

does not appear feasible at this point in time to physically separate storm and sanitary sewers doesn't mean that you should just wash your hands of the question.

Mr. BARNHILL. Yes.

Mr. MOORE. Let me just raise a question that has occurred to me from time to time.

Why can't you treat storm and sanitary sewage while it is in movement in the sewer itself, before it is discharged into the receiving water?

Dr. WEINBERGER. We have a number of projects right now that are exploring technology, and here again it is important to realize that many of the problems we are talking about today in the pollution field did not have the degree of recognition and the degree of priority that they have today. Therefore, there weren't people working on these problems. So really we are in the beginning of exploring some of these techniques. We do have proposals involving physical methods for treatment in sewers, chemical methods for treatment in sewers, in-sewer storage and a whole host of possible solutions which will be more economical than some of the alternates.

Mr. MOORE. I think we need to get back to the question he asked awhile ago, which as I recall was, How do you get from the uses to the standards? This is the question that I think Dr. Hirsch ought to tackle.

Dr. HIRSCH. I am sure you recognize already that the setting of standards initiates with the States and they go through the procedure and submit them in here. Philosophically or theoretically the way you get to the standards is composed of three things. The first would be a designation of what you want to use the water for.

Second, you would say to yourself what quality of water do you need to support that particular usage, and those would be the criteria, the numerical or descriptive values.

Third, you would say to yourself, now what do you have to do in the way of remedial measures to achieve that water quality.

Mr. CARPENTER. Let's go back to your first statement.

How is the choice of use made without some knowledge of the cost effectiveness data?

Dr. HIRSCH. Well, I think it is made on a kind, in most cases kind, of a commonsense appraisal of what the cost effectiveness is. And I guess this relates to Dr. Weinberger's comments, too.

The Chicago ship canal, for example: I am sure technology would be available to make that a recreational area and a fishery area and so on. But rule of thumb would tell us that that would be so tremendous in scale that it just isn't deemed feasible.

The general approach in this regard has been to look at what normally available, conventional waste treatment methods would achieve in the body of water. On the general assumption that secondary treatment, for example, for municipal wastes is available, that it ought to be used widely, it is used widely, and the same for comparable measures in industry, and then to take a look at that and if that yields a quality of water which will support certain kinds of uses, that is a kind of a commonsense—

Mr. CARPENTER. So you use a circular process?

Dr. HIRSCH. Yes.