when another hospital assumes another medical facility's waste stream, they are assuming that maybe their definitions and procedures are identical to their own, and when you are incinerating and you are using -- and you are disposing maybe improperly, or maybe trace amounts of flammable, liquids, there is a lot of liability associated with that.

So, across the country, that is not occurring for even doctors or some generators, or other hospitals, they are taking their waste to major medical facilities that do have onsite treatment.

As I indicated earlier, we do have four sites in California, and all of those sites are permitted within the jurisdiction of the State Department of Health Services, Toxic Substance Control Division.

Hospitals, as well as other inpatient facilities licensed in this state, are regulated and come under the infectious waste requirements outlined in Title 22; however, there are a couple of changes that have been mentioned today, and I'll reiterate them quickly and move on. I guess, specifically, the state law currently allows for the disposal of untreated infectious waste in sanitary landfills. Even though this is not a current practice in Southern California counties so much, it is a practice in many of the counties in

central and northern California.

I guess, secondly, the prudent practices for the management of medical wastes should apply to all generators. Currently, as you have heard many times, the small generators of 220 pounds a month are exempt from regulation. There have been a couple of comments made that the small physician doesn't have any alternatives, that there are no places for them to take it that are cost effective -- in fact, there are -- we have worked for some time on developing a very cost effective -- less than $.50 a day, which is not, I don't think, a tremendous burden on the physician's office to handle their medical waste appropriately, giving them the same comprehensive package that we give to the large acute care hospitals that we now serve.

After doing a lot of telemarketing throughout the medical community, with these particular small quantity generators, it was about 60 percent unanimous that their concerns were not as great as our concerns for the waste, and they really felt that until someone said they had to handle it appropriately they would continue to handle it legally, which is what they are doing now by commingling it in the solid waste stream.

The changes that I just mentioned certainly would insure a comprehensive cradle-to-grave management program for medical wastes throughout the state. There seems to be a

greater trend in our health care systems right now, placing, I guess, a greater reliance on some of the out-patient centers, the small physician's office, as opposed to the dependency on hospitalization as it has been in the past.

The small urgent care centers, the emergency care free-standing units, are not regulated currently, not that they all don't do something responsibly, we do service several 100 independent physicians out of Los Angeles; however, that is out of the 10,000 that are here, and we do have a lot of clients that are responsible and are handling the waste appropriately, currently.

That is all I am going to say, and will conclude this statement. If you have any questions, I'll be glad to answer them.

CHAIR DAVIS: Yes, let me just ask a couple of questions.

I gather that BFI is one of the larger disposers of medical wastes?

MS. SIKES: That is true.

CHAIR DAVIS: And, I just want to make sure that I understood.

You said that under current law -- and I gather you said this in the spirit of having us change this law, that was your purpose for saying it -- but, did I correctly understand you to say that under current law untreated

infectious medical wastes could be disposed of in a landfill?

MS. SIKES: With the approval of the local county health officer, yes.

CHAIR DAVIS: And, was my inference correct, that you thought that was a change -- that we should change that law?

MS. SIKES: Yes, your inference is correct.

And, I say that only because a lot of the wastes that are being disposed of untreated are not disposed of in a manner separate and apart from the other waste streams, but there are some small private landfills, in some of the remote areas of the country, that currently are commingling their wastes.

CHAIR DAVIS: Since this is your business, and you probably have a pretty good sense of what's happening out in the real world, as they say, do you -- I have asked everyone this question -- who is the culprit? Who is basically either ignoring the law and dumping illegally, or do you have any observations that would help us in identifying who is responsible for the waste we have been finding, particularly that on our beaches?

MS. SIKES: Not really any other than the ones that have been mentioned.

When the storm drains were being mentioned a few minutes ago, I have personally been made aware of a couple of incidences where -- not in the State of California, I might

clarify that -- in some other states, where independent physicians were contracting with a person, or a company, whoever it was, to come and take their needles and syringes away on a regular basis. We further found out that this person admitted that what they do with these needles and syringes is they take them and they sell them down on the street, where there are needle users that are looking for usable needles, and that is what they do with them. Those that are usable, I am sure are taken wherever they are taken, and those that aren't used are probably thrown in the gutter somewhere. Those types of things certainly can be said to -- if it is appropriate they can end up in the ocean.

I don't think that someone standing on the beach with a bag waving it, and tossing it into the ocean, certainly -- I do believe there might be some companies throughout California -- and not just California -- throughout the United States right now, that are looking at the medical waste issue possibly as an opportunity for an entrepreneurial business venture, without treatment capabilities, and are collecting this waste and disposing of it improperly.

CHAIR DAVIS: Do we have a licensing problem, or are we not --

MS. SIKES: In the State of California, no. In the State of California, the regulations governing everything from a treatment facility to licensing, packaging,

transportation, is very well regulated.

CHAIR DAVIS: Leo.

MS. SIKES: Thank you.

COMMISSIONER MC CARTHY: No.

CHAIR DAVIS: Thank you.

The next witness is Bob Heilig.

I would ask you to indulge the Chair, as we are a little behind schedule, and we also have a meeting that we have to conduct of the Lands Commission, so if you could try and confine yourself to about five minutes, and then we can ask whatever questions we think are appropriate.

MR. HEILIG: I would be happy to, Mr. Chairman.

CHAIR DAVIS: Thank you.

MR. HEILIG: Thank you, Mr. Chairman, Lieutenant Governor McCarthy, my name is Bob Heilig. I am the Director for Professional Services for the California Association of Hospitals and Health Systems. Thank you for inviting us to come and provide testimony before your Commission today.

I think the first thing I would like to do is to perhaps clarify a couple of misconceptions that we seem to have heard this morning. The first is that to date, there is no epidemiological evidence to suggest that hospital or medical waste is any more infectious than residential wastes. As a matter of fact, in 1983, there was a well published study that found that hospital wastes contained 10 to 10,00

less microbial contaminants than residential wastes does.

Secondly, in studies performed by the CDC, the Center for Communicable Diseases in Atlanta, and the American Hospital Association, they have been unable to find any evidence of illness or disease that is related to waste disposal. That would exclude, of course, occupational needle sticks, and that is an occupational injury, but disease transmission from -- waste disposal, that is.

