It is perhaps the simplest innovation available to a treatment plant. It demands minimal operator skills, and significant benefits can be realized with no additional instrumentation. This is not to say, of course, that instrumentation wouldn't enhance the potential success of chemical treatment.

The dosage rate for polymers is on the order of one or two parts per million. At that concentration, they have no effect on aquatic life. Moreover, because the polymers are settled and collected with the solids, there is probably no measurable amount in the effluent. Even if a plant were to be overdosed, the polymers would still be tied to the solids and removed.

An additional benefit of polymer treatment is that it can be extended to include phosphate removal. A plant that is using polymers for raw waste flocculation already has half of a consistent and dependable phosphate removal system. All that is needed is the addition of metal salts ahead of the polymer. The added cost of phosphate removal would be $10–40, depending upon the specific metal salt and the transportation charges.

In view of the fact that the massive amounts of construction funds that are required are being diverted to higher priority needs, the benefits that could be gained by appropriating operating funds look very good indeed. This approach not only merits support, but may actually be a necessity if we are to protect our water resources until such time as new facilities can be designed and constructed.

Mr. McCarthy. Now, unless there is more business, these hearings stand adjourned until further call of the Chair.

(Whereupon, at 4:45 p.m., the hearing was adjourned, subject to the call of the Chair.)

STATEMENT OF REPRESENTATIVE WILLIAM H. BATES OF MASSACHUSETTS

Mr. Chairman, I am grateful for this opportunity to record my support for the legislation before your Committee to strengthen the control of oil and vessel pollution of both our coasts and lakes.

It was my privilege to join Congressman Keith of my home state of Massachusetts in introducing H.R. 16559, which is similar to the Administration bill, H.R. 15906. While I wish to endorse H.R. 15906, the "Oil and Hazardous Substance Pollution Control Act, as sorely needed legislation. I hope that favorable consideration will also be given to the two amendments to the Committee's bill which are included in H.R. 16559.

Before amplifying my views on this legislation, I would like to recall the fact that when we enacted the "Clean Waters Restoration Act of 1966," we felt a big step had been taken toward combatting water pollution. However, that Act became effective on December 3, 1966, and, by coincidence, there was an alarming oil spill by a tanker one day later in the harbor of my home city of Salem, Massachusetts. The resulting investigation revealed the short-comings which had unfortunately been written into that Act so far as enforcement of the Oil Pollution Act amendments therein were concerned. Since then, therefore, I have sponsored and supported the various legislative efforts to remedy that situation.

The bills here concerned, H.R. 15906 and H.R. 16559, seek to amend and strengthen further the Federal Water Pollution Control Act so as to provide for the control of oil discharged into the waters of our navigable streams and the contiguous zone of the United States, "if such oil may pollute or contribute to the pollution of the waters of the territory or the territorial sea of the United States." These bills also provide for "removal of discharged matter" from the navigable waters of the United States, the contiguous zone, and (in the case of H.R. 16559) the high seas.

The Committee bill includes needed stiffer penalties against oil dumping by vessels off our coasts, sets up new government machinery for cleaning up oil in pollution emergencies, and contains a requirement that the pollutor pay the full cost of the clean-up. However, I do not believe it goes far enough when it limitslimits government clean-up action to oil spills within the 12-mile limit. You will note that H.R. 16559 proposes to include portions of the high seas outside that limit.

A large scale oil spill of the proportions of the *"Torrey Canyon"* or the more recent *"Ocean Eagle"* accident in Puerto Rico could, if it occurred beyond 12 miles from the coast, be disastrous to our vital American fisheries resources of Georges