

demand (BOD) at present loading levels. This plant does not meet the recommendations of the water quality standards approved by Secretary Udall for New York's interstate waters or the Federal Enforcement Conference on the Hudson River. However, there are a number of reasons why construction of this facility is warranted.

The facility provides a reasonably high level of treatment which will result in water quality enhancement. The plant was designed and land acquired prior to the effective dates of the Federal water quality standards and Federal Enforcement Conference recommendations, which specified higher levels of treatment than attainable at the North River facility under its present design and scope. Although this plant will not meet standards and conference requirements, it will be removing 70 percent of the biochemical oxygen demand of wastes, amounting to millions of gallons per day, which would otherwise be discharged raw to the river.

The facility will be part of a proposed system which, by the conference and standards deadline of 1972, should be providing treatment substantially in accordance with the standards and conference recommendations. The basic problem at this time is one of space on which to build a complete treatment facility which would remove 80 percent BOD at all times. The North River plant is designed to achieve as much treatment as possible within space and time limitations. The City of New York has recently acquired an additional 2.8 acres of land adjacent to the North River plant site on which to construct additional treatment facilities which will remove 70 percent BOD at design capacity (some twenty-five years hence), but which in earlier years of operation will achieve substantially greater treatment. Further, the City of New York has initiated the necessary administrative proceedings to acquire 4.9 acres of land for the purpose of constructing additional treatment facilities designed for 90 percent BOD removal to meet the Hudson River Conference recommendations and the water quality standards approved by the Secretary. The progress of the City in this regard will be regularly reviewed by the enforcement conferees, and every effort will be made to assure that the City meets the 1972 deadline.

Delay in constructing the treatment plant will result in increased cost to the City, the State and the Federal Government. Construction costs in New York City are increasing about 8 percent annually. Any delay in construction of the proposed treatment plant will result in substantially increased costs to the City, New York State and the Federal Government. The North River project for both interceptor sewers and waste treatment plant has a present estimated cost of about \$180,000,000. Each year's delay in going ahead with the project, whether caused by redesign or relocation, imposes an additional cost of about \$15,000,000. Total redesign to upgrade the treatment levels of the North River plant would entail at least a three-year delay; the delay alone would cost \$50,000,000.

Mr. RYAN. May I ask this question: What is the difference in the water quality which results from 90-percent removal compared to 70-percent removal, or 80 percent compared to 53 percent?

Dr. WEINBERGER. Let me try to answer that as briefly as possible. If we consider the 90 percent removal as contrasted with let's say 60 percent removal, then we would be introducing only one-fourth of the amount of impurities into the receiving stream. I am referring to what we would be discharging into the stream.

What effect this has on the stream would depend on the volume in the stream as well as the various use that stream is being protected for.

Mr. RYAN. Do you want to proceed or should we go into this further, Mr. Chairman?

Mr. DADDARIO. Mr. Ryan, you proceed until you are satisfied.

Mr. RYAN. I would like to come back to the question of the inconsistency of the Hudson River Conference recommending 80 percent reduction. Are you familiar with the New York State standards that have been approved by the Federal Government?

Dr. WEINBERGER. No, sir; I do not know whether that is one of the 15 that have been approved or not.