But, despite the lack of any evidence of risk, the California Association of Hospitals believes that generators of all infectious waste should continue to take appropriate steps to maintain a safe environment -- I think that is what we are here discussing today.

Disposition of wastes from hospitals is regulated by a number of different laws: Title 26 of the California Administrative Code, the Health and Safety Code, and then also the worker protection laws -- federal OSHA and CAL-OSHA -- have laws protecting workers from hazardous or infectious wastes in hospitals.

Hospitals basically handle their wastes as follows:

Sharps, which we have heard and talked about this morning.

Needles and cutting instruments are in impervious containers at the point of origin and are taken to a secure holding area, and then generally a contract agency -- such as

we just heard speak -- comes and picks up those containers and disposes of them properly, generally through incineration.

Pure, infectious waste, defined in the law, is placed in red bags at the point of origin or the point of use, wherever it became infected, and it is autoclaved generally onsite. Most hospitals autoclave it onsite through steam sterilization, which again, contrary to previous testimony, has proven to be a very effective way of reducing pathogens, and then disposed of or burned in land fills. At that point, those red bags are sterile. They aren't infectious any more.

We heard the Navy comment earlier that only in certain situations did they ever dump infectious waste overboard, and that would be a war-type situation. What the Commander actually described though, was dumping over sterile bags. He described that infectious waste is being autoclaved and then dumped, so, in fact, they never even dump infectious waste into the ocean. He was describing sterile material, much cleaner than would be in your normal garbage container at home.

The next category, pathological wastes, or surgical specimens, again placed in red bags, and impervious boxes, and then generally burned onsite, although some hospitals do contract with professional solid waste management firms to do the burning for them, then that ash is disposed of.

Laboratory waste is placed in red bags, leak-proof containers, in the laboratory, then autoclaved or burned and then transported to a land fill. And, of course, in that last category would be regular trash, which is treated as regular trash.

The California Association of Hospitals provides for all of its hospitals a Hazardous Waste Materials Manual which codifies all of the laws, and has suggested ways of dealing with all hazardous waste and infectious waste.

In your letter to us, you asked the question --

COMMISSIONER MC CARTHY: Is that for the membership?

MR. HEILIG: -- that is for the membership. It is available for anybody who would like a copy of it from us.

In your letter to us, you asked a question about the quantities of materials generated by hospitals. We really don't know the answer to that at this time. Rough estimates suggests that perhaps somewhere in the range of 90 million pounds per year, of at least statutorial defined infectious waste, is generated by health care institutions in this state.

Congress recently passed a Medical Waste Tracking Act which will have pilot projects -- primarily on the east coast -- which will attempt to determine exactly how much infectious or hazardous waste is coming out of medical institutions, and I think we will have a better handle then

on what we are talking about when that is finished with --

COMMISSIONER MC CARTHY: That 90 million pounds is just for California?

MR. HEILIG: -- that is just for California, yes sir.

CHAIR DAVIS: There isn't -- there aren't records to suggest how many -- the tonnage of red bags that have to be disposed of by someone, or have to be carried off by someone? Who I am sure you have to pay to perform that chore.

MR. HEILIG: Well, actually, once an infectious material -- red bag material, if you will -- is autoclaved, then that is no longer infectious material, and it could legally be treated much the same as any other trash. It is no longer infectious, and there has been no tracking system for that in the past.

Of the regulations that currently exist, the one that we would like to see most changed, would be the separation of infectious waste from hazardous materials. Currently, under state laws, they are combined together, and they are two dramatically different elements. Hazardous materials can't be rendered, very easily, not hazardous, where infectious waste merely needs to be burnt or sterilized, and it no longer is infectious, it is no longer a danger to the environment from the infection standpoint.

The management of all hazardous materials, at the state level, comes under people who are basically sanitation

engineers, solid waste management engineers, not medical personnel -- that comes into a very separate and distinct part of the Department of Health Services. I think it would be a benefit to all of the citizens of the state to see that separated out into a unique area where you have people from the medical sector who really, truly understand the issue of medical wastes and infectious wastes, because it is so different than hazardous waste.

CHAIR DAVIS: Okay.

MR. HEILIG: I have nothing further.

COMMISSIONER MC CARTHY: Jewel Sikes, who spoke before you, indicated that her company, BFI Medical Wastes, disposes of 1.3 million pounds of medical and infectious wastes, each year from their clients.

Maybe there is a way to extrapolate from that, looking at their specific sources of acute care hospitals, and doctors offices, looking at the nature of the hospitals, how much lab work is done, the kinds -- if there are any specialties at the hospital, and try to figure out whether it is 9 million pounds of medical and infectious wastes altogether in California, or a little more or less than that.

Is part of the book that you have there, does it encourage any particular disposal methods? Do you have any idea of how much of the medical waste coming from the hospital members that you represent, go into land fill,

versus BFI type disposal?

MR. HEILIG: I could not tell you right off what percent goes to BFI, but I am sure that --

COMMISSIONER MC CARTHY: I don't mean BFI, itself.

MR. HEILIG: - well, or similar type of --

COMMISSIONER MC CARTHY: I meant that I wanted to --

MR. HEILIG: -- firms, right.

COMMISSIONER MC CARTHY: -- yes, I don't know if there are any other competitors to BFI --

MR. HEILIG: They are certainly --

COMMISSIONER MC CARTHY: -- active in the --

MR. HEILIG: -- yes --

COMMISSIONER MC CARTHY: -- state?

MR. HEILIG: There are, but they are certainly the largest --

COMMISSIONER MC CARTHY: In California?

MR. HEILIG: -- yes, in California, and in the nation, as far as I am aware of.

Your suggestion of a way of tracking the amount -- and there may be a way to extrapolate from their numbers. My 90 million pounds was an extrapolation from a broad knowledge of how much total hospital waste there appears to be, and then suggestions are that approximately 10 percent of all of that waste would be categorized as infectious, and then just extrapolated back to 90 million pounds.

