Mr. VIVIAN. Our point is that equipment put in over many years has not been very adequate and therefore national standards will probably be necessary. I would hope that your industry will contribute to make wise and objective standards.

Dr. BISHOP. I have worked, as I point out later in the paper, on the technical committee to the conferees on Lake Michigan in setting up standards there, and I think our industry people have worked along with others in the water quality and air quality criteria.

Mr. DADDARIO. Dr. Bueche, I think it would be helpful since you are here if you could also answer Mr. Vivian's question.

Dr. BUECHE. I think I heard the question, but if Mr. Vivian would care to address the part of the question that he thinks might be applicable, it would be helpful.

Mr. VIVIAN. The question is how can we best use the capabilities of private and industrial research to construct pilot projects and to create the equipment that will eliminate pollution?

It seems to me the best way is to set standards which everyone can work toward in creating the least expensive means of meeting such standards. The question is not to establish standards for New York State, Schenectady, Lake Erie, or Michigan, as you have mentioned, or the ferrous mills at Trenton, but to set a nationwide standard for the minimum amount of effluents that are produced for two reasons: First, it will prevent industry from moving to where enforcement is the least, irrespective of the law; and, second, it will provide those who are designing equipment a more effective market so that they will produce the same quality for different situations.

Mr. DADDARIO. This matter of standards is important because, as I understand Dr. Bueche, one of the important points raised is that once you establish the standards then you do begin to put in proper perspective, the competitive angle without which you cannot accomplish your end objectives.

Mr. VIVIAN. Yes; I agree with that wholeheartedly.

Dr. BUECHE. I will go a little bit further, and I don't disagree with either statement here; that is, rather than call them standards at the early stages one should call them goals or "suggested standards." Then we can see if we can meet these things economically and if we can achieve these goals. Once we find that we can get there, perhaps they should be dignified by the word "standards." But it is quite right; if this is done on a purely local basis, the incentive for industry to contribute will be somewhat lessened.

Am I responsive?

Mr. DADDARIO. That's fine.

Dr. BISHOP. The major industrial contributions to the abatement program lie in the industry's ability and willingness to experiment with commerical-scale plant equipment. You can be assured that the first few installations of control equipment on a process bring many headaches and a few heartaches for the companies involved. However, there is an excellent exchange of information on the operation of control equipment among members of the steel industry, and we learn from each other's mistakes and successes.

The steel industry has been willing to publish the results of its efforts so that other industries can also benefit from our endeavors in