vessel operator's viewpoint, the two most important aspects of the study project were not resolved, namely, the promulgation of standards for treatment of vessel overboard waste discharges and the development of treatment systems for ship-

board installation necessary to meet those standards.

I point this out merely to illustrate the feeling of frustration which has been experienced by vessel owners in endeavoring to learn just what steps should be taken to control overboard waste discharges. This feeling of frustration is further aggravated by the fact that the pollution caused by municipalities and shoreside industry preponderates and has greatly increased over the years. Thus remedial measures on commercial vessels, whose numbers have decreased in a like period, will be of little avail until the vast pollution of cities and shoreside industry has been greatly reduced. It is evident from the number of commercial vessels involved, American, Canadian and foreign, that at no time are there more than about 14,000 seamen personnel scattered throughout the entire Great Lakes, which comprises 95,160 square miles of water surface. This is an average of approximately one seaman for every 6.8 square miles. Accordingly, in going ahead with any program for commercial vessels, the problem should be kept in proper perspective.

## LEGISLATIVE PROPOSALS

In the interest thereof, I am submitting for your consideration draft legislation embracing a four-point program for commercial vessels. These four points are:

## DEVELOPMENT PROGRAM

First: It would seem that insofar as commercial vessels are concerned, enforcement of water quality standards should not be achieved punitively through the imposition of prohibitions and penalties. Initially, suitable waste treatment systems for shipboard installation must be developed. Manufacturers have come up with many devices, such as chemical toilets, etc., but these are, at best, only temporary and stopgap measures. What is needed are type accepted, practical shipboard waste treatment systems which, once installed, will assure the owner that his vessel is in compliance with applicable regulations. We earnestly urge that an accelerated program be initiated directed toward development of improved low-cost techniques for control and treatment of vessel overboard waste discharges. Under the Clean Air Act in connection with air pollution control, such a program has already been initiated.

Although the Department of the Interior is responsible for administering the Federal Water Pollution Control Act, as amended, we believe the Department of Transportation to be the agency most knowledgeable in the field of requirements for vessel construction and related navigational problems. Such an allocation of authority should not only produce greater efficiency but would be productive of greater economies since the problem is not one merely of prescribing standards but designing equipment suitable for shipboard installation. This ultimately must be the responsibility of naval architects, many of whom are employed by the Department of Transportation, i.e., Coast Guard, but none to my knowledge by the Department of Interior. That department may set the standards but only the Department of Transportation can design the equipment.

Hence, we recommend that the responsibility for the necessary development program be delegated to the Department of Transportation and that that agency be given authority to certify the acceptance of devices and waste treatment

systems for shipboard installation.

## FEDERAL PREEMPTION OF FIELD

Second: Once a vessel operator has installed a suitable shipboard waste treatment system, type accepted by the Secretary of Transportation and certified as capable of meeting applicable federal water quality standards, the vessel should be immune from all state and local laws regulating pollution. The proper functioning of the waste treatment system can be readily determined from inspections conducted by the Coast Guard. Enforcement thus becomes a relatively simple process since commercial vessels are already subject to periodic Coast Guard inspection.

Third: Insofar as the Great Lakes are concerned, it must be emphasized again that we share these waters with Canada. In areas such a the St. Marys, St. Clair and Detroit Rivers, we have the paradoxial situation now where vessels,