But, I would be happy to work with them and see if we could arrive at a figure that is perhaps more solid.

COMMISSIONER MC CARTHY: Yes, and maybe looking at the BFIs in California, and whoever the others are, and figuring out what they are burning, we could get to a fairly firm estimate of the size of the problem we are dealing with.

Would you think a state law fair that all hospitals and all generators of medical and infectious waste be required to use BFI type disposal methods, and that we should prohibit land fill of untreated wastes?

MR. HEILIG: I think that a lot of the large hospitals currently manage their own waste onsite. They either incinerate it themselves, or autoclave it and --

COMMISSIONER MC CARTHY: Yes, and it is the type of methods. It doesn't have -- it can be onsite as well as a private business.

MR. HEILIG: Certainly, and it is certainly what we encourage for all hospitals to do now, is to take care of their infectious waste as I described, that it is, by the law, given the health officer's permission in county by county, the law does not strictly require --

COMMISSIONER MC CARTHY: Right.

MR. HEILIG: -- infectious waste to be treated, but to be buried.

The fact of the matter is that that does occur in

northern California, but not that much. Most health officers simply won't allow it.

COMMISSIONER MC CARTHY: What percentage of all medical and infectious wastes would you estimate are disposed of by incineration?

MR. HEILIG: A very small --

COMMISSIONER MC CARTHY: Or, any of the methods that have been described to us here today, other than deposited in land fill as untreated waste?

MR. HEILIG: By far and away the majority of it is either sterilized or incinerated.

It is the minority of the infectious waste that would be buried --

COMMISSIONER MC CARTHY: The testimony received from Jewel Sikes suggested that only five percent is incinerated, unless I misunderstand her.

MR. HEILIG: Well, it is purely incinerated, that is correct, and one of the reasons for that is, of course, the EPA rules on how much black smoke can be admitted per day, and so incineration is almost exclusively -- at least at the hospital level -- limited to body parts and tissue, that are eliminated by incineration. The rest of the infectious materials, bandages or whatever, are autoclaved, and then disposed of with burial at a land fill.

So, she is correct, that a very small amount is

incinerated, but by far and away the majority is, at least, reduced to be noninfectious.

COMMISSIONER MC CARTHY: Do hospitals do their own autoclaving?

MR. HEILIG: A large number of them do, yes. They have large autoclaves where they literally cook their infectious waste, and at that point then it is no longer infectious.

And, in fact, that has presented at least one problem that I am personally aware of where sanitary land fill people have discovered red bags, and said, "Oh, my goodness, this is infectious waste."

Well, red bags are not impervious to the autoclave process, so there is an autoclave bag in which they go into and then into the autoclave machine. That bag, unfortunately right now, is a clear bag, so what they see at the land fill is a red bag, even though it is a sterile bag, and there is panic generated.

COMMISSIONER MC CARTHY: Could you give me a rough estimate of how many, what percentage of our total medical and infectious waste generated are disposed of onsite at acute care hospitals?

MR. HEILIG: I would have to give you -- it would have to be an estimate of my own, and off the top --

COMMISSIONER MC CARTHY: Right.

MR. HEILIG: -- I would venture to say probably 70

percent.

COMMISSIONER MC CARTHY: Now, the 9 million pounds we are talking about, that is what is generated at acute care facilities?

MR. HEILIG: That is correct.

COMMISSIONER MC CARTHY: Okay, and there is no plan under way, that you aware of, that doctors affiliated with hospitals, who have, of course, their own firms and their own offices, where they generate some medical wastes that they could contractually enter into an agreement with the hospitals with which they are affiliated to use that as a site for disposing of their medical wastes?

MR. HEILIG: Well, certainly you heard testimony today that hospitals are precluded, statutorily, from doing that, because they don't have a license to be an onsite receptor of other people's waste to treat.

COMMISSIONER MC CARTHY: Was that clear? That state law clearly prohibits? I thought it was an insurance liability.

MR. HEILIG: No, they could do it --

COMMISSIONER MC CARTHY: Is there a clear prohibition?

MR. HEILIG: -- but -- well, they would have to have a special license for that, and the process of obtaining that license --

COMMISSIONER MC CARTHY: So, existing law does allow

that kind of contractual agreement to be entered into.

MR. HEILIG: It does allow it, yes.

CHAIR DAVIS: But, we have heard a good deal of testimony that obtaining the permit necessary to do that is time consuming, and is not always forthcoming.

MR. HEILIG: That is correct, and then there is --

COMMISSIONER MC CARTHY: That, perhaps, we could be useful with in trying to smooth out the administrative problems.

What I was asking was whether existing law does permit partnerships, or incorporations that are doctors in their offices where some medical wastes are generated, are those entities permitted under existing state law to enter into contracts acute care hospitals that have disposal facilities onsite?

MR. HEILIG: The answer is, yes that is correct, there is no --

COMMISSIONER MC CARTHY: Okay.

MR. HEILIG: -- prohibition. There are a number of other problems, but certainly no prohibition.

COMMISSIONER MC CARTHY: Do you analyze those other problems in anything you have printed out for your membership?

MR. HEILIG: Not that we have printed out, but I certainly have personally --

COMMISSIONER MC CARTHY: Would you list those? Put together something for this Commission?

MR. HEILIG: Certainly, it could be provided to you.

COMMISSIONER MC CARTHY: Thank you.

CHAIR DAVIS: Thank you very much.

MR. HEILIG: Thank you.

EXECUTIVE OFFICER DEDRICK: I would like to make a comment.

CHAIR DAVIS: Yes.

EXECUTIVE OFFICER DEDRICK: You testified, and I am sure correctly, that in the main the materials that are buried are autoclaved. I just would like to point out that the pictures we saw this morning, red bags containing organs and blood, clearly had not been autoclaved. The tissues were raw, and with no autoclaving, and so you understand that when things are autoclaved they are cooked. The protein coagulates, toe color changes, they don't look [illegible] like they do in the pictures that we saw this morning.

MR. HEILIG: No question, there was a problem there --

EXECUTIVE OFFICER DEDRICK: I wanted just to point that out.

MR. HEILIG: -- and I would make no excuses for that.

I would point out that I didn't think it was made clear that the violator was known --

CHAIR DAVIS: We don't know.

MR. HEILIG: -- and was contacted about that particular incident. It is not an unknown incident, and I can't make any excuse for it. It did happen. An employee was discharged because of the mistake. I don't think it is a continuing problem.

CHAIR DAVIS: Let me ask one final question.

An earlier witness testified -- as a matter of fact, I think it was Ms. Sikes -- that existing law does allow public health officers to approve burying untreated infectious medical waste.

MR. HEILIG: That is correct.

CHAIR DAVIS: Now, from your experience, how frequently does that occur?

I grant you this is off of the top of your head, but what percentage of infectious medical wastes would you think would be disposed of in that fashion?

MR. HEILIG: Again, it is off the top of my head, and it seems to be relatively geographic. In Southern California, it is almost unheard of, at all. In northern California, there are cases where health officers have permitted it, and it is more on a local case-by-case incident.

And again, where they have evaluated the issue of infectious waste, and what is infectious, and that is a real dilemma for the medical personnel to try and explain that

every -- and somebody suggested earlier that any cloth material contaminated with blood should be considered infectious -- well, we would have a horrible problem with our own residential trash if that was the case, and most medical people -- physicians and epidemiologists, and infectious disease specialists -- do not consider that infectious, and it is certainly outside the realm of the law.

So, I think the majority -- to answer your question -- is treated properly, and the minority, in northern California, there are instances where untreated infectious waste is buried in a land fill. And, like there is a --

CHAIR DAVIS: And, would you oppose that under any circumstances? In other words, are there any circumstances where that is an appropriate disposal mechanism?

MR. HEILIG: Where it is appropriate?

CHAIR DAVIS: Yes.

MR. HEILIG: There is a large body of medical practitioners who feel that that is perfectly legitimate, in that if it is bagged at the site, or the source where it was contaminated, and then buried, that that is a perfectly safe way to deal with that. And, I am not a physician, so I am not going to speak to that issue, but there is a large medical body that does feel that that is appropriate.

CHAIR DAVIS: Thank you.

MR. HEILIG: Thank you.

CHAIR DAVIS: Our final witness on this category is Dr. Cottrell, who was kind enough to stay this afternoon, and we appreciate that very much, doctor.

DR. COTTRELL: Thank you, Mr. Davis and Mr. McCarthy.

I think that first of all you should bear out that I am from Imperial County. I am the Health Officer there, and I swear that I will always mention the new river when I have more than two high ranking office people together, and remind you that that is in our county.

I am Lee Cottrell, M.D. and I serve as Chairman of the California Medical Association Committee on Environmental Health. I am representing them today. I am also chair of the California Conference of Local Health Officers Environmental Health, but I will not be speaking on their behalf on this occasion.

We have certainly come head on with a language problem. I don't know what great writer it was that said America and England were two great nations separated by a common language, but it is certainly manifested here today, and it reminds me of an experience I had with a Texan that came in to be examined, and I found a very large and unsightly scar on his head, and I asked him how he had gotten that and he said, "It was when I was drugged."

And, I thought, "Oh, my, I really have got a problem, here," and I started asking him about it, and he said, "Well,

doctor, it isn't any real problem. I went to work for a ranch in Texas. I took a new horse, and I didn't cinch the saddle and I feel off, and I was drugged." And, that is how he got the scar.

I think that the first thing that we would ask you to do is to change the term, or change infectious waste that has been inaccurately placed with the waste stream of hazardous waste, and we would make a giant step forward in clarifying some of the problems that we encounter in dealing with medical waste.

I think that by placing it there with the hazardous wastes, we've increased the threat and perception among our people and our population. There is little rationale for the basis of this fear, although biological agents such as bacteria and viruses, require oxygen survival. There may be some that are anaerobic, and some of them are facilitative, but as a whole they need an environmental condition that is very fragile.

We have heard today a challenge made to the very concept of sterilization, and it is so stark to hear that kind of a statement made that I am going to have to go back and refresh my reading on the subject, because sterilization has been the cornerstone of the practice of sterile surgery since almost the time of Pasteur, himself.

We have also heard the suggestion that any law you

might make would certainly have to add AIDS, and I find this very unacceptable, and I would be the first to caution you against this. The AIDS virus is so fragile that it took us five years to even find it. You could take a handful of the virus and decontaminate it, or make it noninfectious with a teaspoon of Clorox, so I would hate to see any language in law that would perpetrate the already fear that we have on our public.

The doctors, as members of the CMA are appalled and will do anything to cooperate with any government agency, and cooperate with any law making, that would assure us that our beaches would not be contaminated with this unslightly waste.

We do challenge, and we do it scientifically, and you have heard it throughout the testimony today, that the reason that some of these cases are difficult to prosecute is that they cannot prove infectivity, and I would present to you that it is not very likely that they ever will, because most of the bacteria and viruses cannot survive in this environment that they are placed in.

It seems that it is in our field that tests are governed by sensitivity and specificity, and certainly when you see a waste that can be identified with the medical community, it certainly is specific. But, the sensitivity of it is practically zero -- and I can see that you are trying to make your meeting, or something?

CHAIR DAVIS: No, I want to ask a question, if I may, doctor.

Apart from whether or not medical waste is a public health hazard to people on the beach, wouldn't you agree that the disposal of medical wastes can very well have degrading effects on the environments of the oceans, as well as create problems for the commercial fishing industry?

DR. COTTRELL: I would now speak very strongly, as an individual, and hope that I would represent all of the doctors: the ocean is not the place for disposal. I think that even water treatment should go to secondary, possibly tertiary treatment, before it is exposed to our ocean. That is a very strong feeling that I have.

I think that, unfortunately, at this time incineration is the cutting edge of technology, and probably the most difficult to discuss with people, and that would reduce a lot of this -- environmental contamination would be reduced a great amount if we were allowed to bring in incinerators that are of a much larger scale.

CHAIR DAVIS: Would you go -- I applaud your sentiments on that subject -- would you go farther and remove the current requirement that prosecutors show that waste is infectious before they can bring criminal sanctions against the improper disposal of waste in our oceans, and on our beaches?.

DR. COTTRELL: I want to make sure that our terminology is clear. This is waste that has been indiscriminately disposed of, and I would certainly think that the prosecutors would not have to prove infectivity. They would have to prove only nuisance, and inappropriate or indiscriminate waste disposal.

CHAIR DAVIS: Thank you.

DR. COTTRELL: I think that you have thrown me off a little bit here, and I don't know where --

CHAIR DAVIS: I did, and I apologize, but I wanted to seize on that.

You were making the point that rarely will waste be infectious, for the reasons you suggested, and I just wanted to see if that was critical in your thinking to how the problem should be treated, and how sanctions would be applied.

DR. COTTRELL: I hope that I satisfactorily answered it.

CHAIR DAVIS: Yes.

DR. COTTRELL: I feel very strongly that in the field of waste we have to deal with it realistically, and deal with it properly, and I don't see any reason why medical wastes -- and that is what they amount to -- cannot be disposed of without the classification of hazardous.

I think that then I would commit the California

Medical Association to advocating a more stringent enforcement of existing laws, and judicial tracing of alleged violators. This would also create a deterrant to those that casually violate the law. This would not require additional laws that we don't already have in place, and that appear to be working well in California. We don't have a real serious problem, and it can be dealt with on local levels.

We have to be aware that even though that if it costs billions of dollars, as Mr. McCarthy pointed out on the secondary treatment of sewage, if that could give us a billion dollars of improvements to the quality of life of our citizens, it would be a dollar well spent, but I don't think that we will get it out of making it more difficult to dispose of medical wastes.

In summary then, the California Medical Association believes that except for a few isolated, recent, incidences, the problem of improper handling of infectious wastes is not serious. We can do more to educate our members -- and we will do this after this hearing -- we will make arrangements with the editors of our publications, and put forth a strong effort to promulgate throughout California and the medical community instruction as to how to comply with every feature of the law, and thereby relieve them of any potential incrimination of being part of the problem instead of the solution.

I think that if we even considered that each doctors' office would have to be licensed, I think that most counties would like to generate $100 a piece. That would increase medical costs just for the permitting, somewhere in the neighborhood of $7 million, based on roughly 70,000 doctors practicing in the United States.

And, in all due respect to the young lady who said that her company could dispose of the waste for $.50 a day, that would amount to only $180 a month, and the experience in Kern County when they were utilized to go to each doctor's office, it was nearly $1000 a year, and we are talking about $35 million and we really have not addressed a problem because we are convinced that the infectivity of these wastes are so low that sterilization would take care of it, incineration would take care of it, and proper land fill would take care of it, and the argument that this could perculate into our water supply is nonsense.

CHAIR DAVIS: Just because I don't want you to leave a misimpression with people, when you say the problem is not serious, you mean serious in terms of a public health hazard to individuals, as opposed to degrading effect on the environment of the disposal of medical wastes in our oceans and on our beaches.

DR. COTTRELL: Oh, yes, that is correct.

CHAIR DAVIS: Okay.

Leo?

COMMISSIONER MC CARTHY: No.

CHAIR DAVIS: Thank you very much. I appreciate you staying so long, doctor, to provide this testimony.

We are going to take one more witness, and then -- to accommodate the Lieutenant Governor's scheduling concerns, I want to take up the Lands Commission agenda. Hopefully, we can finish that and then come back to the last three witnesses, who will speak to proposed changes in the law.

I would like Jack McGurk to briefly describe the law as it stands, and then if you will permit us we will then go into a formal meeting of the Lands Commission to conduct some business on the agenda, and then and pick up the last couple of witnesses who will speak to proposed changes in the law.

MR. MC GURK: I am here today to update you on the status of the infectious waste management in California to provide you with an overview of the Department of Health Services plans to improve management of infectious waste.

The department adopted infectious waste management regulations in 1984, pursuant to legislation authored by Senator Doolittle. The legislation defined infectious waste as a hazardous waste, which lead to a more stringent program than most states, which deal with infectious wastes only as a factor in health care facility licensing.

Because it is governed under hazardous waste laws,

infectious waste management violations in California carry civil penalties of up to $25,000 per day per violation, plus administrative orders that have the same practice as those violations, and also the possible criminal penalties that can even result in imprisonment of up to two years.

The department is currently working with the legislature to strengthen statutes as appropriate. A departmental task force, which includes representatives of the local media and environmental health community is currently addressing the need for statutory and regulatory enhancement.

Several representatives that were here today, Mr. Merryman, and a staff person from Mr. Stephany's office, are on that task force, as well as a member representing CCLHO.

California's regulations which pertain to treatment, handling, and disposal of medical wastes apply to all generators of infectious and medical wastes regardless of the amount generated, on sharps, such as hypodermic needles and scapels, cultures of etiologic agents, and recognizable human anatomical remains.

Small generators, that generate less than 100 kilograms per month, are exempt from these regulations only for wastes that is not in one of those three categories. This would include items such as discarded bandages, gloves, and other disposables.

Implementation and enforcement of these regulations rests primarily with local authorities. Counties currently have authority to perform inspections as part of their enforcement efforts. Counties also have authority to impose a fee structure on generators to fund their programs.

California's regulations require that infectious waste be transported by a registered hauler when the wastes generated are in amounts greater than 100 kilograms per month. The regulations do not require the waste to be manifested. The United States Environmental Protection Agency will be implementing a two-year pilot program to track medical wastes. Ten eastern states were named as participants in the federal law, however, any of the remaining states -- the remaining 40 states -- may opt into the program.

Last week California received a letter from EPA's administrator, Lee Thomas, inviting California to opt into the program. The department is researching EPA's program to determine if it meets California's tracking needs. The federal program is in the process of being developed now. Once the program is outlined, California will be in a position to determine whether it meets our needs.

One of the major aspects of a tracking program that needs to be considered is the universe of medical wastes that the program would encompass. We believe that medical wastes

should be divided into two broad categories for tracking purposes. The first is infectious waste, as well as medical waste that presents a safety risk but that is not necessarily infectious, such as hypodermic needles, and broken glass vials. This category should be manifested and tracked.

The second category would include aesthetically displeasing wastes that do not present an infection or safety risk. This type of waste would include discarded bandages, gloves, and other disposables. These types of waste should be handled and disposed of properly; however, we do not believe it is necessary to manifest them. If manifesting were required of this low risk category, it could present an unacceptable burden for generators, and could jeopardize the success of tracking the truly infectious and higher risk medical wastes.

The department will consider these and other impacts when evaluating EPA's pilot tracking program. Whether California opts into EPA's tracking program, or designs a tracking program specifically tailored to California's needs, the department intends to work actively with EPA in the field of managing medical wastes to assure that federal policy meets California's as well as other states' needs.

In closing, I would like to emphasize that the Department of Health Services is evaluating California's existing Infectious Waste Management Program to determine if

it is adequate to deal with the present situation. We are also working closely with the legislature, the Governor's Office, EPA, to assess the need for legislation or further regulation of infectious and other medical wastes.

That concludes my presentation.

CHAIR DAVIS: Thank you.

I don't have any questions.

Leo, do you?

COMMISSIONER MC CARTHY: No.

CHAIR DAVIS: Thank you very much for coming here today.

MR. MC GURK: Thank you.

CHAIR DAVIS: All right, what I would like to do now is to recess the hearing and move into the formal State Lands Commission Agenda.

At the end, we will go back and pick up the executive Session, but I want to go to the formal Agenda.

[State Lands Commission formal Agenda taken up at this time. 2:50 p.m. to 3:45 p.m.]

CHAIR DAVIS: We will now adjourn the meeting of the

Lands Commission, and reconvene the hearing on ocean pollution, without objection, and there are three remaining witnesses.

I don't even know how many are here, but is Mr. Gladstein, Mr. Carter, or Mr. Manning here?

[Affirmative response from audience]

I appreciate your indulgence as we try to accommodate various people's schedules. Thank you for your patience.

Mr. Gladstein, You represent Assemblyman Hayden?

MR. GLADSTEIN: Yes, sir.

CHAIR DAVIS: And, you have been asked to come before this body to suggest any changes in the law that would allow the state to come to grips with the problem of medical pollution, be it infectious medical waste or noninfectious medical wastes.

MR. GLADSTEIN: Yes, sir.

Good afternoon, gentleman. My name is Cliff Gladstein, and I am a field representative for Assemblyman Hayden.

The Assemblyman is sorry that he can't be here today. He is probably -- judging from the record low temperatures in Washington D.C. he is probably very sorry -- but he asked me to come here today and read the following letter.

"Dear Chairman Davis, and members of the Commission.

Althought I am unable to personally attent today's hearing on ocean dumping, I greatly appreciate your investigation into the problem of medical wastes, and would like to take this opportunity to share with you a bill I recently introduced in the State Assembly on the subject.

"Improper disposal of medical wastes, some of which is potentially infectious waste, is becoming an increasingly serious problem nationally and in California.

"I am sure we are all familiar with the situation last summer when medical wastes dumped in the Atlantic washed up on the New Jersey shore, resulting in the closing of popular beaches.

"In California, we are also witnessing the results of inadequate regulations of our medical wastes. Hypodermic needles, vials of blood, and other medical wastes are washing up on our public beaches, found in regular trash bins, and even dumped in public parks. Except for large generators, the collection and disposal of medical wastes is virtually unregulated. Even for large generators, there has been lax enforcement.

"Current law allows many small generators of medical wastes to dispose of this potentially infectious

material in the regular trash. This can expose sanitation workers, children, or others who may have contact with trash, to infectious diseases.

"This growing menace encouraged me to introduce legislation to regulate medical wastes disposal from all sources, AB 109 would create a new medical waste section of the law in line with recommendations of the National Center for Disease Control. The provisions of this bill would remove the exemption for small generators of medical wastes, and increase the penalties for improper disposal.

"The bill also allows local sanitation officials to inspect any medical facility to insure proper handling and disposal of medical wastes. The more thorough the control over disposal of medical waste at its source, the less likely it will end up on our beaches.

"I am submitting, for your information, a copy of my bill, and some background material my staff prepared for its introduction. I have been in touch with the State Department of Health Services Task Force on medical wastes, and we have agreed to work together in addressing this problem.

"Likewise, I look forward to the results of your hearing, and your comments on the bill."

Thank you.

Any questions.

CHAIR DAVIS: Thank you for your patience, and for providing us with the letter from the Assemblyman, as well as a copy of his legislation.

MR. GLADSTEIN: Thank you.

CHAIR DAVIS: Is Mr. Carter here?

MR. MANNING: I think he left.

CHAIR DAVIS: He left?

Is this Mr. Manning?

MR. MANNING: Yes.

CHAIR DAVIS: You are a Deputy City Attorney from the City of Santa Monica?

MR. MANNING: Yes, that is correct.

MR. DAVIS: We are delighted to be in your home here, and thank you.

MR. MANNING: Yes, and delighted to have you.

I am in charge of environmental enforcement --

CHAIR DAVIS: Do you recognize this fellow?

MR. MANNING: -- I was just going to say that he is in the same seat that he used to occupy not too long ago.

CHAIR DAVIS: And, did he cause you a lot of trouble? What kind of a councilman is he?

MR. MANNING: He was fine. He didn't cause me any trouble.

CHAIR DAVIS: Fine, all right yes, we got that. We

got the message.

[General discussion held.]

MR. MANNING: I have some pictures that I brought up, which you can look at.

CHAIR DAVIS: Thank you.

MR. MANNING: These are photographs from several incidents of illegal disposal of medical waste in the City of Santa Monica, which has occurred over the last six months. Contained in the pictures are needles, blood, urine samples, chemotherapy wastes -- which is carcenogenic -- and assorted other items which are not so pleasant to look at, but they are reality.

I prosecuted this year a medical group in Santa Monica for illegal disposal of syringes in the normal trash, and those pictures are included there as well, and I currently am prosecuting another doctor in Santa Monica for disposing of needles and blood in the trash.

CHAIR DAVIS: Is this waste found in the City Santa Monica? On the beaches of Santa Monica?

MR. MANNING: No, this waste is being dumped every day in dumpsters, open bins in the alley ways, and other places where sanitation workers every day are faced with the threat of having blood spilled on them. When the trash is

compacted, several sanitation workers have actually been stuck with used needles, and children, animals, and anybody else could easily access these items, especially in a city like Santa Monica, where you have many alleyways which are commonly used thoroughfares.

In addition, I am also going to speak for Bill Carter, who I have worked with closely over the years in environmental enforcement in the Los Angeles County D.A.'s office. They recently found bags of -- red bag wastes on park benches in the City of Los Angeles, as well as blood vials generated from an AIDS clinic -- unfortunately -- being disposed of in the dumpsters, as well.

As well, the City of West Hollywood has also contacted me with problems regarding people, drug addicts, removing used hypodermic syringes from dumpsters.

So, the problem is very real. I heard some of the speakers today sort of diminishing the gravity of the problem, I think. The problem is very real, and for those of us on the front line every day who respond to the calls when they come out of illegal dumping, and then try and prosecute the cases, there are serious problems, which I think you will be in a position to help remedy.

Recently I sent a letter to all medical groups in the City of Santa Monica regarding their responsibilities under the law. I found out that many of the doctors did not

understand the basic notion of proper disposal of medical wastes, and many were uninformed, and had no idea, that this area was regulated at all, and those were some of the doctors whose clear guidelines were applied to.

Many of the small generators of medical wastes are totally unregulated by current law. As the result of that, I have worked with Assemblyman Hayden, and Bill Carter from the D.A.'s office, to write legislation t help remedy the problem.

Briefly, I would like to outline three things that the bill does do, and then a couple of things that I think you could address through the State Lands Commission.

It removes infectious waste from the Hazardous Waste Control Act, which several people talked about today as being necessary. And, reclassifies it as medical wastes, thereby allowing prosecutors to win cases by proving that the waste is a type of waste which is potentially infectious, as opposed to having to prove the infectious characteristics.

It eliminates exemptions for small generators of medical wastes, which are currently a major problem. And, it empowers local sanitation officials to do inspections of medical offices and work with them to make sure that they are disposing of medical wastes, properly.

This is necessary because, as you may have heard or may not have heard -- I am not sure -- the county and state

health officials are overwhelmed by trying to deal with the problems of hazardous waste. They do virtually no inspections in Los Angeles County of licensed clinics and health facilities. The only people who inspections are done for are large hospitals, and even then regulation is very loose. With no inspection and no enforcement, and a lack of personnel, and a lack of money, we feel it is necessary to empower local sanitation officials with more control, to become directly affected and to get involved with the issue and do inspections. This is a novel solution to problems which will cost little money for local governments to implement.

Two things the legislation does not do, which I hope you can remedy, it does not establish a tracking or manifesting system for medical wastes. On the federal level, Senator Bradley this year introduced legislation for a pilot program in New Jersey and New York, to establish a monitoring system. This should be done at the state level in California, and should be studied by yourself and the State Department of Health Services. An effective tracking and manifesting system would go a long way to identifying the current problems with wastes being disposed of illegally in both land fills and the ocean.

CHAIR DAVIS: There is no tracking provision in --

MR. MANNING: In the legislation, no, there is not.

We felt that needed further study, and we didn't want to bite off more than we could chew in this bill.

Also, another thing which people address is to eliminate the permitting requirement, the TSD permitting requirement for hospitals to treat wastes generated by doctors in the community. This would go a long way in helping to solve the problem.

CHAIR DAVIS: Now, there has been some people here who suggested -- and I haven't told Leo -- but people have suggested the permit should still issue, but it should issue from a local agency, rather than the State Department of Health.

MR. MANNING: That is possible.

I think there has to be some permitting, but the problem is, at the state level, the permitting, they are so far behind in processing permits now. I mean, they are like two years behind in certain situations.

I am not sure that the local health officers are really equipped to administer that system, either.

CHAIR DAVIS: Well, then let me ask you the question I was trying to ask just before, of a witness from --

MR. MANNING: I remember.

CHAIR DAVIS: -- San Diego County.

What hazards do we run if there is no permit requirement -- what hazards, if any, do we run if there is no

permit requirement?

MR. MANNING: We run the risk of medical wastes being mixed, let's say, something like chemotherapy wastes, which maybe shouldn't be autoclaved, being mixed with needles and blood, and other things, which could be, probably, autoclaved at the hospital or incinerated.

You also run the risk of people transporting these items to the hospital in an unsafe and improper manner, thereby maybe endangering themselves and others in the community. Those are two of the concerns, and also the liability issues which I mentioned.

But, I think that is outweighed by the fact that if you simplify the process through legislation or regulations, you can sufficiently put in place certain guidelines, and the medical wastes can be safely transported to a hospital and an agreement can be worked out between the hospitals, and the doctors who use that hospital, to make sure the proper items are autoclaved, or incinerated at the hospital facility.

CHAIR DAVIS: And, then what assurance could we give the public that the wastes were being properly disposed of?

MR. MANNING: Okay, right now the public has no insurance for that.

By having at least the local -- the small generators give their waste to the hospitals, we would know at least that they were not going in the normal trash and ther-

disappearing some place, either in a land fill, in the oceans, or God knows where else.

By this system at least you would be getting to the hospitals who are more highly regulated, who local health officers have the personnel to inspect more frequently, and who are more closely regulated under existing law, and under the proposed legislation sanitation officials as well could do inspections and work with the hospitals and medical community to make sure they know what their legal requirements are, and then to make sure they are complying with it.

In conclusion, I just would like to say that the Disease Control Center Guidelines for universal health precautions are not currently followed under existing California law, that sanitation workers face unreasonable health risks every day, and that potentially the people in the community do.

And, I think the Hayden legislation will go a long way to remedy this problem, but also there are gaps which remain, which we just discussed, which this Commission can address and that would be very helpful, and would make my job easier as a prosecutor.

COMMISSIONER KATZ: You talked earlier about the sanitation workers confronting these problems unexpectedly.

What kind of information capturing mechanisms does

this city have?

MR. MANNING: Well --

COMMISSIONER KATZ: Are they required to report every such incident?

MR. MANNING: I began with the city about two years ago, and what we have tried to do is we have tried to educate the sanitation workers on what to look for in dumpsters, that is apparent. I don't want them rummaging through it.

When they find medical wastes, or other hazardous wastes dumped illegally that we have a process where they notify the Police Department, Fire Department, and myself, and we respond and investigate it, try and track it back to the source, which is why immediate notification is important.

Many times the sanitation workers will know where they picked it up on their route. We will then trace back to that spot on the route and have the Police Department investigate.

COMMISSIONER KATZ: And, about how many of these investigations take place in a city of this size? Two hospitals --

MR. MANNING: I would say, in the last six months, we have had five separate incidents, and those are just the ones we know about. Generally, it is the tip of the iceberg.

I also find out when I talk to the sanitation workers, that there have been two or three other incidents which they didn't report, because they didn't either have time, or they

didn't know they were supposed to, so I would estimate that there have been at least 8 incidents in the last six months. Some of which we knew about, and some of which we didn't. And, I know there have been many other incidents throughout the County of Los Angeles.

And, another problem I might point out briefly is that the people that -- the city officials have a learning curve here. Small cities like Santa Monica don't necessarily have the expertise of larger cities like Los Angeles or L.A. County where we have a Health Department in place, and when we've called the County of Los Angeles to respond to these incidents, many times they have been unable, or unwilling to respond due to the constraint on their own resources of responding to emergency incidents where a hazardous waste tanker truck will overturn on the freeway.

So, it is a real crisis by putting it into the Hazardous Waste Control Act. You are taking -- you are battling for resources. By taking it out of the hands of the Waste Control Act, and giving it its own status as medical wastes, and empowering sanitation officials, we can do a more effective job, I think, of regulating and investigating.

COMMISSIONER KATZ: Thank you.

CHAIR DAVIS: Thank you very much --

MR. MANNING: Thank you.

CHAIR DAVIS: -- for your patience and for your

testimony, which is quite good.

I want to thank the Commission staff for organizing a very comprehensive hearing, where a lot of illuminating ideas were presented, and we covered a lot of ground here, and I appreciate all of the work that went into today's hearing.

Paul, what are you signalling me about?

PAUL IDECKER: I was just wondering if there was a public comment section or is that omitted because of the time?

CHAIR DAVIS: Well, I would be happy to stay here and allow it.

I hate to keep jumping back and forth, but I want to get to the executive session so that all of the attorneys can go back to Sacramento, and then I will come back and we can -- is it brief?

MR. GOLD: Pretty brief, yes.

CHAIR DAVIS: All right, go ahead.

Is there anyone else who wants to participate in the public comment session?

[No response.]

Okay, we will have a session of one.

What is your name?

MR. GOLD: My name is Mark Gold. I am a staff scientist for Heal the Bay, which is a local public interest group.

Most of the large scale problems, and possible solutions to the medical waste disposal and treatment have already been addressed today. We at Heal the Bay strongly support Assemblyman Hayden's proposed medical waste legislation.

One of the major problems facing the public has not been adequately addressed, however, and that is what should people do with medical wastes once they find it on our beaches, or in our trash dumpsters?

This problem is demonstrated by the following anecdote: one of our members found a four-inch vial of antiseptic on November 15 at a beach one-half mile from here. She found the vial two days after a storm, and placed it on my desk -- of all places. The vial turned out to contain the biological chemical warfare antiseptic that showed up on San Diego and Orange County beaches that same week. This fact says a lot for ocean transport of pollutants.

It took me over 20 phone calls to at least 10 different Santa Monica and Los Angeles County agencies before the vial was finally picked up by the Santa Monica Police Department. The person at the L.A. County Department of Health Services told our Heal the Bay receptionist to chlorinate the vial with bleach, and then pour the liquid into the sink with further bleach input. She was then told to throw the vial into the trash.

There was an irony in this whole scenario. When the Santa Monica Police Department picked up the vial, they choose to call the County Health Services for pick up. This was the same agency that gave us the irresponsible advice of taking care of the problem ourselves.

We at Heal the Bay would like to see an agency take the lead on the medical waste problem. None of the agencies had any idea of the proper protocol for medical waste transportation and disposal. Perhaps a protocol does not exist, in which case, it definitely should. We need better inter-agency communication and cooperation to deal with the medical waste problem.

Another separate infectious waste problem, that I have actually heard nc one address, is that bacteria that are genetically engineered at universities are frequently being disposed of by pouring it down the sink.

I don't know if anyone is looking into this sort of problem, and autoclaving bacteria from experiments is frequently not required, and the enforcement of such autoclaving procedures is lax at best.

Thank you.

CHAIR DAVIS: Do you have any personal experience? Or, have you talked to anyone who has personally witnessed people at universities pouring these genetically engineered --

MR. GOLD: I have, but because of the circumstances, you know, they could probably get in trouble for telling on their fellow researchers, but it is fairly common place.

CHAIR DAVIS: All right, thank you very much for your patience and participation.

MR. GOLD: You're welcome.

CHAIR DAVIS: There is no one else to participate in the public comment period?

[No response.]

I want to thank Mr. Gold, and I want to again thank the staff for bringing together a very good group of witnesses.

And, I want to adjourn today's special hearing on ocean pollution as it relates to medical wastes, again, thanking the staff very much.

[Adjourned at 4:05 p.m.]

# REPORTER'S CERTIFICATE

STATE OF CALIFORNIA )
)
) ss.
COUNTY OF VENTURA )
)

I, PRISCILLA PIKE, an official Hearing Reporter and Notary Public for the State of California, do hereby certify that the foregoing pages 1 through 158, inclusive, constitute a true and correct transcript of the matter as reported by me.

I FURTHER CERTIFY that I have no interest in the subject matter.

WITNESS my hand this 23rd day of January, 1989, in the County of Ventura.

Priscilla Pike

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